Sexual Health Knowledge, Attitudes, and Beliefs of Queensland Sudanese Communities

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Doctor of Philosophy

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Abstract

Background

Little is known about the post arrival sexual health related issues affecting young refugee background Australians and how they interact with their parents, partners, and peers regarding these culturally sensitive topics. Without an understanding of what influences their knowledge, attitudes and beliefs, sexual decision making, and behavioural intent, it is difficult to determine this group’s sexual health needs.

Purpose

The purpose of this study was to explore and describe the sexual health knowledge, attitudes and beliefs, and behaviour of the 16-24 year old Queensland Sudanese community members. This research also explored the broader Queensland Sudanese community’s attitudes and beliefs and the intergenerational factors perceived to be influencing sexual health literacy, patterns of behaviour, and health service utilisation.

Method

This descriptive research was conducted using a four phase convergent parallel mixed methods design. Extensive community consultation was undertaken during Phase 1 Project conceptualisation; Phase 2 Pilot study assessed the feasibility of the proposed research process; Phase 3 involved concurrent data collection and analysis from three equally weighted parallel strands; and Phase 4 the convergence and interpretation of Phase 3 data. The Phase 3 parallel strands included: (i) a written survey with 16-24 year old community members; (ii) interviews with a sub-sample of the survey participants; and (iii) five community focus group discussions (FGD) with adults. The National Survey of Australian Secondary Students and Sexual Health (NSASSSH) tool was adapted for use in this study. Descriptive, correlational, and Multivariate Analysis of Variance statistics were used to analyse the survey data. Following separate concurrent thematic analysis of the qualitative data, the convergence and triangulation of strand data were conducted, without transformation, via a process of comparing and contrasting the independent findings.
Results

Participants \((N = 248)\) were from a range of predominantly Southern Sudanese ethnic groups. Analysis of the survey data \((n = 229)\) revealed the 16-24 year old participants’ knowledge of sexually transmissible infections and HIV \((p < .001)\) was significantly higher if they had lived in Australia for seven or more years, and females reported significantly higher STI and HIV knowledge levels compared to male participants \((p < .001)\). The majority had sought sexual health information \((61.1\%)\); however, STI and HIV knowledge levels were low in comparison to the NSASSSH cohort. Most young people were confident talking to their partners about sex \((72.1\%)\), though notably less so with their parents \((27.9\%)\). The mean sexual risk behaviour subscale score indicated a low level of risk associated with self-reported sexual behaviour. However, there was evidence of behaviours shown to increase sexual risk such as inconsistent condom use and low rates of other methods of contraception. Of the 61.1% who self-reported they had experienced sex, 3.1% reported an STI diagnosis, 9.0% reported sex leading to pregnancy, 33.1% reported unwanted sexual experiences, and 32.9% reported they had engaged in anal sex in the last 12 months. Qualitative data indicated that traditional cultural beliefs continued to influence participants’ attitudes, risk perception, and patterns of behaviour such as condom use and talking about sex. Convergence of interview \((n = 11)\) and FGD \((n = 19)\) data indicated the perceived freedom of Australian youth and their ‘open’ attitude to talking about sex were thought to have a strong influence on young people’s sexual behaviour and traditional parenting roles. All participants agreed changing attitudes and behaviours were creating intergenerational conflict. There was intergenerational support for parents and young people to develop the skills and willingness to talk about sexual health and to have access to sexual health information early post arrival.

Implications for Practice, Education, and Research

The sexual behaviour of this study’s 16-24 years old participants is similar to that of their contemporary Australian secondary school peers. However, these results suggest this group of young people is sexually vulnerable in terms of their poor knowledge and intergenerational cultural discord. The need to develop, implement, and evaluate culturally informed models of sexual health care and interventions early within the
resettlement experience that are appropriate to the social, cultural, and environmental needs of the young people and broader Queensland Sudanese community is clear.

**Conclusion**

This study successfully explored the sexual health knowledge, attitudes, and beliefs of the Queensland Sudanese communities in a culturally sensitive and safe manner. Conducting this research in partnership with the community addressed the challenges associated with conducting sensitive research with a vulnerable community. Few researchers have addressed the sexual health and behaviours of refugee background youth in Australia, particularly from the perspective of one specific collective cultural target community. Consequently, this research makes a unique contribution to the existing body of sexual health literature by providing clinicians, policy makers, researchers, and the community with a meaningful intergenerational understanding of the determinants perceived to be influencing the young people’s sexual decision making and behaviours.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Candidate Signature ___________________________ Date ____________

Judith Ann Dean
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Abbreviations

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<th>Full Form</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>ANOVA</td>
<td>Analysis of Variances</td>
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<tr>
<td>BBV</td>
<td>Blood Borne Viruses</td>
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<tr>
<td>CALD</td>
<td>Culturally and Linguistically Diverse</td>
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<tr>
<td>CCASS</td>
<td>Confidence In Communicating About Sex Score</td>
</tr>
<tr>
<td>CI</td>
<td>Cultural Identity</td>
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<tr>
<td>ECCQ</td>
<td>Ethnic Communities Council of Queensland</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussions</td>
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<tr>
<td>HBM</td>
<td>Health Belief Model</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papilloma Virus</td>
</tr>
<tr>
<td>HREC</td>
<td>Human Research Ethics Committee</td>
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<tr>
<td>IBM</td>
<td>Integrated Behavioural Model (Integrated Behavioural Science Theory)</td>
</tr>
<tr>
<td>IDI</td>
<td>In-depth Interviews</td>
</tr>
<tr>
<td>LGBTI</td>
<td>Lesbian, Gay, Bisexual, Transgender, and Intersex</td>
</tr>
<tr>
<td>MANOVA</td>
<td>Multivariate Analysis of Variance</td>
</tr>
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<td>NSASSSH</td>
<td>National Survey of Australian Secondary Students and Sexual Health</td>
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<tr>
<td>NZ</td>
<td>New Zealand</td>
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<tr>
<td>PR</td>
<td>Peer Recruiters</td>
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<tr>
<td>QUAL</td>
<td>Qualitative</td>
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<td>QUAN</td>
<td>Quantitative</td>
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<tr>
<td>RELACHS</td>
<td>Research with East London Adolescents Community Health Survey</td>
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<td>RG</td>
<td>Reference Group</td>
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<tr>
<td>RQ</td>
<td>Research Question</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>SLT</td>
<td>Social Learning Theory</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>SRBS</td>
<td>Sexual Risk Behaviour Score</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmissible Infections</td>
</tr>
<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
</tr>
<tr>
<td>TPB</td>
<td>Theory of Planned Behaviour</td>
</tr>
<tr>
<td>TRA</td>
<td>Theory of Reasoned Action</td>
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<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Education Scientific and Cultural Organisation</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
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## Glossary

**Attitude**
An individual’s settled opinion or way of thinking or feeling about a fact, situation, and/or behaviour formed by their personal positive or negative opinion, appraisal, judgement, or evaluation of the issue, behaviour, or situation and their belief that it will lead to a specific outcome which can impact on that individual’s behaviour towards someone or something (Ajzen & Fishbein, 1980; Albarracín, Johnson, Fishbein, & Muellerleile, 2001).

**Beliefs**
Feelings, thoughts, or opinions that an individual holds as true. An individual’s acceptance or conviction that a statement or belief is true or factual is influenced by factors such as that individual’s level of knowledge, understanding, and attitude as well as external factors such as religion, culture, and perceived social norms (Ajzen & Fishbein, 1980).

**Knowledge**
Information, understanding, and skills gained through education or experience. An individual’s knowledge or lack of knowledge will influence their perception and understanding, and assist in forming that individual’s attitudes or belief (Hargreaves, 2002; Noar, 2007a, 2007b).

**Gender**
In this thesis, ‘Gender’ was used to group the male and female participants when presenting statistical data. The words ‘sex’ and ‘gender’ are commonly used interchangeably when referring to males and females, however, the principal researcher recognises the distinction between a person’s biological ‘sex’ (i.e. the physical state of being male, female or intersex) and their socioculturally constructed gender roles, behaviours, activities, and attributes (WHO, 2014).
Migrant A person who has freely immigrated or relocated to a new country for purposes of personal want, convenience, or to improve their life (Ethnic Communities Council Queensland, 2008; UNESCO, 2012). The Australian Bureau of Statistics defines a migrant as a person who was born overseas and has obtained permanent Australian resident status prior to or after their arrival (Australian Bureau of Statistics, 2007b). The decision to migrate is not related to external compelling factors such as in the case of refugees.

Negative sexual health outcome Any situation perceived as negative or undesired that arises from sexual activity such as acquiring an STI, HIV, and/or experiencing an unplanned pregnancy.

Older ‘Older participants’ has been used in this thesis when referring to the community focus group discussion (FGD) participants.

Queensland Sudanese Community ‘Queensland Sudanese community’ has been used when defining the target population throughout this thesis. However, it is important to acknowledge this community may identify as a collection of sub-communities due to the diverse array of ethnic, religious, tribal, linguistic, and regional affiliations that make up the complex social structures of these countries (Jensen & Westoby, 2008; Moro, 2004) and the 2011 separation of this region into two independent nations - the Republic of Sudan and South Sudan (P. M. Holt & Daly, 2011; Moszynski, 2011; Rai, Ramadhan, & Tulchinsky, 2012).

Refugee According to Article 1 of the United Nations Convention Relating to the Status of Refugees (1951), the United Nations High Commissioner for Refugees (UNHCR) defines a refugee as ‘any person who owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his/her nationality and is unable or, owing to such fear, is unwilling to
avail himself/herself of the protection of that country; or who, not having a nationality and being outside the country of his/her former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it’ (UNHCR, 1992, 2007). The assessment of an individual to determine refugee status is governed by the 1951 Convention and the 1967 Protocol relating to the Status of Refugees and is the responsibility of the government to which the refugee applies for recognition of refugee status.

Refugee background In this thesis ‘refugee background’ is used when referring to an individual or community who has settled in Australia following their refugee journey experience. Continued use of ‘refugee’ as a label or collective grouping post resettlement for people from a refugee background can create feelings of isolation and not belonging within the Australian community; an increased sense of vulnerability and stigmatisation; and generalisation of pre- and post arrival experiences (Nunn, 2011).

Sexual behaviour ‘Sexual’ pertains to any connection with the term ‘sex’ and can apply to the anatomical, psychological, or physical aspects of sex (Wehmeier, 2007). ‘Behaviour’ is defined as the way that a human being acts or performs in a particular situation or context. Therefore ‘sexual behaviour’ refers to how an individual acts or performs in relation to any aspects of sex or sexual activity.

Sexual health The World Health Organisation (WHO) (1975) defines ‘sexual health’ as “...the integration of the somatic, emotional, intellectual, and social aspects of the sexual being...” (World Health Organisation [WHO], 1975, p. 6). This definition acknowledges that sexual health incorporates the interaction of biological, psychological, cognitive, social, political, cultural, ethical, legal, historical, religious, and spiritual factors and is more than just absence of sexually transmissible infections (WHO, 2006).
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Sexual health literacy</td>
<td>The knowledge, skill, and ability required to understand and to use information in order to make sound sexual health and staying healthy related decisions in the context of everyday life.</td>
</tr>
<tr>
<td>Sexual wellbeing</td>
<td>A state of being or doing well in relation to sexual health including psychological, social, and physical aspects of wellbeing.</td>
</tr>
<tr>
<td>Sexual risk behaviour</td>
<td>‘Risk’ can relate to any behaviour or situation that is associated with a negative consequence or detrimental outcome (Wehmeier, 2007). ‘Sexual risk behaviour’ is defined as any behaviour relating to sexual activity that, when performed, may result in a negative sexual health outcome or consequence such as an STI.</td>
</tr>
<tr>
<td>Strand</td>
<td>‘Strand’ refers to the independent parallel quantitative and qualitative approaches (from conceptualisation to data collection and analysis) incorporated into this mixed methods study (Creswell &amp; Plano-Clark, 2011; Teddlie &amp; Tashakkori, 2009).</td>
</tr>
<tr>
<td>Sudanese</td>
<td>For the purposes of this study ‘Sudanese’ refers to a native, national, or inhabitant of the Republic of the Sudan or the independent nation of South Sudan; or a person who is a descendant of a native, national, or inhabitant of the Republic of the Sudan or the independent nation of South Sudan.</td>
</tr>
<tr>
<td>Young people</td>
<td>The Australian Bureau of Statistics (ABS) uses the age breakdown of 0-14 to define children and 16-24 for youth (Australian Bureau of Statistics, 2007c) for purposes of statistical reporting. In this thesis, young people, youth, or younger participants are used interchangeably when referring to the 16-24 year old participants.</td>
</tr>
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Conference Presentations


Publications

Acknowledgement of Papers Included in this Thesis

Included in this thesis is one paper in Chapter 2 that was co-authored with my supervisors. My contribution to this co-authored paper is outlined at the front of the relevant chapter. The bibliographic details for this paper including all authors are:


Appropriate acknowledgements of those who contributed to the research but did not qualify as authors are included in the paper.

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(Countersigned) ____________________________ (Date) _____________

**Supervisor: Professor Donald Stewart**

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**Supervisor: Professor Judy Wollin**

(Countersigned) ____________________________ (Date) _____________

**Supervisor: Dr Joseph Debattista**

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Chapter 1 Introduction

1.1 Introduction

There has been limited research conducted in Australia regarding the sexual health and wellbeing of communities with a refugee background. Lack of research in this area has contributed to poor understanding and a limited awareness of the sexual health literacy, needs, and priorities of these communities. Anecdotal evidence, gathered during formal and informal consultations with the Queensland Sudanese communities, suggests there are inconsistencies between the young people’s sexual health related attitudes and behaviours and what their parents perceived to be happening and/or thought should be happening. This discrepancy, combined with the lack of research addressing the sexual health knowledge, attitudes, and behaviours of this community, led to the development of this research.

This introductory chapter presents a background discussion of the target population’s journey to Australia, including a short history of Sudan with the emergence of South Sudan as an independent nation in 2011, Australia’s Humanitarian Program, and a brief description of how migration affects one’s health and wellbeing. Building understanding of this community’s background and how this influences their health and wellbeing provides the foundation to support the significance and justification of the research. The chapter will continue with an overview of the research aims, along with the methodological approach and theoretical framework underpinning this mixed methods exploration of sexual health knowledge, attitudes, beliefs, and behaviours of the Queensland Sudanese community.

1.2 Background

1.2.1 History of Sudan

Until 2011, the Democratic Republic of the Sudan was the largest African country with one of the most complex, heterogeneous, social, and cultural webs of ethnic and tribal affiliations and religious differences (Rogier, 2005). With over 50 ethnic groups and 140 different languages spoken (Kizito, 2001), Sudan was historically described as two distinct regions and cultural groups (Commonwealth of Australia, 2007; P. M. Holt & Daly, 2011; Migrant Resource Centre, 2006; Williams, 2003): The northern region
being populated by people of Arabic Nubian descent and the Arabic-Sudanese Creole speaking black Africans, and the southern regions being predominantly non-Arabic speaking black sub-Saharan Africans. This diverse array of ethnic, religious, tribal, and regional affiliations is one of the factors contributing to this region’s complex social and political history, including prolonged periods of conflict and civil unrest (Cassity & Gow, 2005; Kizito, 2001; Moro, 2004; Rogier, 2005). Extreme poverty and persecution of people in the south have occurred as a result of this unrest and the prolonged dominance by the northern regions of Sudan. During one of these prolonged periods of civil unrest commencing in the 1950s, it is estimated that one to two million people were killed and over four million people displaced, with a significant proportion of the world’s refugees seeking resettlement in recent years originating from this region, in particular the southern Sudanese tribal affiliations (Kizito, 2001; Rogier, 2005).

The 2005 Comprehensive Peace Agreement and the 2011 South Sudan Referendum, which resulted in the Democratic Republic of the Sudan being recognised as two separated sovereign nations, the Republic of the Sudan and the independent nation of South Sudan, brought hope for stability in this region (P. M. Holt & Daly, 2011; Moszynski, 2011; Rai et al., 2012). Nonetheless, this region continues to experience the aftermath of prolonged civil unrest, genocide, famine, and displacement of people, and the political and humanitarian situation remains unstable with escalating unrest and violence in South Sudan (Moszynski, 2011; Wakabi, 2011). This ongoing instability has resulted in infrastructures that are chronically ineffective, with large numbers of internally displaced persons or refugees continuing to seek settlement in countries such as Australia.

This long and ongoing history of civil conflict means that refugees from this region have endured protracted periods of forced migration and experiences of trauma and torture, persecution, gender violence and abuse, family separation, and loss of social and cultural supports (Cassity & Gow, 2005; M. Harris & Zwar, 2005). In some cases, due to the length of conflict, Sudanese background youth have never known life without unrest and the range of experiences that accompany forced migration (Tempany, 2009). Prolonged experiences of forced migration have led to this group having distinctly different settlement and health needs post arrival in Australia compared to other refugee groups (Cassity & Gow, 2005; Dhanji, 2009).
1.2.2 Australia’s humanitarian program

Australia has a long history of supporting the humanitarian needs of refugees and others. This includes an obligation under the Refugee Convention to support international policy, offshore development programs, plus protection and resettlement of refugees and displaced people under well-established Migration and Humanitarian programs (Australian Government, 2009, 2011, 2013). People from African nations have long been considered a priority for resettlement in Australia under the Australian Humanitarian Program (Australian Government, 2009, 2011; Commonwealth of Australia, 2005) with the Australian Sudanese community being one of the fastest and largest growing new arrival communities since the early 2000s (Commonwealth of Australia, 2013b).

It was hoped that the 2005 Comprehensive Peace Agreement and the 2011 South Sudan Referendum would result in a significant decline in offshore Humanitarian Visa Program Sudanese arrival numbers (Commonwealth of Australia, 2005, 2007). While numbers have reduced in recent years (Australian Government, 2013), the internal unrest continues (Wakabi, 2011) and people from this region remain one of the top 10 nationalities being granted offshore visas under Australia’s Humanitarian Program (Australian Government, 2013; Commonwealth of Australia, 2013b).

1.2.3 Migration, health, and wellbeing

Migrants, those who choose to immigrate to another country, often have better health compared to the general population of their host country (Anikeeva et al., 2010). However, forced migration and prolonged periods living in refugee camps can have a marked impact on physical and mental health, resulting in a complex range of vulnerabilities and health needs (Kizito, 2001; Shier, Engstrom, & Graham, 2011), including a well-established association with increased sexual vulnerability and risk of negative sexual health outcomes (Blake, Ledsky, Goodenow, & O'Donnell, 2001; McGinn, 2000; McGinn, Purdin, Krause, & Jones, 2001; WHO, 2000). Higher rates of complex health issues, including increased prevalence of infectious diseases such as hepatitis B, syphilis, and tuberculosis, have been detected in Australian refugee arrivals compared to other migrant groups and the general population (D. Johnson, 2007; Martin & Mak, 2006). Despite these findings, a Victorian study (56.6% of participants were
new arrivals from Sudan) found large numbers of the participants were not sufficiently screened on arrival for infectious diseases (Tiong, 2006; Tiong et al., 2006). This lack of routine screening could pose a potential public health risk to Australian.

Despite the growth of African background communities in Australia, there continues to be a dearth of evidence on how best to cater to the health needs of this heterogeneous group of migrant and refugee settlers (O. Davidson, Fenton, & Mahtani, 2002; Tiong, 2006). A general lack of knowledge and understanding of their differing health related sociocultural normative beliefs means service providers are often inadequately prepared to cope with this group’s diversity of needs. This is particularly evident in the sexual health care setting where models of care are often culturally inappropriate and ineffective in meeting the client needs (O. Davidson et al., 2002; Palak, 2005). Sexual health has been identified as one of the key areas of concern for African Australians, however, a lack of knowledge and awareness of this group’s sexual health status has been cited as a major contributing factors to poor health outcomes for this community post arrival in Australia (Australian Human Rights Commission, 2010a).

1.3 Significance and Justification of the Research

The study seeks to address the lack of understanding and awareness of the sexual health knowledge, attitudes, and beliefs of the Queensland Sudanese community and associated patterns of behaviour among the 16-24 year old community members. An understanding of these factors is essential in order to develop and implement appropriate services and to achieve optimal sexual health and wellbeing for this community.

Sexual health is an issue that affects the whole of society, however, young people and other vulnerable subgroups, such as those who have experienced forced migration, are disproportionately affected by negative sexual health outcomes such as sexually transmissible infections (STI) and Human Immunodeficiency Virus (HIV) (Aguti & Tiryampasha, 2002, July; Couch, Dowsett, Dutertre, Keys, & Pitts, 2006; Hallman, 2004; Keys et al., 2008; McGinn, 2000; McGinn et al., 2001; Morris, 2005; Tompkins, Smith, Jones, & Swundell, 2006). It is well established that forced migration is associated with sexual health vulnerabilities and increased risk of negative sexual health
outcomes (McGinn, 2000; McGinn et al., 2001; Reproductive Health Response in Crises Consortium, 2010; WHO, 2000). Despite this, there is scant research addressing the sexual health and wellbeing of migrant and refugee communities in their new settlement country including Australia (Hoffman et al., 2011; McMichael & Gifford, 2009, 2010; Tompkins et al., 2006; Zhou, 2012).

Historically, sexual health related research focused on STI biological factors and prevalence (Fenton, Johnson, McManus, & Erens, 2001). Understanding the dynamics of STI transmission trends and disease patterns is important; however, focusing solely on this aspect has often been to the detriment of the individual’s and the broader community’s sexual health and wellbeing (Wellings & Cleland, 2001). In order to prevent STI, HIV, and other negative sexual health outcomes such as unplanned pregnancy, a broader contextualised understanding of the determinants that influence an individual’s sexual decision making and behavioural intent is needed (Fishbein, 2000).

Identifying and understanding determinants of behaviour, such as knowledge, attitudes and beliefs, and an individual’s sociocultural context, develops understanding of the factors that influence STI transmission and disease patterns. Intergenerational exploration of these issues and of the variants that influence behaviour from a local and cultural context facilitates the development and implementation of effective and culturally appropriate behavioural change interventions (O. Davidson et al., 2002; Dubois-Arber & Caraël, 2002; Fishbein, 2000).

It is for these reasons that understanding the contextual and cultural sexual health knowledge, attitudes, and beliefs of the Queensland Sudanese community is important. Lack of understanding of these issues also impacts on the ability of health service providers and policy makers to develop effective responses to the local, national, and global trends in STI and HIV prevalence that continue to disproportionately affect vulnerable populations such as young people and refugee background communities.
1.4 Target Population

The target population for this study was the Queensland Sudanese community. The 2006 Australian Bureau of Statistics Census of Population and Housing reported there were 19,050 Sudan born people living in Australia, with around one quarter aged between 15 to 24 years (Australian Bureau of Statistics, 2007a; Commonwealth of Australia, 2009; Lucas, Jamali, & Edgar, 2011). This was a 287% increase from the 2001 census data. However, despite the 2011 Census figures (19,370 people born in Sudan as living in Australia) indicating the rate of increase has slowed significantly in recent years (Australian Bureau of Statistics, 2011), it is estimated that around 28,000 people identifying as being of Sudanese background have resettled in Australia since 1996 (Australian Government 2009). Approximately 12.6% of the Australian Sudan-born population reside in Queensland, with the current total Queensland Sudan-born population estimated at 2,400 (Queensland Government, 2011). Between 500 to 600 are 16-24 years of age and the majority have settled in Brisbane and southeast Queensland regional areas such as Toowoomba and the Darling Downs (Commonwealth of Australia, 2007). Sampling and recruitment was, therefore, concentrated in the southeast corner of Queensland.

‘Queensland Sudanese community’ has been used when defining the target population throughout this thesis. Outcomes of community consultations conducted during the planning phase of this research indicated this was how the community self-identify. It is, however, acknowledged that the term ‘community’ may not adequately reflect the complex heterogenic array of ethnic, religious, tribal, linguistic, and regional affiliations or collection of sub-communities that exist within this gathering of people (Jensen & Westoby, 2008; Moro, 2004). Care was therefore taken not to draw arbitrary lines or gather individuals together to suit the purpose of the research (J. Taylor, Wilkinson, & Cheers, 2008). For example, inclusion criteria were not based on place of birth, nationality, migration status, visa entrance type, or residency and citizenship status. Rather, ‘Sudanese’ included any person who self-identified as belonging to the ‘Queensland Sudanese community’. Including individuals who identified as either a native, national, or previous inhabitant of Sudan or a descendant of a native, national, or inhabitant of Sudan enabled recruitment of a sample that reflected the true community profile (Birman, 2005).
It is important to note that this research was developed and conducted prior to the 2011 referendum that saw the southern regions of Sudan secede from the Republic of the Sudan and emerge as the independent sovereign nation of South Sudan (P. M. Holt & Daly, 2011; Moszynski, 2011; Rai et al., 2012). It is, therefore, acknowledged that the majority of participants may now self-identify as being South Sudanese. The target population is referred to as the ‘Queensland Sudanese community’ in this thesis, however, in all future papers produced from this research the distinction between the ‘Queensland Sudanese and South Sudanese communities’ will be acknowledged.

1.5 Research Aim

The aim of this research was to explore and describe the sexual health knowledge, attitudes, and behaviour of 16-24 year old Queensland Sudanese community members. Conducted in partnership with the Queensland Sudanese community, using a convergent parallel mixed methods design, this research also aimed to explore the attitudes and beliefs of the broader Queensland Sudanese community and to examine the complex array of intergenerational social, cultural, and environmental variables that influence behaviour and patterns of health service utilisation.

It was not intended that this research would test a specific hypothesis or establish a causal relationship between identified behavioural indictors and behaviours. Rather, it was designed to address the identified gap in research by collecting multilevel mixed methods data that described the sexual health knowledge, attitudes, and behaviour of the target population. This description provided a valuable contextualised multidimensional perspective and understanding of the research topic and the intergenerational variance in knowledge and understanding of sexual health related issues that was a precursor to the development of this study. Findings from this research will inform the development of culturally and linguistically appropriate sexual health services, education and prevention strategies, and future health policy that will assist in improving the overall sexual health and psychosexual wellbeing of the collective Queensland Sudanese communities.

Conducted under ethical approval from the Griffith University Human Research Ethics Committee (GU Ref No: NRS/02/09/HREC), this study also aimed to encourage active
participation of the Queensland Sudanese community and facilitate a collaborative partnership to the mutual benefit of all parties. Community collaboration and cyclic sharing of information provided the researcher with an understanding of the target community’s social and cultural reality while building community trust and identification with the research. Providing the community with a direct voice in all stages of the research process also created a research environment and methodological approach that overcame many of the methodological challenges associated with conducting this research.

1.6 Research Questions

There were nine research questions addressed in this research:

1. What is the knowledge of the 16-24 year old Sudanese background youth in Queensland regarding sexually transmissible infections (STI) and HIV?
2. What are the attitudes and beliefs of the 16-24 year old Sudanese background youth in Queensland regarding sexual health and behaviour?
3. How confident are the 16-24 year old Sudanese background youth in Queensland communicating about sex?
4. What are the self-reported patterns of sexual behaviour among the 16-24 year old Sudanese background youth in Queensland?
5. What are the services used by the 16-24 year old Sudanese background youth in Queensland for sexual health information and health care?
6. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding sexual health and behaviours?
7. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding the sexual health and behaviour of the young community members?
8. What are the sexual health related issues causing concern to the 16-24 year old Sudanese background youth and the broader Queensland Sudanese community?
9. What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?


1.7 Research Framework and Methods

This study’s convergent parallel mixed methods design consisted of four phases:

Phase 1  Project conceptualisation, design, and planning included extensive ongoing community consultation and the formation of a reference group (RG)

Phase 2  Pilot study

Phase 3  Concurrent data collection and analysis from three equally weighted parallel independent data strands

Phase 4  Convergence and interpretation of data.

The Integrated Behavioural Model (IBM) developed by Fishbein (2000) was adopted for this study as it provided a well-established theoretical framework to explore sexual health knowledge, attitudes, and beliefs and other social, cultural, and environmental behaviour determinants known to influence sexual behaviour (Fishbein, 2000; Kasprzyk, Montaño, & Fishbein, 1998; Montaño & Kasprzyk, 2008). Using a theoretical model that has been shown to effectively predict sexual behavioural intent from a cross-cultural perspective means this study’s results are ideally placed to inform future development of effective behavioural change interventions and health messages (Albarracín et al., 2005; Albarracín et al., 2001; Fishbein & Pequegnat, 2000; St Lawrence & Fortenberry, 2007; Yzer, 2012). The variables in the IBM (knowledge, attitudes, beliefs, confidence/self-efficacy, perceived norms, environment constraints) were used to inform the research questions and choice of data collection tools for this study. Table 1.1 identifies the links between research questions and IBM variables.

Using a mixed methods approach offsets potential weaknesses or biases that can occur when a single method approach is used for researching sensitive topics in vulnerable populations (Ager, 2000; Creswell, 1994; Creswell & Plano-Clark, 2007; Moffatt, White, Mackintosh, & Howel, 2006). Convergence and triangulation of the Phase 3 parallel, concurrently collected, and analysed data will provide a valid, substantiated, multidimensional interpretation of the overall research findings (Creswell & Plano-Clark, 2007). How each of the Phase 3 parallel datasets are related to the research questions is highlighted in Table 1.1.
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Strand 1 Survey</th>
<th>Strand 2 Interviews</th>
<th>Strand 3 FGD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the knowledge of the 16-24 year old Sudanese background youth in Queensland regarding sexually transmissible infections (STI) and HIV?</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>2. What are the attitudes and beliefs of the 16-24 year old Sudanese background youth in Queensland regarding sexual health and behaviour?</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>3. How confident are the 16-24 year old Sudanese background youth in Queensland communicating about sex?</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>4. What are the self-reported patterns of sexual behaviour among the 16-24 year old Sudanese background youth in Queensland?</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>5. What are the services used by the 16-24 year old Sudanese background youth in Queensland for sexual health information and health care?</td>
<td>√</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>6. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding sexual health and behaviours?</td>
<td></td>
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<td>√</td>
</tr>
<tr>
<td>7. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding the sexual health and behaviour of the young community members?</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>8. What are the sexual health related issues causing concern to the 16-24 year old Sudanese background youth and the broader Queensland Sudanese community?</td>
<td></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>9. What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?</td>
<td></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

* FGD – Focus Group Discussions; HIV – Human Immunodeficiency Virus; Bold – Indicates the Integrated Behavioural Model (IBM) variables used to inform the research questions.
Consideration was given to methodological rigour and steps were taken to ensure that the research was conducted ‘with’ the community and not ‘on’ the community (Gifford, Bakopanos, Kaplan, & Correa-Velez, 2006). Conducting research ‘with’ the community can present challenges; nonetheless, it was imperative that the methodological approach took this complexity into consideration and was conducted in partnership with the community. This enabled the study’s research framework and methodology to be acceptable and appropriate to the community while being reflective of the community’s sociocultural context (Dean, Wollin, Stewart, Debattista, & Mitchell, 2012; Wilson & Neville, 2009).

1.8 Thesis Structure

This thesis is presented in eight chapters beginning with this introductory chapter, which presents a brief background and overview of the research.

Chapter 2 provides a thorough review of literature pertaining to sexual health, young people of refugee background, and the theoretical variables known to influence sexual health knowledge, attitudes, and behaviour. The theoretical framework underpinning this research is discussed in detail and the review concludes by identifying the gaps and limitations in existing research.

Chapter 3 presents the methodological approach adopted for this research, along with a detailed overview of the research process used for each of the four phases conducted. The concurrent converging triangulation mixed methods design obtained data from three concurrently collected and analysed data strands. Results from the analysis of data from these three primary datasets are presented in two separate quantitative and qualitative data analysis chapters.

Chapter 4 presents the results from analysis of the survey data, including the presentation of demographic information and the reliability and validity of the scales incorporated into this study’s survey instrument.
Chapter 5 presents the findings from the interviews conducted with a subsample of the 16-24 year old survey participants, followed by the findings from the community focus group discussions (FGD).

Chapter 6 presents the convergence of data analysis results, thus providing a stronger contextualised multidimensional understanding of this complex research topic.

Chapter 7, the Discussion Chapter, begins with a discussion and summary of the overall findings and then outlines how the synergism of the data has answered the research questions and relates to prior research.

The final chapter, Chapter 8, summarises the project and outlines how the findings from this research can be used to inform practice and guide future research and the development of preventative health education, models of care, and future public health policy.

1.9 Summary

In order to improve sexual health and wellbeing there is a need to create a paradigm for developing services and policy based on evidence and understanding of the determinants that influence behaviour rather than rely solely on the existing accepted models of care. Improved understanding of the knowledge, attitudes, and beliefs of the target cohort will contribute to a better understanding of the way in which these factors may influence the protective and risk taking sexual behaviours and general psychosexual wellbeing of the Queensland Sudanese community. Understanding these factors and patterns of behaviour from an intergenerational perspective will assist in developing supportive and safe spaces for the young members of this community to engage and learn.

Chapter 2 provides a review of literature pertaining to the factors influencing the sexual behaviour and health status of young people and refugee background communities, and justification for why the well-established integrated behavioural model (IBM) by Fishbein (2000) was used to guide exploration of these factors in this study.
Chapter 2 Literature Review

Statement of contribution to co-authored published paper

This chapter includes a co-authored paper. The bibliographic details of the co-authored paper, including all authors, are:


My contribution to the paper involved: This paper reports on the methodological approach used to explore sexual health knowledge, attitudes, and beliefs with the Sudanese community in Queensland, Australia and the steps taken to address the methodological, ethical, and logistical challenges associated with conducting sensitive research with vulnerable, hidden, yet highly visible populations. I completed the research and writing of the paper with methodological and editorial advice from my PhD supervisors, Professor Judy Wollin, Professor Donald Stewart, Associate Professor Marion Mitchell, and Dr. Joseph Debattista.

(Signed) ________________________________  (Date) ______________

**Student/Corresponding Author:** Judith Dean

(Countersigned) ________________________________  (Date) ______________

**Supervisor:** Assoc. Professor Marion Mitchell

(Countersigned) ________________________________  (Date) ______________

**Supervisor:** Professor Donald Stewart

(Countersigned) ________________________________  (Date) ______________

**Supervisor:** Professor Judy Wollin

(Countersigned) ________________________________  (Date) ______________

**Supervisor:** Dr Joseph Debattista


2.1 Introduction

This chapter presents a review of literature related to the factors influencing sexual health and behaviours with a focus on migrant and refugee background communities and young people. An extensive review of what is known about the multiple factors that influence sexual health and behaviour is presented and linked within the context of this study’s target population. An overview of the theoretical framework that underpins this research demonstrates why understanding of knowledge, attitudes, and beliefs are integral to understanding behavioural intent, and provides justification for why this well-established framework has been employed in this study.

This chapter concludes with a justification for the research method and a discussion of the methodological, ethical, and logistical challenges associated with conducting culturally sensitive research with a hidden, yet highly visible, collective population. These challenges are presented by inclusion of a co-authored paper published in the journal Culture, Health, and Sexuality. The article identifies the steps taken to address these challenges, with justification of why this research was important despite the challenges associated with conducting such research (Dean et al., 2012).

2.2 Factors Influencing Sexual Health, Risk, and Behaviour

For the purposes of this research, the World Health Organisation (WHO) definition has been adopted because it acknowledges sexual health is more than just an absence of disease, dysfunction, or infirmity, but a concept that incorporates the “…integration of the somatic, emotional, intellectual, and social aspects of the sexual being…” (WHO, 1975, p. 6). The concept of sexual health varies across countries, cultures, and political paradigms making it difficult to draw a consensus on meaning (Giami, 2002; Muchoki, 2012; Sandfort & Ehrhardt, 2004). Nonetheless, this definition acknowledges sexual health is influenced by the interaction of biological, psychological, cognitive, social, political, cultural, ethical, legal, historical, religious, and spiritual factors (WHO, 1975, 2006, 2011) and recognises the interaction of these factors, in combination with a person’s knowledge, attitudes, and skills, as key determinants of behaviour (Fishbein, 2000; WHO, 1975).
How a person copes or behaves in response to the broad range of complex sexual health related issues they meet while navigating the journey from childhood to adulthood is strongly influenced by the social, cultural, and environmental context in which they live and learn (Croghan, 2006; Fraser & Sim, 2007). An awareness of the intrinsic and extrinsic aspects of these factors from the context in which a person is living is essential in order to develop a comprehensive understanding of the determinants influencing their sexual health knowledge, attitudes and beliefs, sexual decision making, and behaviour during this journey (Kang, 2011; McWhirter, McWhirter, McWhirter, & McWhirter, 2007). Factors influencing behavioural intent, including those pertaining to sexual risk and protective behaviours, are discussed later in this chapter in relation to the theoretical framework underpinning this study (Fishbein, 2000). The following critique of literature focuses on factors specific to the sexual health and behaviour of migrant and refugee background communities and young people, the target population of this study.

### 2.2.1 Migrant and refugee background populations

It is well established that migration is associated with increased sexual vulnerability and risk of negative sexual health outcomes (Blake et al., 2001; McGinn, 2000; McGinn et al., 2001; Reproductive Health Response in Crises Consortium, 2010; UNAIDS & UNHCR, 2007; WHO, 2000). This is particularly so for individuals and communities who have experienced forced migration (McGinn, 2000), such as many within this study’s predominantly refugee background target population (Commonwealth of Australia, 2007, 2013a; Lucas et al., 2011). The refugee experience is diverse and influenced by many factors; forced migration can lead to exposure to trauma and torture, disrupted patterns of education, poor access to health care, and loss of family and community supports, all factors known to affect physical, psychosocial and sexual wellbeing, vulnerability, and behaviour (M. Ali & Pett, 2005; McGinn et al., 2001; McMichael, 2008; Tompkins et al., 2006; UNHCR, 2007). Previous research proposes the pre-arrival sexual vulnerability of refugee background populations is influenced by the complex interplay of sociocultural, political, and environmental factors associated with forced migration and living within a displaced or refugee context (McMahon, Moreton, & Luisi, 2010; Muchoki, 2012). The refugee experience, however, does not cease post resettlement in a new host country, but continues as individuals and families try to rebuild and to adapt to their new surroundings and experiences (Kizito, 2001). It is suggested the challenges of learning to live within a new and often conflicting
framework of sociocultural sexual and gender related norms and behavioural expectations can contribute to ongoing sexual vulnerability post arrival in host and permanent resettlement countries (Muchoki, 2012). However, there is a dearth of research focusing on the factors influencing sexual vulnerability on settlement in a host country (Hoffman et al., 2011; McMichael & Gifford, 2009; Tompkins et al., 2006; Zhou, 2012).

Mobility and disruption of family are thought to contribute to the breakdown of the moral and cultural norms that guide the behaviour of individuals as well as communities (UNHCR, 2004). Fracturing of social and cultural norms can lead to increased risk taking behaviour and exposure to STI and negative sexual health sequelae (UNHCR, 2004). Women, children, and young people who make up the majority of all refugee and displaced populations are recognised to be at increased sexual vulnerability (S. L. Thomas & Thomas, 2004; UNAIDS, 2001; UNAIDS & UNHCR, 2007). This group, in particular young women and unaccompanied minors, are often exposed to gender violence, sexual slavery, and even the necessity to initiate sexual activity earlier than the sociocultural norm in order to engage in opportunistic and commercial sex work as a means of survival. Sexual violence, especially against women, is a widespread problem along the forced migration and refugee journey (Allimant & Ostapiej-Piatkowski, 2011; Austin, Guy, Lee-Jones, McGinn, & Schlecht, 2008; Beswick, 2001; Pittaway & Bartolomei, 2001; Pittaway & Rees, 2006; Stark & Ager, 2011; Tankink, 2013; Ward & Vann, 2002), with some researchers suggesting vulnerability to sexual violence may continue, if not increase, post resettlement in a new sociocultural context (Allimant & Ostapiej-Piatkowski, 2011; Pittaway & Bartolomei, 2001; N. Taylor & Putt, 2007). This is supported by previous research suggesting a lifetime history of sexual violence and forced sex significantly increases a person’s risk taking behaviour, future exposure to sexual violence, and other negative outcomes such as suicide ideation (Basile et al., 2006).

Population movement, whether it be by choice or forced migration, is also associated with an increased risk of exposure to HIV and STI (Kramer et al., 2008; McGinn, 2000; McMahon et al., 2010; Memish & Osoba, 2006; Muchoki, 2012; F. Thomas, Haour-Knipe, & Aggleton, 2010), and potential bridging of these infections between high and low prevalence populations (McGinn, 2000; C. A. Palmer, 1999). The breakdown of
social and economic networks, loss of cultural and social norms that regulate behaviour, and the limited access to education and health care associated with conflict, forced displacement, and voluntary population mobility are known to influence patterns of STI and HIV transmissions and vulnerability (M. Ali & Pett, 2005; McGinn et al., 2001; McMichael, 2008; Tompkins et al., 2006; UNAIDS & UNHCR, 2007).

Refugees and migrants of Sudanese background originate from, and transit through, areas of high STI, HIV, and viral hepatitis prevalence during their journey to resettlement in Australia. Many transit through Sub-Saharan Africa, a region disproportionately affected by conflict (Spiegel, 2004), with one of the highest global prevalence rates for HIV (UNAIDS, 2013). Data from Kakuma refugee camp in Kenya, a major holding camp for Sudanese refugees seeking settlement in Australia, report significantly higher STI and HIV prevalence rates compared to the general Australian population (McGinn et al., 2001; Spiegel, 2004).

Due to the prolonged conflict, internal instability, and resultant loss of health infrastructure, there has historically been limited access to accurate epidemiological STI and HIV data from Sudan (Ortashi, El Khidir, & Herieka, 2004) and the newly recognised country of South Sudan (Burki, 2011). Recent data estimate Sudan’s adult HIV prevalence to be 1.1% (Sudan National AIDS Control Program, 2012). The Republic of South Sudan’s rate is higher, around 3% (UNAIDS & South Sudan AIDS Commission, 2012), with rates as high as 8% to 10% in some areas bordering higher prevalence countries such as Uganda and Democratic Republic of Congo (T. Allen, 2007; Alliance in South Sudan, 2011; Burki, 2011; Ministry of Health of Southern Sudan, 2006; Moszynski, 2011). These figures suggest a relatively low HIV prevalence among the general Sudanese population (Dejong & Mortagy, 2013; Mohamed & Mahfouz, 2013), however, the figures are higher than in many resettlement destination countries (Elmusharaf, Elkhidir, Hoffmann, & Almroth, 2006; Ortashi et al., 2004), including Australia, which remains a country of low HIV prevalence (0.1%) (The Kirby Institute, 2013b).

HIV transmission occurs predominantly via heterosexual contact in the Sudanese nations (Khalil, 2011; Mohamed & Mahfouz, 2013). In comparison, Australia has a predominantly male-to-male transmission pattern among gay and other men who have
sex with men (Commonwealth of Australia, 2010; Guy et al., 2007). However, Australian national data demonstrate rates of new HIV infection diagnosis attributed to heterosexual contact has risen in recent years, particularly among individuals born in, or with a history of a sexual partner from, a high prevalence country (The Kirby Institute, 2013a). While this cannot be solely attributed to the impact of migrant and refugee resettlement from these regions, Australians originating from high prevalence countries are significantly over represented in new and late HIV diagnosis in Australia (Lemoh et al., 2010; The Kirby Institute, 2013a). This is particularly so for people born in or with partners from Sub-Saharan Africa (Combs & Giele, 2009; Horyniak et al., 2009; Lemoh, Biggs, & Hellard, 2008; Lemoh et al., 2009; Sergeant, 2009), with the Australian population rate of new HIV diagnosis for people born in this region increasing by 66% between 2008 to 2012 (The Kirby Institute, 2013a).

Similarly, an increase in hepatitis B notifications in Australia in recent years (Benson & Donohue, 2007) has also been attributed to increasing numbers of new arrivals from countries of high prevalence such as Sub-Saharan Africa where over 10% of the population is known to have chronic hepatitis B (Benson & Donohue, 2007) compared to Australia’s estimated hepatitis B carriage of 0.87% (Martin & Mak, 2006). This changing pattern of both HIV and hepatitis B infection demonstrates a need for more understanding of HIV and STI transmission and associated patterns of sexual behaviour among new arrival communities in Australia, along with the need to review pre- and post arrival screening processes (Sergeant, 2009).

Pre-migration health screening is mandatory prior to the issuing of an Australian humanitarian program entry visa (R. J. Murray, Davis, Burgner, & the Australasian Society for Infectious Diseases Refugee Health Guidelines Writing Group, 2009). However, it is not inclusive of all infectious disease or age groups seeking entry, thus influencing the potential for transmission of these infections post arrival (The Royal Australasian College of Physicians, 2007). According to the Communicable Disease Network Australia Pre-Departure Communicable Diseases Health Screening Protocols For Refugees Arriving From Africa (2006), HIV testing is recommended to be performed within three to 12 months prior to departure; however, this is not required to be repeated pre-arrival (Department of Health and Ageing, 2006). Pre-departure screening is often performed in resource-poor settings with varying degrees of accuracy.
and timeframes between testing and departure. Young people and children are considered among the most vulnerable to HIV in Sub-Saharan Africa (Bankole, Singh, Woog, & Wulf, 2004) and contribute significantly to the HIV burden in Sudan (Khalil, 2011). However, in Australia, where under 14 year olds make up the majority of humanitarian entrants (Commonwealth of Australia, 2013a), pre- and post arrival HIV screening is not required for those under 15 years of age (Commonwealth of Australia, 2013c; N. Davidson, Skull, Chaney, et al., 2004; Sheikh-Mohammed, MacIntyre, Wood, Leask, & Isaacs, 2006; The Royal Australasian College of Physicians, 2007).

The inconsistencies in patterns, timeframes, and standards of testing could lead to failure to detect infections both pre- and post arrival in Australia. Time lag between testing and departure could also lead to the potential acquisition of infections while awaiting transfer after pre-migration testing has been completed. Failure to include children and young people could lead to a significant pool of missed HIV and other vertically transmitted and sexually related infections.

People born in Australia account for over 50% of new HIV diagnoses, and national data indicate the rate of new HIV diagnosis is increasing among overseas born Australians (The Kirby Institute, 2013a). Previous research suggests only 1% of the South Sudanese population have been tested for HIV (The Republic of South Sudan, 2011) and many new arrivals to Australia are unaware of their status or even potential for prior contact with infectious diseases (Martin & Mak, 2006).

In Australia, post arrival screening of new arrivals in most states and territories is decentralised and uncoordinated (N. Davidson, Skull, Chaney, et al., 2004; The Royal Australasian College of Physicians, 2007; Tiong et al., 2006), and screening for HIV, viral hepatitis, and other STI, though recommended (Australasian Society for Infectious Diseases, 2009), is not routinely performed on arrival. With migrants and refugees from high prevalence areas already identified as potential bridging populations for the spread of infectious diseases in their host country (Kramer et al., 2008; McMahon et al., 2010; Tompkins et al., 2006), the failure to test and to detect infectious diseases in new arrival populations could have significant impact on the prevalence of such infections in Australia and pose a public health concern.
Behavioural studies in the United Kingdom (UK) have identified that sexual risk taking behaviour has increased in the black African communities (Fenton et al., 2005). Combined with the disproportionate burden of HIV prevalence in this group, this poses an ongoing concern to the rates of heterosexual transmission of HIV in the UK (Fenton et al., 2005). A study conducted with Sudanese communities in the United States of America (USA) also demonstrated patterns of high sexual risk behaviour, particularly among young single men, and very low knowledge about HIV and condom use (Tompkins et al., 2006). Participants in the study also reported perceptions of low risk or susceptibility to acquiring STI, including HIV (Tompkins et al., 2006). The non-randomised small sample size in the study (N = 47) makes it difficult to generalise these findings to other Sudanese migrant communities or to draw inference that a similar pattern of sexual risk taking behaviour or level of knowledge may exist among the newly arrived Sudanese migrants and refugees in Australia. Nonetheless, poor HIV knowledge and patterns of sexual risk behaviour have been found in several other studies conducted with Sudanese communities in Sudan (M. M. Ali, Cleland, & Carael, 2001; T. Allen, 2007; Khalil, 2011; Mohamed & Mahfouz, 2013; Moukhyer, van Eijk, Bosma, & de Vries, 2006) and other resettlement countries (T. Allen, 2007; Birukila, Brunton, & Dickson, 2013; B. Y. Holt et al., 2003; Lazarus, Himedan, Ostergaard, & Liljestrand, 2006; Willis & Nkwocha, 2004, 2006), suggesting many Sudanese migrant and refugee communities have similar low levels of knowledge and patterns of risk.

An Australian study exploring sexual health literacy among refugee background youth in Victoria, Australia found low levels of knowledge and perceived risk (McMichael, 2008). The small representation of Sudanese youth in this study (n = 25 of N = 142), again prohibits meaningful inference to be drawn; however, the results support the hypothesis that Sudanese migrant and refugee communities have similarly low levels of knowledge and patterns of sexual risk. Further research exploring how new arrival groups adjust to, or connect with, the differing sexual cultures and norms they encounter while learning to live within the Australian context and how this affects their behavioural intent, sexual decision making, and knowledge is needed in order to inform service providers how to address these issues.

Cultural beliefs and norms, such as gender roles, are thought to be one of the most significant factors influencing sexual behaviour (Bhavsar & Bhugra, 2013; Gao et al.,
However, attitudes and beliefs, along with normative behavioural expectations, do change over time and across generations as individuals and communities are exposed to different cultures and external events (Berman, 2001; Ember & Ember, 2011; Hailonga van Dijk, 2007; MacLachlan, 2006). Previous research suggests exposure to multiple cultures and events, such as those experienced by many of Australia’s new arrival communities during prolonged periods of displacement, migration, and resettlement, has resulted in many within these groups having minimal understanding and experience of their cultural background ‘norms’ (Poppitt & Frey, 2007). These prolonged periods of displacement and migration may also mean many migrant and refugee background Australians have sociocultural normative attitudes and beliefs that are not consistent with contemporary sociocultural normative beliefs or behavioural expectations of their origin countries (Ember & Ember, 2011). This, combined with a potential lack of knowledge and understanding of the social structures and cultural norms that define accepted behaviours within the Australian context, can lead to misunderstandings and potential risk.

Sudan is traditionally a patriarchal society where men are dominant (Muchoki, 2013) and women, the primary care givers, are considered subordinate (Commonwealth of Australia, 2007; Duany & Duany, 2005; Hebbani, Obijiofor, & Bristed, 2012; House, 1988). Gender roles and family structures have changed in Sudan due to the impact of prolonged conflict (Duany & Duany, 2005; Hebbani et al., 2012; Scott et al., 2014). Resettlement in a new host country has also changed traditional gender roles and family dynamics as Sudanese women and young people develop an increased sense of independence and a perceived right to equality (Milner & Khawaja, 2010). Women gaining control over finances through greater access to education, government child entitlements, and employment post resettlement is thought to have considerable impact on traditional male roles (Colic-Peisker & Tilbury, 2007; Dhanji, 2009) as men perceive a loss of social status, authority, and masculinity (Muchoki, 2013). Considerable gender and intergenerational conflict has emerged due to these post settlement changes (Berman, 2001; Ember & Ember, 2011; MacLachlan, 2006).

Traditional Sudanese parenting is based on a collectivist, extended family, gender based, and authoritarian framework (Deng & Pienaar, 2011; Ebbeck & Dela Cerna,
Adults traditionally have control and children and young people are expected to respect and conform and not question behavioural expectations. Resettlement is, however, also changing this framework as children acculturate more rapidly, compared to adults, to what they perceive to be the social norms and behavioural expectations of Australia (Ebbeck & Dela Cerna, 2006; Hebbani, Obijiofor, & Bristed, 2009; R. Palmer, Lemoh, Tham, Hakim, & Biggs, 2009; Poppitt & Frey, 2007).

Traditional sociocultural norms, religious beliefs, and parental attitudes can have a direct regulatory influence on an individual’s attitudes, beliefs, and behavioural intent (Lammers, Ireland, Resnick, & Blum, 2000; Little & Rankin, 2001; Manlove, Terry-Humen, Ikramullah, & Moore, 2006; Molla, Berhane, & Lindtjørn, 2008). In many African cultures the effect of these perceived regularity norms are thought to have an enduring strong influence on attitudes and behaviours (Liddell, Giles, & Rae, 2008). Acculturation, however, will inevitably change the attitudes and beliefs of all ages (Berry, 1997). Varying and sometimes conflicting cultural beliefs and contexts across the generations, arising from differing rates of acculturation, impact on how young people interact and communicate with their parents and other adults (Hebbani, Obijiofor, & Bristed, 2010; Poppitt & Frey, 2007). This contributes to the intergenerational disharmony that commonly arises among new arrival families (McMichael, 2013; Uskul, Lalonde, & Konanur, 2011).

It is well established that the confusion and challenges of learning to live within a new and sometimes conflicting sociocultural and environmental context influence how people behave as they try to establish a sense of belonging in their new country (Chown, Kang, Sanci, Newnham, & Bennett, 2008; Correa-Velez, Gifford, & Barnett, 2010; Guerra & White, 1995). People adapt to these changes in different ways; however, the confusion and challenges deepen as young people more readily accept and adopt the norms and behaviours of the host culture while rejecting traditional beliefs and culture to which the older members of new arrival communities tend to adhere (Jensen & Westoby, 2008). This can lead the youth to dislocate from traditional values in a way that threatens traditional family structures and parenting roles, and increases intergenerational disharmony (R. Palmer et al., 2009).
Exposure to the host country culture also means young people start to adopt sexual attitudes and practices similar to those of the mainstream culture (Meston & Ahrold, 2010). While there is a lack of research from an Australian perspective, studies in the USA have shown sexual health risk taking behaviour is influenced by acculturation (Dela Cruz, Padilla, & Agustin, 2000). There is an association between acculturation and a range of other risk behaviours, such as earlier initiation of smoking and substance abuse, with higher level acculturated migrant youth being more likely to engage in risk taking behaviour than others (Blake et al., 2001; Ebin et al., 2001; Kaplan, Nápoles-Springer, Stewart, & Pérez-Stable, 2001).

The majority of African cultures, including the Sudanese, consider sexual health related matters such as sex and pregnancies before marriage, HIV, and same sex relationships as culturally sensitive or ‘taboo’ topics associated with stigma, fear, and cultural shame (Abu-Raddad et al., 2010; Brody & Potterat, 2003; Dejong & Mortagy, 2013; McMichael, 2013; Mohamed & Mahfouz, 2013; Muchoki, 2012). Exposure to new sexual cultures on resettlement can be confusing and create intergenerational conflict (Muchoki, 2012). It is for these reasons that understanding the interaction between traditional normative cultural beliefs and behavioural expectations and those learnt, adopted, or perceived within the context a person is now living is imperative. This is particularly so from the perspective of young people as they learn to live within these varying and sometimes conflicting cross-cultural and intergenerational attitudes, beliefs, and social constructs faster and in a different way to previous generations and adults (Berman, 2001; R. White & Wyn, 2008).

Relevance to and implications for this study

- This study’s target population is predominantly from a refugee background,
- Forced migration is associated with increased sexual vulnerability and the risk of negative sexual health outcomes such as:
  - Widespread sexual violence, especially against women, young people, and unaccompanied minors, and,
  - Increased risk of exposure to HIV and STI, particularly for those who originate from and/or transit through high prevalence countries like
Kenya and other Sub-Saharan African countries, such as this study’s target population,

- Pre- and post migration health screening is in place in Australia; however, screening for STI and HIV is inconsistent and has cultural and logistical challenges,
- This study’s target population may have poor levels of sexual health knowledge,
- Navigating conflicting sociocultural normative beliefs and behavioural norms post resettlement in Australia may result in increased sexual risk taking behaviour and continued sexual vulnerability for this study’s target population,
- Australian rates of new HIV infections and late HIV diagnosis among individuals born in high prevalence countries, in particular those from Sub-Saharan Africa, have risen noticeably in recent years, suggesting Sudanese Queenslanders need to be considered a sexual health priority population,
- There is a dearth of research focusing on the factors influencing post resettlement sexual vulnerability and behaviour among Australian refugee background communities.

### 2.2.2 Young people

Globally, young people are considered sexually vulnerable and experience disproportionately higher rates of STI and other negative sexual health outcomes compared to older age groups (Bearinger, Sieving, Ferguson, & Sharma, 2007; Ethier & Orr, 2007). The longitudinal National Survey of Australian Secondary Students and Sexual Health (NSASSSH), conducted roughly every five years since 1992, provides an accurate overview of the sexual attitudes, knowledge levels, and patterns of behaviour of young Australians. Its results suggest STI and pregnancy rates have remained relatively stable among 15-17 year old school attendees from 2002 until 2014 (Agius, Pitts, Smith, & Mitchell, 2010; Mitchell, Patrick, Heywood, Blackman, & Pitts, 2014; Smith, Agius, Dyson, Mitchell, & Pitts, 2003; Smith, Agius, Mitchell, Barrett, & Pitts, 2009). Nonetheless, Australia continues to have one of the highest teenage pregnancy rates in the developed world, despite declining birth rates among young Australians in recent years (Agius, Pitts, Dyson, Mitchell, & Smith, 2006; Family Planning Queensland, 2012; Skinner et al., 2009).
Young Australians are also at significantly more risk of acquiring an STI compared to older age groups (Australian Institute of Health and Welfare, 2010), with the 15-24 year olds representing 81% of the annual notifications of chlamydia (The Kirby Institute, 2013a). Young people with a refugee background are considered particularly vulnerable (Haour-Knine, Eriksson, & Grondin, 2006; McMichael & Gifford, 2010). However, an absence of STI prevalence data specific to ethnic subgroups living within Australia makes it difficult to determine their risk post resettlement. Nonetheless, it can be proposed that they remain vulnerable in relation to their sexual health post arrival in Australia. It is, therefore, timely and important for this current research exploring sexual health within the social, cultural, and environmental context in which this study’s target population now live. Contextualised understanding of the factors influencing sexual health knowledge, attitudes, and behaviours, along with what motivates sexual decisions regarding protective or risk taking behaviour, will help safeguard against this group’s sexual vulnerability being increased purely by their resettlement to Australia.

The dynamic transition young people experience as they journey from childhood through adolescence to adult independence compounds the complexity of factors influencing their health and behaviour (de Visser, Rissel, Smith, & Richters, 2006; Kang, 2011). This transition period includes significant biological changes occurring simultaneously with young people experimenting and exploring their sexuality and independence (Rosenthal & Browning, 2005). Considered essential by behavioural theorists for the development of independence and ability to form healthy adult relationships, this pattern of experimentation often includes sexual and other risk taking behaviours that may be perceived as problematic and culturally unacceptable by parents and other adults (Rosenthal & Browning, 2005). Young people begin to develop an adult perspective of sexuality during this phase; however, their level of sexual maturity and vulnerability continues to be influenced by the sociocultural and environmental context in which they live (de Visser et al., 2006; Ethier & Orr, 2007). For example, how a young person learns and behaves is influenced by the people within their social and familial networks, neighbourhood, and school environment. As stated earlier, young people are disproportionately affected by negative reproductive health outcomes; however, those with lower levels of educational attainment and living in lower socioeconomic circumstances suffer further inequity (Coleman & Testa, 2007).
Young people from refugee and migrant backgrounds, such as those participating in this current study, face similar developmental issues and sexual health choices to their mainstream peers (McMichael, 2008; McMichael & Gifford, 2009). They also often experience socioeconomic and environmental circumstances that place them at increased risk (Beadnell, 2007; Coleman & Testa, 2007). When combined with their pre- and post settlement experiences, these factors suggest this group of young people may be more sexually vulnerable compared to many of their contemporary Australians (Couch et al., 2006; Keys et al., 2008).

Young people are resilient and readily adapt to challenges (Schweitzer, Greenslade, & Kagee, 2007). Nevertheless, if they do not possess the necessary knowledge and skills to make informed decisions or to address their fears and concerns, they are at increased risk of negative outcomes that impact their sexual health and general wellbeing throughout their lifespan (A. C. Chen, Thompson, & Morrison-Beedy, 2010; Sathe & Sathe, 2005). The challenges and confusion of learning to live within a different sociocultural context further adds to the sexual vulnerability of refugee background youth and alters how they behave in response to the sexual choices faced post settlement in Australia (McMichael, 2008; McMichael & Gifford, 2009).

Behaviour and capacity to make informed decisions is influenced by a young person’s stage of biological, cognitive, and psychosocial transition into adulthood (Ethier & Orr, 2007). Normal adolescent development can place young people at increased risk of STI and unplanned pregnancy (McWhirter et al., 2007), particularly when combined with the low levels of sexual health related knowledge and perceptions of risk that often exist (Agius et al., 2010; Senior, Helmer, Chenhall, & Burbank, 2014; Weinstein, Walsh, & Ward, 2008). Uncertainty and confusion about the sudden physical, emotional, and psychological changes that occur during normal adolescent development can lead to young people feeling misunderstood, unprepared, and unwilling to discuss their feelings and emerging perceptions of their sexuality with peers, parents, and other people (Sathe & Sathe, 2005). Young people also often lack the interpersonal relationships, confidence, and communication skills required to communicate these mixed feelings and anxieties or to seek out information (Lou, Chen, Li, & Yu, 2010). It is during this time that young people require guidance and support from important social and familial networks to learn and to develop the confidence, self-determination, and identity that
promotes protective sexual health seeking behaviour (Ethier & Orr, 2007; Gloppen, David-Ferdon, & Bates, 2010; O’Leary et al., 2012; Senior et al., 2014). The presence of supportive family can also moderate behaviour (O’Leary et al., 2012). A lack of, or disruption to, these support networks, such as experienced by many refugee background families (Correa-Velez et al., 2010; McMichael, Gifford, & Correa-Velez, 2011), can lead them to seek information from unreliable sources and to the development of misconceptions about their level of sexual safety.

Existing health and behavioural factors associated with limited access to health care education and protection pre-arrival solely could account for the vulnerability of refugee background youth post arrival in settlement countries (N. Davidson, Skull, Burgner, et al., 2004; M. Harris & Zwar, 2005). However, post arrival experiences, including socialisation to the new cultures and normative beliefs associated with living within a bicultural society, exposure to media, and the resultant shift or change in sociocultural and sexual norms and behavioural expectations, have been shown to contribute to this increased vulnerability (Haour-Knipe et al., 2006; McWhirter et al., 2007). Limited access to traditional support systems and the daily struggle to achieve the basic requirements of survival, such as food, shelter, and health care, often result in sexual and reproductive health needs being placed at a low priority both pre- and post migration for many refugee and migrant groups. Previous Australian research suggests refugee background youth post arrival in Australia experience cultural dislocation, discrimination, racism, and frustration at being stereotyped or grouped by their ethnicity or refugee experiences (McMichael, 2008). This can lead to disengagement from school and poor health outcomes. The small sample (N = 142) in McMichael’s study prohibited meaningful analysis of the Sudanese subgroup (n = 25); nonetheless, these experiences can also lead to reduced self-confidence, low self-esteem, and feelings of failure (Australian Human Rights Commission, 2010a). These are all predictive factors of sexual health risk (Gloppen et al., 2010; Rosenthal, Moore, & Flynn, 1991).

Cultural and linguistic barriers, stigma, and discrimination attached to the culturally sensitive topic of STI and HIV, along with xenophobia, may influence perceptions of priority and willingness to access sexual health services and information for African and other ethnically diverse young people post resettlement (Fenton, Chinouya, Davidson, & Copas, 2002; Tompkins et al., 2006). Reluctance to access services and to participate
in prevention initiatives is further compounded by the persistent and significant social stigma, discrimination, and fear associated with HIV and sexual health issues among African migrants and refugees (Fenton et al., 2002). Low levels of perceived sexual risk, linked with poor health seeking behaviour, contribute to this group’s ongoing vulnerability to sexual health related risk factors (Fenton et al., 2002).

Most young Australians have experienced sexual activity of some kind by the age of 18 and, while a substantial proportion reports using condoms (Kang, 2011; Mitchell et al., 2014; Smith et al., 2009), many do not consider the associated risk or protective factors until after their sexual début. The lack of behavioural data pertaining to Australian Sudanese youth limits understanding of the factors that influence their sexual decisions, behavioural patterns, and associated risk. Understanding the physical, social, cultural, and environmental factors that influence a young person’s sexual decision making, behavioural intent, and, therefore, their potential sexual risk from the context in which that young person is living is the key to reducing their sexual vulnerability and improving their sexual health and wellbeing (Croghan, 2006). Consistent with the theoretical framework underpinning this current study (Fishbein, 2000; Montaño & Kasprzyk, 2008), a systematic review by Marston and King (2006) of 268 qualitative studies involving participants from a diverse range of cultures and countries suggests the factors that influence a young person’s sexual behaviour, such as sociocultural normative beliefs, behavioural expectations, gender stereotypes, and relationship dynamics, are similar worldwide. A person’s perception of their risk was also identified as a strong common determinant of sexual behaviour and decision making (Marston & King, 2006).

Relevance to and implications for this study

- Young people are sexually vulnerable and disproportionately affected by STI and other negative sexual health outcomes compared to older age groups,
- Refugee background youths are considered particularly vulnerable,
- Physical, sociocultural, and environmental factors influence a young person’s sexual decision making and behavioural intent,
- Socialisation to a new culture and associated normative beliefs contribute to increased sexual vulnerability,
• An absence of ethnicity specific STI prevalence and behavioural data makes it difficult to determine the post resettlement sexual vulnerability of this study’s target population.

This study seeks part way to address the identified gap in understanding of these factors with Australian refugee background youth.

2.2.3 Sexual risk and risk perceptions

Cultural theory of risk, developed by Mary Douglas and Aaron Wildavsky (1992), posits the way people perceive danger, think about social norms, and make conscious decisions in response to risk is influenced by a range of social and cultural constructs (Kahan, 2012; Ol tedal, Moen, Klempe, & Rundmo, 2004; Tansey & O'Riordan, 1999). It is well established that behaviour and behavioural intent are influenced by the sociocultural and environmental context in which they may occur (Fishbein, 2000; Lammers et al., 2000; Overstreet, Cegielski, & Hall, 2013). The cultural theory of risk asserts that assessment of risk and resulting behavioural decisions are also influenced by these factors; however, they cannot be made in isolation of an individual’s perception of their sociocultural context (Tansey & O'Riordan, 1999). Rather, it is the interaction of individual and collective level social, cultural, and environmental norms and external factors that explain why people make different choices in regards to taking risk. How an individual assesses and/or responds to perceived danger or risk is dependent on their bond to their community sociocultural norms, and their perceived role and responsibility within this community and/or relationship. Confusion can arise when trying to learn to live and to make these risk assessments within new and conflicting collective norms. This supports why migration experiences have been identified as a factor that influences a person’s perception of risk and associated patterns of sexual risk taking behaviour (Jayakody et al., 2011).

The cultural theory of risk asserts that the interaction of all the individual and collective level sociocultural factors needs to be considered in the social and environmental context in which that person is living, along with that individual’s perception of their place within that society. Nonetheless, the individual’s perception of risk, past experiences, and relationship context in which the sexual decision making is occurring can often override these broader collective sociocultural population constructs (Green,
For example, multiple studies have associated condom use with a person’s perception of being judged or stigmatised, according to normative sociocultural standards and beliefs (Corbett, Dickson-Gómez, Hilario, & Weeks, 2009; Marston & King, 2006; Newton, Newton, Windisch, & Ewing, 2013). However, when an individual is deciding whether or not to engage in unprotected sexual contact their perception of their partner’s characteristics, such as being perceived as clean or risky and unclean, or being in a long-term loving relationship compared to a casual partner, combined with perceived severity of the consequences, may well override those broader social and cultural level factors (Green, 2002; Marston & King, 2006; Senior et al., 2014). Perceptions of gaining a reward versus experiencing a penalty, such as loss of that relationship, along with pressure to please partners or others or fear of partners, are all strong common cross-cultural influences on a person’s intent to behave in a safe or risky manner (Marston & King, 2006). These factors are all considered predictors of sexual risk and vulnerability along with behavioural intent.

Perceptions of risk, decision making, and related risk taking behaviours are also influenced by gender, with males being considered generally more inclined to initiate higher risk behaviour (Pawlowski, Atwal, & Dunbar, 2008). Level of risk taking is further influenced by who is present at the time of decision making, such as when competing with peers or ‘showing off’ to girls (Pawlowski et al., 2008; Wilke, Hutchinson, Todd, & Kruger, 2006). Risk taking behaviour in some domains, such as physical risk, may be considered attractive and part of mating signals amongst some groups. However, the same risk taking behaviour may be repellent to others depending on accompanying sociocultural constructs, norms, and perceived fear of associated negative sociocultural outcomes (Kahan, 2012; Ol tedal et al., 2004; Tansey & O’Riordan, 1999).

Sexual risk taking behaviour is defined as any behaviour relating to sexual activity that, when performed, may result in a negative outcome such as an STI or HIV diagnosis, unwanted sex, or an unplanned pregnancy (A. C. Chen et al., 2010; Wehmeier, 2007). Predictors of sexual risk, risk taking behaviour, and vulnerability to STI and other negative sexual health related outcomes also include patterns of condom and contraception use, alcohol and drugs use, teenage pregnancy, and accessing health and information services (Bearinger et al., 2007; Caminis, Henrich, Ruchkin, Schwab-Stone,
& Martin, 2007; Feinberg, Ridenour, & Greenberg, 2007; Koniak-Griffin & Stein, 2006; Moilanen, Crockett, Raffaelli, & Jones, 2010). A young person’s sexual vulnerability and pattern of risk taking behaviour is also influenced by a history of sexual violence and unwanted sexual experiences (Basile et al., 2006; Hogben et al., 2001; Littleton, Breitkopf, & Berenson, 2007) and their level of knowledge and self-efficacy in communicating about sexual and reproductive health matters (Garwick, Nerdahl, Banken, Muenzenberger-Bretl, & Sieving, 2004; Gloppen et al., 2010). Factors such as the prevalence of STI and HIV in the community, health seeking behaviours, educational level, socioeconomic status, age, gender, and ethnic origin, as well as patterns of sexual début and behaviour, partner change, and social mixing are also known to influence an individual’s sexual risk and vulnerability (Fenton et al., 2005; Gerressu & Stephenson, 2008).

There are established links between a young age of sexual début and an increased rate of negative sexual and reproductive health outcomes (Coleman & Testa, 2007; Ethier & Orr, 2007; Fenton et al., 2005) including unplanned pregnancy and STI (Caminis et al., 2007; Gray et al., 2008; Lammers et al., 2000; Valle, Torgersen, Røysamb, Klepp, & Thelle, 2005). An individual’s beliefs, attitudes, and perceived skills are strong predictors of sexual initiation (Gray et al., 2008). Traditional sociocultural norms and behavioural expectations and other familial level factors also influence patterns of sexual initiation and can, in some cultures, have a strong regulatory effect on an individual’s decision to delay initiating sexual activity (Gray et al., 2008; Lammers et al., 2000; Little & Rankin, 2001; Manlove et al., 2006). However, changing family and social factors, such as a change in the household structure like the loss of a male figure and living with a single mother, failure at school, and living unaccompanied away from family, are all strong predictors of early sexual début (Hargreaves, 2002; Lammers et al., 2000). These factors, combined with an increased risk of exposure to conflict, violence, and sexual assault (N. Davidson, Skull, Chaney, et al., 2004; Hargreaves, 2002; Lammers et al., 2000; Pedersen, Samuelsen, & Wichstrom, 2003; Valle et al., 2005) are all variables young refugees and migrants are exposed to during their migration and resettlement experiences.

Some researchers propose young people have the ability to self-determine behaviours and identify behaviours as ‘risky’ (Hargreaves, 2002). Other studies suggest young
people often lack the ability to perceive risk and to understand the consequences associated with their intended behaviour, even if they have access to the knowledge (Greene, Krcmar, Walters, Rubin, & Hale, 2000; Senior et al., 2014). Knowledge alone does not necessarily equate to young people practising safer sexual behaviour (Couch et al., 2006). A young person’s behaviour and perception of risk is also influenced by their ability to identify and to process any potential positive or negative outcomes associated with that behaviour (Hargreaves, 2002). Young people commonly express concern about unplanned pregnancies and fear of the perceived stigma attached to STI; however, generally, they have a sense of invulnerability and low perception of risk for acquiring an STI or other negative outcome (Abel & Brunton, 2005; Senior et al., 2014). These perceptions are similar among migrant and refugee background youth who generally demonstrate a very low priority to sexual health related matters (Connell, McKEvitt, & Low, 2004; McMichael & Gifford, 2010). This lack of concern, combined with poorer knowledge and understanding about STI and other sexual health related matters, contribute to this group’s sexual vulnerability (McMichael & Gifford, 2010).

Relevance to and implications for this study

- Perceptions of risk, similar to behavioural intent, are influenced by a range of sociocultural and environmental factors,
- Traditional sociocultural norms and behavioural expectations and other familial level factors can influence and regulate sexual behaviours,
- Exposure to new and conflicting sexual norms can lead to cultural confusion, sexual risk taking behaviour, and altered perceptions of sexual risk,
- There is a dearth of literature concerning Australian refugee background youth’s perceptions of sexual risk and how this influences their sexual decision making and behaviour.

Addressing the sexual and reproductive health issues facing young people from all sectors of our community is vital. Identifying and exploring the contextualised sociocultural and environmental factors that influence sexual decision making, behavioural intent, and perceptions of risk, along with prevalence of negative sexual health outcomes among specific subsets of the community, will enable the development of evidence informed age appropriate prevention strategies tailored to the unique
sociocultural context in which the target community lives (Bearinger et al., 2007; A. C. Chen et al., 2010). Such strategies should aim to promote individual sexual health seeking behaviours while addressing the broader community based constructs influencing intercultural and generational confusion and conflict.

2.3 Limitations of Existing Research

Historically, the vast majority of research addressing sexual health related issues has been pathological and disease focused (Wellings & Cleland, 2001) and conducted using Western theoretical frameworks (A. C. Chen et al., 2010; Khawaja, White, Schweitzer, & Greenslade, 2008). Such research often only targeted individual diseases or specific behaviours, failed to adequately capture the burden of the disease on the community, or contextualised sociocultural and environmental determinants that influence sexual behavioural intent and disease patterns unique to the target populations (A. C. Chen et al., 2010; Khawaja et al., 2008; Wellings & Cleland, 2001). The extensive body of evidence supporting the efficacy of evidence informed behaviour change interventions has given rise to an increased focus on the broader behavioural and community level sociocultural and environmental determinants of sexual health and wellbeing (Fishbein, 2000). Conducting social, behavioural, and biological research enhances lifelong health outcomes for the individual while also facilitating contextualised understanding and awareness of the health status and needs of the community. There is, however, a dearth of ethnicity specific behavioural and biomedical data focusing on the sexual health of many of the newly arrived and emerging migrant and refugee communities in Australia (McMichael & Gifford, 2010).

National population based studies focusing on broader general health and wellbeing, by and large, include sexual health related questions. However, such research often lacks biological data allowing triangulation of STI prevalence with reported behavioural patterns to identify true priority populations (Wellings & Cleland, 2001). Broad population based studies using conventional sampling frames, such as electoral rolls or census data, also often yield insufficient data to produce significant findings relating to the smaller, marginalised population subsets such as the one involved in this current study (Wellings & Cleland, 2001). Use of standard census demographic data, such as place of birth and language spoken, fail to collect sufficient information to identify the unique identifiers that represent or define these community subsets (Bloch, 2007; J.
Robinson, 2011). The representation of these groups in larger national population based studies is also influenced by difficulty in accessing these groups and their potential unwillingness to participate, associated with past experiences of betrayal or persecution by government officials (Hynes, 2003; Jacobson & Landau, 2003), fear of discrimination (Colic-Peisker, 2009) and other more pressing issues of settlement (McMichael, 2008).

As discussed previously, sexual health is a culturally sensitive and taboo subject associated with stigma, fear, and cultural shame within many African cultures, including the Sudanese (Abu-Raddad et al., 2010; Brody & Potterat, 2003; Dejong & Mortagy, 2013; McMichael, 2013; Mohamed & Mahfouz, 2013; Muchoki, 2012; R. Palmer et al., 2009). This sensitivity and stigmatisation contributes to the ethical, methodological, and logistical challenges associated with conducting research in this area among many communities and the dearth of research addressing sexual health and wellbeing of refugee background communities in their new settlement country, including Australia (Chinouya, Davidson, & Fenton, 2000; Hoffman et al., 2011; McMichael & Gifford, 2009, 2010; Tompkins et al., 2006; Zhou, 2012). This has led to large gaps in understanding of the sexual health needs of these new arrival communities from the context of their settlement countries, as well as limited understanding of what methodological approach would be acceptable and effective in trying to answer this complex sensitive question (Chinouya et al., 2000).

The MAYISHA Sexual Health Survey for African Communities project, a large mixed methods study designed to explore the sexual attitudes and lifestyles of African communities in England (MAYISHA II Collaborative Group, 2005), reported it is feasible to conduct research into the sexual health of migrant and refugee communities, including young people from 16 years of age. However, the report stressed the research needs to be conducted in collaboration with the community (Sadler et al., 2007; Sadler et al., 2006). However, the challenges associated with conducting community participatory sexual health research with young people and vulnerable ethnically diverse groups has contributed to the dearth of research in this area (Elam & Fenton, 2003; Flicker & Guta, 2008).
A body of research involving the Australian Sudanese community has emerged since the commencement of this current study. The majority of this research, however, is based on their belonging to broader generalised collective groups such as African, or Sub-Saharan African (Carolan, 2010; Horyniak et al., 2012; Matereke, 2009; Muchoki, 2013), refugee, Culturally and Linguistically Diverse (CALD), or non-English speaking background (Henderson & Kendall, 2011; D. Johnson, 2007; D. R. Johnson, Ziersch, & Burgess, 2008). Research inclusive of a range of ethnicities may achieve sufficient numbers to yield an adequate sample size (Wellings & Cleland, 2001). Research target populations labelled into groups like ‘refugee’ or ‘African’ may attract funding bodies (Phillips, 2011). Nevertheless, each of these options presents methodological challenges and issues. Collective labelling as ‘African’ limits understanding of the true heterogeneous nature of the African and Sudanese communities (Dhanji, 2009; Phillips, 2011), along with the sociocultural reality and motivators unique to individual ethnicities and cultural subsets gathered within these groupings (Dean et al., 2012; Durantini, Albaracin, Mitchell, Earl, & Gillette, 2006; Phillips, 2011; Van Der Velde, Williamson, & Ogilvie, 2009; Wilson & Neville, 2009). Labelling or grouping individuals and communities based on prior experiences and assumptions of belonging can also reinforce biases and stereotypes (Phillips, 2011).

Research with the Australian or the Queensland Sudanese community as the sole target population predominantly focuses on issues relating to acculturation (Hatoss, 2012; Hebbani et al., 2012; Milner & Khawaja, 2010; Poppitt & Frey, 2007), settlement in Australia (Lejukole, 2008; Marlowe, 2011; Milos, 2011; K. E. Murray, 2010; Nunn, 2011), English literacy, education, and learning (J. Brown, Miller, & Mitchell, 2006; U. Burgoyne & Hull, 2007b; Hatoss, O'Neill, & Eacersall, 2012; Turner & Fozdar, 2010), mental health and trauma (Copping, Shakespeare-Finch, & Paton, 2010; Savic, Chur-Hansen, Mahmood, & Moore, 2013; Westoby, 2005), but not sexual health. This dearth of sexual health related research is also reflected across the broader Australian African migrant and refugee communities. A review of 108 articles concerning African-Australians with refugee backgrounds by Muchioki (2012) identified only four papers addressing sexual health or sexuality related issues. The scarcity of research addressing the sexual health of the collective African community and subsets within has led to limited understanding of the impact settlement has had on their sexual health, including
how new arrivals engage with, or adjust to, the Australian sexual culture and norms (Muchoki, 2012).

There is also limited research available in Australia addressing the impact of a bicultural upbringing on the sexual health knowledge, attitudes, and beliefs of the young members of the newly arrived Sudanese community. On arrival in a new country, refugee and migrant youth experience a bicultural upbringing that includes socialisation into a new country’s norms while being taught and influenced by social norms and cultural practices of their country of origin (Berry, 1997; Berry & Sabatierb, 2010; Palak, 2005). The coming together of two different cultures creates intergenerational confusion and conflict (Ebbeck & Dela Cerna, 2006; Hailonga van Dijk, 2007; Hebbani et al., 2012). Further research is needed in order to explore how, where, or if these two cultures merge to influence the young people’s sexual health knowledge, attitudes, and beliefs, along with behavioural intent and actual behaviour.

Newly arrived Australians, including the Sudanese and other African-Australian communities, are already experiencing significant discrimination and stereotyping based on their ethnicity, appearance, and media coverage of events as they struggle to find their place in their new society (Australian Federation of AIDS Organisations Inc, 2006; Australian Human Rights Commission, 2010a, 2010b; Colic-Peisker, 2009; Correa-Velez et al., 2010; Cottone, 2005; Fozdar & Torezani, 2008; Hebbani & McNamara, 2010, July; Losoncz, 2011; Marjoribanks, Nolan, & Farquharson, 2010, July; Mungai, 2008, November; Nunn, 2011; Poppitt & Frey, 2007; Sulaiman-Hill, Thompson, Afsar, & Hodliffe, 2011; Victorian Equal Opportunity & Human Rights Commission, 2008; Windle, 2008). Therefore, it is important that this ethnicity specific data are collected and used in a manner that negates the risk of individuals and communities experiencing further discrimination and stereotyping by being labelled as ‘risky’ or a threat rather than vulnerable (O. Davidson et al., 2002; Worth, 2006).

There is extensive research exploring factors that influence behaviour and the efficacy of behavioural theories in predicting and changing behaviours associated with sexual health and HIV related risk and prevention (de Visser & O’Neill, 2013; Noar, 2007a; Noar & Zimmerman, 2005; Overstreet et al., 2013). However, there is a significant lack of research exploring the intergenerational and cross-cultural elements influencing the
sexual health related behaviours and risk of ethnic minority communities in Australia from the context of their settlement experience within Australia’s ever evolving multicultural community. The gap in understanding of these sub-populations’ sexual health needs and vulnerabilities requires addressing. However, researchers are ethically bound to ensure the primary aim of all research is for the community to benefit (Wilson & Neville, 2009). This current study seeks to address this identified gap in literature for the Queensland Sudanese Community.

Relevance to and implications for this study

- Extensive research has been conducted exploring factors that influence behaviour and the efficacy of behavioural theories in predicting and changing behaviours associated with sexual health and HIV related risk and prevention,
- There is, however, a dearth of ethnicity specific sexual health behavioural and biomedical data for many of the newly arrived and emerging migrant and refugee background communities in Australia,
- The ethical, methodological, and logistical challenges of conducting culturally sensitive sexual health related research in collaboration with vulnerable populations such as this study’s target community has contributed to this dearth of literature,
- To adequately capture the contextualised sociocultural and environmental determinants that influence sexual behaviour unique to these vulnerable populations and negate any potential harm, research needs to be conducted using a culturally proven theoretical framework and a culturally safe methodological approach.

The following sections of this chapter present the theoretical framework adopted for this study and the rationale for the methodological approach applied in order to minimise and negate any risk associated with participation throughout the research process.
2.4 Theoretical Framework

2.4.1 Integrated Behavioural Model (IBM)

The Integrated Behavioural Model (IBM) developed by Fishbein (2000) (See Figure 2.1) was adopted for this research. This section of the chapter presents and justifies the use of the IBM for this research.

(Fishbein, 2000; Montaño & Kasprzyk, 2008)

Figure 2.1: Integrated Behavioural Model (IBM)

The IBM takes into account the complex interaction of the social, cultural, and environmental variables that influence intention or motivation to perform a behaviour and comprises a combination of variables from a number of well-established behavioural theories (Fishbein, 2000) including:

1. **Theory of Reasoned Action (TRA)** proposes the immediate determinant of behaviour is *intent* (Basen-Engquist & Parcel, 1992) and intent is shaped by an individual’s *beliefs* and *attitudes* towards that behaviour, influence of others (peers), and how they value approval of others (F. Allen, 2010; St Lawrence & Fortenberry, 2007).
2. **Theory of Planned Behaviour (TPB)**, an extension of the TRA, adds that behaviour is influenced by an individual’s *perception* of how much *control* they have over their own behaviour (Brannon & Feist, 2007).

3. **Health Belief Model (HBM)** proposes an individual’s *perception* of susceptibility to the disease, the severity and perceived harm or threat of the disease, and finally the benefits of health enhancing behaviour predict how they behave and seek health care (F. Allen, 2010; Brannon & Feist, 2007; UNAIDS, 1999).

4. **Social Learning Theory (SLT)** assumes people continuously learn behaviours from one another and from interaction with environmental determinants, via observation, imitation, and modelling (Bandura, 1977; Ormrod, 1999), and posits an individual’s ability to learn and to perform the behaviour is based on their *perception of self-efficacy* and expectations about outcomes (Dubois-Arber & Caraël, 2002).

These four theories have all been used effectively to predict and to change sexual behaviours, and in the development of STI and HIV education and health promotion programs targeting vulnerable minority groups (Hornik, 2007; Nutbeam & Harris, 2004; Rye, Fisher, & Fisher, 2001). However, no one theory has been found to be more effective in predicting sexual risk taking behaviour than another (Fishbein, 2000; Noar, 2007b).

Following consideration of the key determinants identified in these widely accepted behavioural theories, Fishbein (2000) proposed that, out of the vast number of variables that influence behaviour, there are a select number that influence intent to behave and these can be integrated into one effective model for predicting and understanding any given behaviour (Fishbein, 2000; Fishbein & Cappella, 2006; Montaño & Kasprzyk, 2008; Yzer, 2012). Fishbein further proposed that intention or motivation to perform a behaviour is one of the most important determinants of that behaviour occurring (Montaño & Kasprzyk, 2008). The IBM identifies the most important and influential determinants of behavioural intent from each of these behavioural theories and integrates them into a flexible well-established model that takes into account the different and unique sociocultural characteristics of any given population (Fishbein, 2000; Yzer, 2012).
The IBM, also known as the Integrative Model of Behavioural Prediction (Montaño & Kasprzyk, 2008), includes three primary determinants that structure the intent to behave (Fishbein, 2000). These include an individual’s attitude toward performing the behaviour, their subjective norm or perceived pressure to perform combined with their perception of the social norm in relation to that behaviour, and their self-efficacy or confidence in their ability to perform or to control the specific behaviour. The IBM hypothesises, consistent with the TRA and TPB, an individual’s knowledge, skill, and intent to perform a specific behaviour strongly influences the occurrence of that behaviour. However, similar to the HBM, environmental constraints or perceived barriers can prevent that behaviour occurring. Fishbein (2000) proposed that to accurately predict the behavioural intent of an individual all determinants and barriers to that behaviour need to be considered from the perspective of the actual society or context in which that individual resides or the behaviour occurs. It is essential to understand the behavioural, normative, efficacy, and control beliefs of the population in consideration and the degree to which the individual’s intent to behave is influenced by these broad community level socioculturally driven attitudes and beliefs (Fishbein, 2000; Montaño & Kasprzyk, 2008). For example, an individual’s attitude to a specific behaviour is influenced by their belief that it is ‘good’ or ‘bad’ and their motivation or intent to perform that behaviour is strengthened if they perceive the population believes it is ‘good’ and socially acceptable. Conversely, if the population considers the specific behaviour to be ‘bad or taboo’, then the IBM proposes the individual will be attitudinally driven not to perform that behaviour.

The IBM also recognises the importance of external variables as one of the most proximal and significant factors in the formation of a person’s beliefs (Fishbein, 2000; Hutchinson & Wood, 2007). External influencing factors, such as parental influences, cultural background, peer pressure, and past experience, have been found to be important factors in predicting intent and understanding behaviour (Hutchinson & Wood, 2007). Demographic variables, such as location, age, and gender, combined with an individual’s personality, are thought to indirectly influence the formation of an individual’s behavioural, normative, and self-efficacy beliefs (Fishbein, 2000). The IBM model proposes that even this indirect influence cannot be excluded due to its potential impact on the underlying belief systems of the individual and the population in which they live. Many of these external or background variables are not able to be
changed, however, their inclusion in the IBM recognises the need for flexibility to incorporate the different and often unique demographic, socioeconomic, and cultural factors of the individual and target population (Yzer, 2012).

A specific singular behaviour can be defined as: *the action, the target, the context, and the time period in which the behaviour is observed or expected* (Fishbein, 2000). Change in any one of the four elements will change the behaviour and potentially change the overall outcome or risk associated with that behaviour. Consider the single behaviour of using (*the action*) a condom for anal sex (*the target*) with a regular partner always (*the context and time period*) and compare this with using a condom for anal sex with a casual partner sometimes. The behaviour of condom use for anal sex is the same *action* and *target* but this behaviour can result in a potentially riskier *context* and *time period* for the second behaviour with the casual partner. The IBM proposes identifying and understanding the intrinsic and extrinsic variables that influence a specific singular behaviour, such as condom use, from the context in which it occurs is the key factor in predicting if that behaviour will occur and being able to change that behaviour (Fishbein, 2000).

### 2.4.2 Justification for theoretical framework

The Integrated Behavioural Model (IBM) has been successfully used to predict and understand patterns of condom use among identified high risk populations such as injecting drug users, men who have sex with men, sex industry workers, and heterosexuals who have multiple partners (Kasprzyk et al., 1998; Montaño & Kasprzyk, 2008). Since its development, it has also been applied extensively in the development of effective theory based HIV behaviour change and intervention programs (Fishbein, 2000). Sexual health and HIV interventions developed using results of studies grounded in behavioural theories, such as the IBM, have been shown to be effective in changing attitudes and targeted behaviours (Albarracín et al., 2005; Albarracín et al., 2001; Fishbein & Pequegnat, 2000; St Lawrence & Fortenberry, 2007; Yzer, 2012).

Developing an intervention was beyond the aim and scope of this study’s purpose. Nonetheless, the use of the IBM has also been well established as a framework to assist in the exploration of sexual behaviour and the determinants that influence sexual
behaviour, the primary aims of this study (Fishbein, 2000). Identifying and understanding the who, when, where, and why sexual behaviour occurs and any potential influencing factors using the constructs underpinning the IBM will, therefore, provide valuable data to guide the future development of evidence based intervention programs, health policy, and practice change (Fishbein, 2000). The appropriateness of behavioural theories for application in a multicultural context has been questioned by some due to the theories’ original grounding in the Western developed world context (O. Davidson et al., 2002). The theoretical models integrated into the IBM, have all been successfully applied independently in a variety of populations and cultural contexts to explore and to predict sexual behaviour (Kakoko, Åstrøm, Lugoe, & Lie, 2006; Mulatu, Adamu, & Haile, 2000).

The IBM by Fishbein (2000) has also been effectively used to help understand the interactive relationship between the social, cultural, and environmental factors that influence the sexual behaviour of young people from vulnerable populations, such as the target population for this study (Dubois-Arber & Carael, 2002). Contextualised understanding of these factors helps guide the development and implementation of culturally informed and appropriate health education and intervention programs (Jackson, 1997), effective in changing individual and community level attitudes, perceptions, and social norms that influence sexual behaviour, thereby improving health seeking behaviours and increasing positive client outcomes (Jackson, 1997; St Lawrence & Fortenberry, 2007).

Understanding the factors that influence sexual behaviour is not a straightforward step-by-step process. It involves the identification and understanding of multiple internal and external elements from personal, social, cultural, and environmental levels. It is also important to take into consideration an individual’s sexual decision making and self-efficacy, which are not always associated with rational thought or calm reflective decisions (F. Allen, 2010) but influenced by sometimes unpredictable factors such as sexual excitement and spontaneity (B. B. E. Robinson, Bockting, Rosser, Miner, & Coleman, 2002). The IBM provided an established evidence informed theoretical framework to guide exploration of social, cultural, and environmental factors known to influence and predict both individual and community level behavioural intent and patterns of sexual behaviour (Brannon & Feist, 2007; Fishbein, 2000; Fishbein & Yzer,
This theoretical underpinning also provided flexibility to effectively incorporate and to explore the external behavioural determinants unique to the contextual perspective of the target population.

Relevance to and implications for this study

- The IBM has been successfully used to predict and understand patterns of sexual behaviour and risk among identified high risk culturally diverse populations,
- The IBM provided a well-established framework to explore the social, cultural, and environmental factors known to influence sexual behaviour, such as knowledge, attitudes and beliefs, and confidence, the primary aim of this study,
- The variables contained within the IBM (knowledge, beliefs, attitudes, perceived norms, and self-efficacy and confidence) were used to guide development of the research questions of this study (See page 9 and Table 1.1),
- How the IBM guided the choice of items incorporated into the data collection tools used for this study will be expanded further in Chapter 3,
- The contextualised understanding of the IBM determinants of behaviour explored in this study will guide the development and implementation of culturally informed and appropriate health education and intervention programs.

2.5 Justification and Challenges of the Methodology

The Method Chapter (Chapter 3) presents the methodological framework for the research. This section of the literature review chapter comprises a review of literature providing justification for conducting this study in partnership with the target community using a convergent parallel mixed methods design. The challenges associated with conducting culturally sensitive research with vulnerable ‘hidden yet highly visible’ populations and the steps taken to address these issues in relation to this current study are then presented by inclusion of a co-authored published paper.
2.5.1 Justification of the research method

When conducting sensitive research with vulnerable and hard-to-reach populations, the research method needs to be rigorous and to provide flexibility to compensate for the target population’s diversity of vulnerabilities, needs, and experiences in a manner that accurately and safely captures the participants’ perspectives (Elam & Fenton, 2003; Liamputtong, 2007). The challenge of designing this current study, therefore, was to find a methodological approach that addressed these challenges while yielding valid data that answered the research questions (Gifford et al., 2006).

It is well established that a combination of methodological approaches provides a deeper understanding of the phenomena being studied when researching challenging sensitive topics and social situations such as sex with populations perceived as vulnerable and/or hidden (Ager, 2000; Gifford et al., 2006; Liamputtong, 2007, 2013). Using a mixed methods methodological approach in this current study expanded the scope of the research (Sandelowski, 2000), strengthened the quality and rigour of the research findings (Ager, 2000; Creswell, 1994, 2014; Creswell & Plano-Clark, 2007; Moffatt et al., 2006; Östlund, Kidd, Wengström, & Rowa-Dewar, 2011; Polit & Beck, 2012), while helping to offset potential weaknesses or biases that can occur when a single method approach is used in isolation for researching sensitive topics in vulnerable populations (Ager, 2000; Creswell, 1994; Creswell & Plano-Clark, 2007; Moffatt et al., 2006; Polit & Beck, 2012).

Triangulation and convergence of data from the combination of methods provided better understanding, clarity, and accuracy of the social phenomena being researched in this study, enabled identification of emerging links between the constructs being explored (Östlund et al., 2011), and provided opportunity to assess for potential discrepancy between the datasets (Dariotis, Pleck, Sonenstein, Astone, & Sifakis, 2009). Combining quantitative and qualitative approaches with a converging triangulation model was not intended to ensure consistency and accuracy between outcomes. It did, however, provide opportunity to compare, contrast, and validate the findings by enabling the exploration of the research question from a number of different perspectives and levels (Creswell, 2014; Creswell & Plano-Clark, 2007; Polit & Beck, 2012; Spicer, 2004). Convergence of the parallel mixed methods data provided opportunity for collaboration.
between the datasets that helped adjust for potential biases (Creswell, 2014; Polit & Beck, 2012). Integration of inferences drawn from the independent parallel analysis of this study’s mixed methods data further enhanced the validity and richness of the overall findings (Polit & Beck, 2012).

Using a combination of methodological approaches to answer this study’s research questions also provided participants greater choice in how they volunteered to share their stories and allowed for the use of both inductive and deductive reasoning (Creswell & Plano-Clark, 2007). Quantitative research in the form of a cross-sectional survey used in this current study provided a numeric description of trends, associations, and opinions of the study participants (Creswell, 2014). The use of interviews and focus group discussions (FGD) gave voice to the participants and elicited personal narratives grounded firmly within the local context of the situation (Ager, 2000). Such narratives helped to explain and to interpret the quantitative data, while clarifying the subtleties and complexities of the human and social element of this study’s research questions and overall findings (Creswell & Plano-Clark, 2007; Liamputtong, 2013; Seale, 2004; Spicer, 2004). Comparing and contrasting the interview findings with the population-based evidence derived from the larger survey sample also enabled the research findings to be further contextualised within the participant’s perspectives and applied in a broader social and health context than if a single method had been used (Gifford et al., 2006; Hynes, 2003; Spicer, 2004).

Combining methods also allowed for a larger quantitative sample of participants to be included in the research, thereby increasing the potential for generalisation of overall findings to a larger population and reducing potential biases created by personal researcher interpretation of qualitative data (Creswell & Plano-Clark, 2007). Interviews and FGD are both effective tools for exploring sexual health knowledge, attitudes, and beliefs (Power, 2002) and eliciting data on social norms in a cross-cultural context (Connell et al., 2004; Ingham & Stone, 2001; McMichael, 2008; Temple & Moran, 2006). The inclusion of interviews with young people and FGD with older community members in this current study elicited different level data that provided intergenerational understanding of the target population’s sociocultural norms and behavioural expectations. The inclusion of a qualitative approach also provided an
excellent platform to facilitate dialogue and rapport building between the researcher and participants (Creswell & Plano-Clark, 2007; Spicer, 2004).

Active participation of the target population throughout the research process, from the original identification and conceptualisation of the research problem through to the planning and development of the research method, was fundamental to the success of this research, which emerged from a community led initiative to understand the intergenerational diversity of sexual health knowledge, attitudes and beliefs, and behavioural expectations. The establishment of a collaborative active partnership with the target community, a core principle of community based collaborative or participatory research (Israel, Eng, Schulz, & Parker, 2005; Koch, Kralik, vanLoon, & Mann, 2006; Liamputtong, 2007), has been found to be very effective in establishing a sense of trust between the researcher and participants when conducting research targeting sensitive issues like sexual health and HIV amongst marginalised vulnerable populations such as youth and migrant and refugee communities (Brondani, Moniri, & Kerston, 2012; Marcus et al., 2004; Marsden, 2002). Involving the community in research can be labour intensive and resource expensive (Temple & Moran, 2006), nonetheless, the active participation of the community in all phases of this research assisted in building and maintaining a collaborative equitable partnership between the researcher, participants, and other key stakeholders.

The community inclusive nature of the methodology adopted for this research also provided valuable contextualised insight into the community’s sociocultural normative beliefs and perspectives on the research topic (Lantz, Israel, Schulz, & Reyes, 2006). This shared knowledge and understanding of the sociocultural norms and values assisted in developing a sense of safety between the participants and the principal researcher (Elam & Fenton, 2003; Liamputtong, 2007). Establishing this sense of trust was essential for the success of this current study involving members of a predominantly refugee background community who may have an existing sense of mistrust and fear of others, including fellow refugees, host country populations, government services, and research (Gifford et al., 2006; Hynes, 2003; Liamputtong, 2007).
Working collaboratively with the target community resulted in the development of a culturally safe research process, increased participation rates, decreased participant mistrust and concern about being stigmatised for being involved in the research, and ensured the overall findings were relevant, beneficial, and sensitive to the participants (Elam & Fenton, 2003; Israel et al., 2005; Lantz et al., 2006; The Examining Community-Institutional Partnerships for Prevention Research Group, 2006; Tinkler, 2004; Wilson & Neville, 2009). Active involvement of community members also provided a means of early identification and guidance on ethical, methodological, or logistical issues and potential cultural violations (Birman, 2005).

Community involvement in this study included the establishment of a Reference Group (RG), endorsement and use of peer recruiters, the support and input of the key Queensland Sudanese associations and groups, regular attendance and involvement of the principal researcher at community meetings and social gatherings, and ongoing communication with research participants who agreed to be included in research communications. This level of community consultation and participation added strength and relevancy to the research findings by ensuring that knowledge and cultural expression from a diverse range of local community members were incorporated into each phase of the research (Temple & Moran, 2006; Tinkler, 2004).

2.5.2 Challenges associated with the research method

Conducting research exploring sensitive topics with young people and populations considered vulnerable, hard to reach or hidden, and/or a collective, such is the case with this current study, is complex and fraught with methodological, ethical, and logistical challenges (Dean et al., 2012; Liamputtong, 2010; Smith & Pitts, 2007; Tidsall, Davis, & Gallagher, 2009). The following co-authored published paper discusses the steps taken to address these challenges in relation to this current study.
2.5.3 Publication 1: Hidden yet visible: methodological challenges researching sexual health in Sudanese refugee communities.

Publication Status: Published


Hidden yet visible: methodological challenges researching sexual health in Sudanese refugee communities.

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Abstract

Research addressing sensitive topics with people from small, minority ethnic communities can present challenges that are difficult to address using conventional methods. This paper reports on the methodological approach used to explore sexual health knowledge, attitudes, and beliefs among the Sudanese community in Queensland, Australia. The multiphase mixed methods study involved young people 16 to 24 years of age participating in a written survey and semistructured interview and focus group discussions with the broader Queensland Sudanese community members. Community collaboration, the key factor to the success of this research, optimised the development of a research environment that built trust and facilitated access and subsequent understanding. Research conducted in partnership with the target community can address methodological challenges and produce meaningful information when researching sensitive topics with small but ‘highly visible’ populations.

Keywords: research methods; sexual health; Sudanese refugees; vulnerable populations; Australia
Introduction

Sensitive research topics require participants to discuss attitudes, beliefs, and behaviours considered personal and private that may lead to discomfort, social isolation, or even persecution (Wellings, Branigan, & Mitchell, 2000). Such research raises methodological, ethical, and logistical difficulties as researchers and participants balance cultural and social values and ethical research considerations (Birman, 2005). Addressing issues such as sexual health from a cultural perspective with a small highly visible ‘hard-to-reach’ population has in the past resulted in the research being deemed ‘too hard’ to countenance (Hynes, 2003; Ogilvie, Burgess-Pinto, & Caufield, 2008; Smith & Pitts, 2007; Wilson & Neville, 2009). These difficulties have contributed to the dearth of research addressing sensitive topics in hard-to-access groups.

This paper reports on the methodological approach used to explore the sexual health knowledge, attitudes, and behaviours of the Queensland Sudanese community. The research utilised a descriptive, collaborative multiphase research model (Creswell & Plano-Clark, 2007), involving a combination of quantitative and qualitative approaches. Emerging from a community led initiative to understand the variance of intergenerational sexual health attitudes and beliefs, it aimed to identify and explore the sexual health knowledge, attitudes, and patterns of behaviour of 16 to 24 year old Queensland Sudanese community members, together with the social, cultural, and contextual perspective of the broader Queensland Sudanese community.

The importance of establishing rapport and working with the community is emphasised throughout this paper. We describe the steps taken to address the methodological challenges of sampling and recruitment, along with data collection, and highlight some strategies to address the challenges associated with these key research design issues. We contend that the challenges of conducting sensitive research with small minority ethnic communities can be addressed with careful planning and close community collaboration.
**What do we know about the target population?**

The Australian Bureau of Statistics Census of Population and Housing recorded 19,050 Sudan–born people living in Australia in 2006 (Commonwealth of Australia, 2009). However, it is estimated that around 28,000 people of Sudanese background have resettled in Australia since 1996 (Australian Government, 2009) with approximately 62% being under 24 years of age (Commonwealth of Australia, 2007). Sudan’s history of over 40 years of civil conflict (Rogier, 2005) has led to the majority of Sudanese community members arriving in Australia via the Humanitarian Program following protracted periods of displacement and forced migration (Commonwealth of Australia, 2007). The longevity of Sudan’s civil conflict also means many young Sudanese arrivals have never known life without unrest and the range of physical, psychological, and social experiences that accompany forced migration and life in a refugee camp (Tempany, 2009). These experiences may include trauma, torture, rape, family separation and loss, and community breakdown, along with limited access to education and health services (Copping et al., 2010; Goodman, 2004; Kizito, 2001; Tempany, 2009).

It is well established that forced migration is associated with sexual health vulnerabilities and increased risk of negative sexual health outcomes (McGinn, 2000). Despite this, there is scant research addressing sexual health and wellbeing of migrant and refugee communities in their new settlement country (Hoffman et al., 2011; McMichael & Gifford, 2009; Tompkins et al., 2006; Zhou, 2012). As the sexual health of refugee background communities continues to be overlooked post resettlement in Australia (McMichael & Gifford, 2010), the authors of this paper argue that this group’s sexual vulnerability may continue after resettlement if the lack of research and understanding continues.

An emerging body of research involving members of the Australian Sudanese community focuses mainly on this community as a part of larger collective target populations such as African (Harte, Childs, & Hastings, 2009; D. Johnson, 2007; Matereke, 2009; Neale, Ngeow, Skull, & Biggs, 2007; Sheikh-Mohammed et al., 2006) or refugee groups (Henderson & Kendall, 2011; D. R. Johnson et al., 2008) and thus limits specific understanding of this community group. Some of these broader studies
include HIV status among minority ethnic groups (Körner, 2007) and working with African communities on HIV prevention (Lemoh et al., 2008). However, studies with the Australian Sudanese community as the sole target population mainly focus on issues pertaining to acculturation (Hebbani et al., 2009; Milner & Khawaja, 2010; Poppitt & Frey, 2007), settlement in Australia (Lejukole, 2008; K. E. Murray, 2010; Nunn, 2011), English language literacy and learning (J. Brown et al., 2006; U. Burgoyne & Hull, 2007b), mental health and trauma (Copping et al., 2010; Westoby, 2005), and not sexual health.

In contrast to this trend, McMichael (2008) explored sexual health literacy among 16 to 25 year old refugee youth in Melbourne and identified a number of key factors that influence the sexual health of this group. However, the small sample (N = 142) prohibited meaningful analysis of the Sudanese subgroup (n = 25) data (McMichael 2008). Poor HIV knowledge and patterns of sexual risk behaviour have been found in studies conducted with Sudanese communities in Sudan (M. Ali & Pett, 2005; T. Allen, 2007) and in resettlement countries such as the USA (Tompkins et al., 2006; Willis & Nkwocha, 2006). However, the dearth of studies focusing on sexual health knowledge, attitudes, and behaviours within unique socio-cultural contexts of individual resettlement communities continues to limit our ability to respond with appropriate interventions.

*Researching sensitive topics with a highly visible community*

The Queensland Sudanese community, like other refugee background communities, may in some senses be considered ‘hidden’ and ‘hard-to-reach’ (Jacobsen, 2006; Spring et al., 2003). Pre-arrival experiences, including mistrust of government initiated programmes, may result in a reluctance to participate in research (Gifford et al., 2006; Hynes, 2003). Fear that participating in research focusing on a socially and culturally sensitive topic may further add to discrimination and negative stereotyping already experienced post settlement and create further unwillingness (Colic-Peisker, 2009; Ogilvie et al., 2008; Wilson & Neville, 2009). Both these factors contribute to this group being considered hidden and hard-to-reach. However, while potentially hard-to-reach, the Queensland Sudanese community, due to their physical, racial, and cultural characteristics, may be considered ‘highly visible’ rather than
hidden, within the predominantly ‘white Anglo-Western’ Australian community (Colic-Peisker, 2009; Colic-Peisker & Tilbury, 2007; Dhanji, 2009; Hebbani & McNamara, 2010, July; Nunn, 2011; R. White, 2009). Despite Australia’s multiculturalism and anti-discrimination policy and legislation, visibly different individuals and communities experience discrimination and negative stereotyping (Colic-Peisker, 2009; Colic-Peisker & Tilbury, 2007). Fear of further discrimination if associated with sensitive research, combined with a reluctance to participate in research due to past experiences, may present difficulties when conducting research with this group.

Highly visible communities are also often labelled as belonging to a collective, homogenous group by appearance and/or experiences (Dhanji, 2009; R. White, 2009). For example, the Sudanese community may be labelled ‘African’ (Dhanji, 2009) and/or ‘refugee’ (Nunn, 2011) as in the studies conducted in Australia noted earlier. A collective grouping labelled as refugee can create feelings of isolation and not belonging within the Australian community, an increased sense of vulnerability and stigmatisation, and generalisation of pre- and post arrival experiences (Nunn, 2011). Collective labelling as Africans has the potential for researchers with limited understanding of the true heterogeneous nature of the African and Sudanese community to miss recognising the needs of specific ethnic sub-communities with their target population (Dhanji, 2009). Failure to recognise unique target population characteristics may impact on a researcher’s ability to gain access and trust within the community (Wilson & Neville, 2009). The success of any research with a highly visible or hidden minority group depends on the researcher developing a level of rapport that enables sharing of these unique nuances and the socio-cultural reality of participants (Wilson & Neville, 2009). Research questions related to participants’ sexual health involves the exploration of personal and sensitive issues and this can be particularly challenging with communities who identify this topic as culturally taboo and/or sensitive (Elam & Fenton, 2003). As it is the community and individual participants who can most effectively define issues that are sensitive and identify methods to address these issues, one of the most effective ways to address the challenge of researching potentially sensitive issues is to incorporate the target community in the development of the research approach (Elam & Fenton, 2003). In this study, community consultation indicated that the desire to develop greater understanding of what young people were thinking and doing in regards to relationships and sexual behaviour and how the
community needed to respond outweighed the traditional sensitivity toward sexual
health.

Study design and methods

This paper draws from an exploratory descriptive multiphase research project which emanated from extensive community consultation and a pilot study phase. Conducted under ethical approval from Griffith University Human Research Ethics Committee (GU Ref No: NRS/02/09/HREC), this project used a concurrent converging triangulation mixed methods approach (Creswell & Plano-Clark, 2007) that involved the concurrent separate collection and analysis of data relating to the same phenomenon from three independent primary data sources. These included (i) a cross-sectional written sexual health survey with 16 to 24 year old self-identifying members of the Queensland Sudanese community (N = 229); (ii) 11 semistructured interviews with a sub-sample of the survey participants; and (iii) five community focus group discussions with 19 adults aged between 25 and 51 years. The data from these phases were then triangulated without transformation via a process of comparing and contrasting separate findings approach (Creswell & Plano-Clark, 2007). Identification of convergent and divergent themes provided a depth of findings that effectively answered the research questions and increased confidence in the meaning and trustworthiness of the study findings approach (Creswell & Plano-Clark, 2007). The combination of quantitative and qualitative approaches to investigate this complex and sensitive topic provided rich data (Sandelowski, 2000) and strengthened the quality and rigour of findings (Ager, 2000; Creswell, 1994; Creswell & Plano-Clark, 2007; Moffatt et al., 2006). The process adopted provided a better understanding of the overlapping complexity of issues that is often lacking in a single method studies approach (Creswell & Plano-Clark, 2007).
Community consultation and study reference group

Widespread community consultation occurred prior to commencing the study and was ongoing throughout. This helped to develop understanding of the social and cultural context of the community and foster community trust and identification with the research (Israel et al., 2005), while providing opportunity to identify their needs (Israel et al., 2005; Lantz et al., 2006; Sadler et al., 2006; Wallerstein, Duran, Minkler, & Foley, 2005). The chief researcher, this paper’s first author, consulted with the community by the formation of a study reference group of community members, combined with regular attendance at formal community meetings and participation in informal social gatherings. The researcher established an open, respectful communication pathway both face-to-face and via telephone and email contact with the reference group and other key community members to ensure the community had a direct voice in the research.

The reference group, comprising community members aged 19 to 50 years from a range of Sudanese tribal affiliations, provided cultural advice to the researcher. This group was an active partner in the development of the research questions and methodological approach. Membership in the reference group changed throughout the research in response to members’ varying levels of availability due to competing family, community, and work demands. This diversity and fluidity of membership provided the opportunity for increased community involvement and enlarged the overall community representation. It also prevented any member becoming a gatekeeper or sole voice representing the broader community (Temple & Moran, 2006).

Community involvement included not only the establishment of the reference group but ongoing support and input from members of key Queensland Sudanese formal groups and a number of informal social networks. An email group comprising community members and participants, who expressed an interest in being kept informed of the study’s progress, provided a pathway for the reverse flow of information about community issues and upcoming events, for disseminating research information, and study recruitment. Young members of the reference group and the extended email consultation process provided valuable input into the development of a youth friendly and safe research environment. It also enabled recruitment strategies that targeted youth
from a range of community subgroups to be implemented. Creating a connection between the research, the young people, and the broader target community was instrumental in the successful engagement and recruitment for this study.

The first author spent a considerable time attending community and youth specific gatherings. This provided opportunity to observe and gain understanding of the cultural beliefs, traditions, and socio-cultural reality of the community’s Queensland experience. Drawing on previous research (Cottone, 2005; Harte et al., 2009; Hebbani et al., 2010; Khawaja et al., 2008; K. E. Murray, 2010; Poppitt & Frey, 2007; Westoby, 2008) and anecdotal evidence gathered during the various consultations, she developed a closer understanding of the multilayered issues that face the target community and its young members in their new social world. This understanding, combined with ongoing collaboration with the reference group, guided development of a contextually and culturally appropriate research environment (Westoby, 2008; Wilson & Neville, 2009).

While logistically time consuming and sometimes challenging, time spent engaging in community consultation was essential. Without this active partnership with the community and invaluable sharing of information, it would not have been possible to develop a research approach reflective of these participants’ socio-cultural reality (Israel et al., 2005; Nyamathi, Koniak-Griffin, & Greengold, 2007; Temple & Moran, 2006). This approach was essential as it was acceptable to and inclusive of the target population and built a level of trust and rapport that facilitated recruitment of adequate participant numbers in a culturally appropriate environment, thereby minimising selection bias and maximising research value (Birman, 2005; Smith & Pitts, 2007; Spring et al., 2003). This research partnership model supported the development of findings that would be perceived as relevant and meaningful to the study participants, along with service providers and health policy makers ((Gifford et al., 2006; Wilson & Neville, 2009).
Why do a pilot study?

The pilot study phase determined feasibility of accessing the target community and the appropriateness of the methodological approach. It allowed for early identification of barriers or cultural practices that could hinder the research process and timely revision of the research process if required (van Teijlingen & Hundley, 2001). A convenience sample of 30 tribally diverse 16 to 24 year old members of the target community was recruited into the pilot phase to assess the sexual health survey for cultural and linguistic appropriateness. This also provided an opportunity for broader consultation with young members of the community. In addition it resulted in changes to recruitment strategies, including incorporating peer recruiters as active participants in recruitment and data collection, together with the inclusion of sporting and social organisations as the primary access and recruitment sites. One community focus group discussion with five adult members aged between 25 to 40 years was also conducted in the pilot phase. Focus group discussions have been found to be acceptable and effective in eliciting data on social norms when researching sexual health and cross-cultural related issues (Connell et al., 2004; Culley, Hudson, & Rapport, 2007; Temple & Moran, 2006). Findings from this pilot group gave further insight into the research question, language skill, levels of community interest, and accessibility and guided refinement of the focus group discussion guide.

Sample

Sudan consists of over 50 heterogeneous ethnic groups with approximately 140 different spoken languages (Kizito, 2001), along with a complex and diverse array of religious and regional affiliations and sub-communities (Jensen & Westoby, 2008; Moro, 2004). To date, these demographics have not been captured in any Australian population data making it difficult to define a clear sample frame for this study. Community consultation indicated that being Sudanese was not based on place of birth or language spoken as recorded on Australia census data. Therefore, for the purpose of eligibility for this research, Sudanese was defined as any person who self-identified as being Sudanese. This reflected the community’s view on ‘being’ Sudanese.
Sample sizes for the interview and focus group data collection were determined by exhaustion of emerging themes. Calculating and achieving a sample size for the survey phase posed some challenges. Based on the estimated population size of 16 to 24 year old Sudanese Queenslanders, an established Needed Sample Sizes table (Reaves, 1992) indicated a sample size between 230 to 240 participants was needed with an alpha of 0.05. As this represents nearly 50 per cent of the total 16 to 24 year old population, there was a concern that this may place unrealistic demands on the participants and community. Initial assessment of the logistics, cost, and feasibility also indicated it may have been beyond the timeframe and capacity of the research. A timeframe of twelve months was therefore set for survey data collection when recruitment numbers would be reviewed.

**Sampling and recruitment**

Non-probability convenience sampling, including snowball and purposive sampling in conjunction with multiple active strategies of recruitment, was chosen as the most culturally and methodologically appropriate approach for this research (Ahmed, Hussain, & Vournas, 2001, November; Bloch, 2007; Schofield, 2004). Regular consultation with peer recruiters, reference group members, and participants allowed adjustment of sampling methods and active recruitment strategies to reflect local demographics. Purposive sampling was applied in order to achieve gender balance and inclusion of social and tribal/familial networks reflective of the broader Queensland Sudanese community structures. This further increased the probability that the findings were reflective of the generalised normative beliefs and concerns of the wider community (Elam & Fenton, 2003). Distribution of information and recruitment of participants focused on established cultural, social, sporting, and family networks given that strong bonds within these networks are generally formed early upon resettlement (Sheikh-Mohammed et al., 2006). Hidden and hard-to-reach populations also gather at known places (Magnani, Sabin, Saidel, & Heckathorn, 2005) and, in this instance, peer recruiters, study reference group members, and past participants guided the researcher to these known gathering points. This further extension of the seeding points increased opportunity for members of smaller more hidden networks to participate (Magnani et al., 2005).
Recruitment of adults for the focus group discussions was mainly through convenience sampling using established community groups such as women’s support groups, community based organisation networks, and community forums and social events that the researcher was invited to attend.

Two young members of the reference group, one female and one male, acted as peer recruiters and were pivotal to the successful recruitment of young people for the survey and interview phases. The use of peer recruiters was strongly supported by both community feedback and the literature as a culturally appropriate and community accepted means to facilitate access (Correa-Velez, Barnett, Gifford, & Sackey, 2011; Elliott, Watson, & Harries, 2002; Luchters et al., 2008; Simon & Mosavel, 2010; Vargo, Agronick, O'Donnell, & Stueve, 2004). The peer recruiters were from two different social, tribal, and geographical groups within the community and thus were able to provide a diversity of peers and social networks to begin seeding for snowball sampling and recruitment. The use of peer recruiters also decreased the risk of overrepresentation of any one group as they continued to identify new diverse seeding points throughout the data collection period. This included some statewide sporting events involving African youth, world refugee day celebrations, and formal social gatherings organised by the community association. All locations were noted as acceptable and safe by the peer recruiters, the reference group, and community leaders. The researcher gave the peer recruiters information about important aspects of the study to support them in their role in recruiting eligible potential participants and data collection. This was successful and 229 participants were recruited by this process within the 12 month timeframe mentioned earlier, thus achieving the previously considered unobtainable task of recruiting an adequate sample size.

Data collection

The data collection tools for the study were consistent with Fishbein’s Integrated Behaviour Science Theory (IBST) model (Fishbein, 2000), the theoretical approach adopted for this research. The sexual health survey and discussion guides for both the interviews and focus groups were developed from the 4th National Survey of Australian Secondary Students HIV/AIDS and Sexual Health (Smith et al., 2009) for comparison purposes. Reviewed for cultural and linguistic suitability in consultation with the
reference group and during the pilot study, the data collection tools were adjusted accordingly. Care was taken not to change the intent of the survey questions. The Cultural Identity Schedule (CIDS) validated in the RELACHS study (Stansfeld et al., 2003) was added to the sexual health survey to capture cultural identity data.

Data collection occurred in English. While it is acknowledged poor English literacy and language skills could be a barrier, English is widely spoken in Southern Sudan (Williams, 2003) and community consultation indicated that the general English proficiency would be adequate amongst potential participants. The reference group considered the use of interpreters may, in fact, reduce participants’ willingness to disclose sensitive information (Fenton et al., 2002) and affect group dynamics (Culley et al., 2007). This was supported by findings from the pilot focus group. The peer recruiters and researcher also assisted eligible participants to complete the sexual health survey when requested, thereby increasing participation of young people with lower English skills who may otherwise have been excluded.

Addressing the challenges of community data collection

Many African cultures are polychromic, placing less emphasis on adhering to schedules and placing more importance on meeting the needs of the people they are with at the time, often interacting with multiple people at once (Hall, 2012). To the more monochronic Australian culture, where people tend to arrange their lives around schedules, polychronic cultures can appear spontaneous and unstructured. In this study, this manifested itself in the manner in which participants often arrived late for scheduled meetings, which were further interrupted due to arrival of family or friends. Prior understanding of this cultural norm ensured additional time was allocated for data collection and meetings. However, the time spent waiting for participants to arrive was not wasted as it provided time to observe and converse with community members who arrived near the scheduled starting time. The sharing of stories over a cup of tea provided additional insight into social and cultural attitudes and beliefs of the community, thus further deepening the researcher’s understanding and strengthening community rapport.
Polychronic cultures also place great meaning on family and gathering in groups, and this can lead to difficulty establishing a quiet place to meet for data collection (Hall, 2012). To adjust for the Sudanese polychronic nature, the interviews and focus groups were also kept flexible in nature so that participants could join late and come and go as needed. For example, Sudanese women are the main care givers (Wal, 2004), therefore, young children were often present requiring the discussion to be stopped to allow for participants to address their children’s needs. This also posed some difficulty in recording the discussion as there was often significant background noise. To address this, a skilled medical transcriber with knowledge of cross-cultural research was used to transcribe the digital recordings. Additional time was also allocated to checking audio recordings with written field notes and transcripts by the researcher to check accuracy and ensure the intent was captured.

The researcher was also flexible in scheduling and changing meeting times and place to meet study participants’ needs. For example, men and young participants were generally less available during the day due to work and school commitments; meetings were therefore scheduled for evenings and weekends. For the additional convenience of participants, data collection often occurred in homes and locations nominated by the participants. This provided a relaxed and safe environment to facilitate the sharing of information (Gallagher, 2009; Holloway & Wheeler, 2010). However, consideration needed to be given to the potential risks associated with community-based data collection and a safety plan was developed in consultation with the community and the research team and adhered to at all times (Dickson-Swift, James, Kippen, & Liamputtong, 2007).

Discussion

Careful planning, cultural understanding and sensitivity, and close community collaboration can overcome the methodological challenges associated with conducting sensitive research with small highly visible ethnic minority communities. The research methodology needs to be acceptable and appropriate to the community and aligned with the community’s socio-cultural context (Wilson & Neville, 2009). The research needs to reflect the voice and social-cultural reality of the target community; and the only way
to achieve this is to design and conduct the research in collaboration with the community (Elam & Fenton, 2003; Ogilvie et al., 2008; Wilson & Neville, 2009).

The perception of a community as hard-to-reach may be an artefact of conventional research practices, limited understanding of the cultural diversity in heterogeneous groups, and limited experience in collaborating and conducting research with these groups. Sampling and recruitment present real challenges, but there is a range of community inclusive approaches that enables the culturally appropriate recruitment of participants. Research with small, highly visible ethnic minority communities requires that research participants know that their voices are heard and included. Researchers must be committed to engage the community throughout the research process.

Involving the community and using peer recruiters undoubtedly added complexity and additional ethical considerations, but addressing the challenges was feasible and rewarding to the community, participants, and the researchers. Mutuality, in terms of sharing and respect of cultural beliefs and research knowledge, is a first step to developing a culturally appropriate environment and research methodology where the community and researchers are equal partners and beneficiaries of the research. This can only be achieved by ensuring the target community is involved in all stages of the research, as was the case of the research outlined in this paper. However, it is also important to ensure that the community partners understand the research aims and processes and are kept informed of progress and outcomes in a manner they consider beneficial to participants and the broader community (Culley et al., 2007). The reciprocal sharing of experiences and outcomes can reduce misunderstanding, disillusion, and reluctance to participate.

More sexual health research conducted in collaboration with small but highly visible communities is needed. Without this, community members may not receive appropriate sexual health care and education. The key to developing specific services and supporting health policy is for researchers and target communities to work together to address the challenges associated with this type of research in a mutually reflective way.
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2.6 Summary

In summary, this chapter has reviewed the literature pertaining to factors influencing sexual health and related behaviours with a focus on migrant and refugee background communities and young people. It has presented justification for both the theoretical and methodological framework guiding this study. The literature review has demonstrated this study's predominantly refugee background target population can be considered sexually vulnerable and at increased risk of negative sexual health outcomes purely by belonging to a community with a forced migration history.

There is an emerging body of research involving the Australian Sudanese community. However, there remains a dearth of research into this community’s sexual health status and needs post arrival in Queensland, Australia. Socialisation to a new culture with different and often disparate normative sexual and gender related beliefs and behavioural expectations contributes to increased sexual vulnerability. Nonetheless, it remains unknown how this affects the Queensland Sudanese community’s sexual vulnerability and needs post resettlement due to the dearth of ethnicity specific sexual health behavioural and biomedical data in Australia.

Researching sexual health with vulnerable populations in a cross-cultural context presents a range of methodological, ethical, and logistical challenges. The co-authored paper published in Culture, Health, and Sexuality is testament to the interest and lack of knowledge in this area. The co-authored paper and the review of literature presented in this chapter demonstrate that careful planning, cultural understanding, and the use of a mixed methods design conducted in collaboration with the target community can overcome these challenges. The next chapter presents in detail the research design and processes used for this study, along with associated ethical considerations.
Chapter 3 Method

3.1 Introduction

This descriptive research was conducted using a convergent parallel mixed methods design with four phases. This methodological approach applied the triangulation of methods and convergence of data from three equally weighted parallel strands for the purpose of studying the one phenomenon: sexual health knowledge, attitudes and beliefs, and self-reported patterns of sexual behaviour (Creswell, 2014; Creswell & Plano-Clark, 2007; Teddlie & Tashakkori, 2009). This methodological approach provided a stronger contextualised intergenerational understanding of this study’s complex research topic that emerged from a community led initiative. Using a mixed methods approach also offset potential weaknesses or biases that can occur when a single method approach is used for researching sensitive topics in vulnerable populations (Ager, 2000; Creswell, 1994; Creswell & Plano-Clark, 2007; Moffatt et al., 2006). Consideration was given to methodological rigour and steps were taken to ensure the research was conducted ‘with’ the community and not ‘on’ the community (Gifford et al., 2006). Further justification for the methodological approach was provided in Chapter 2 Literature Review. This chapter presents in detail the research design and processes used for data collection and analysis in each phase, along with associated ethical considerations.

3.2 Research Design

This convergent parallel mixed methods design study consisted of four phases. These phases are briefly described here and displayed in Figure 3.1.

Phase 1: Project conceptualisation, design, and planning included community consultation and the formation of a reference group (RG). Preliminary community consultation informed the formulation of the research questions, design, and methodological approach. The formation of a RG, in combination with ongoing community consultation, ensured this study evolved to reflect the target community’s sociocultural context and that cultural safety was maintained throughout the research process (Shahid, Bessarab, Howat, & Thompson, 2009; Westoby, 2008; Wilson & Neville, 2009).
Phase 2: Pilot Study involved the focus testing of the Phase 3 Strand 2 survey instrument and the Phase 3 Strand 3 community focus group discussion (FGD) guide. The pilot study was conducted to assess the feasibility of this study’s proposed research process, including recruitment strategies, and to facilitate early identification of methodological challenges (Kezar, 2000; Secomb & Smith, 2011).

Phase 3: Data collection and analysis involved the concurrent collection and analysis of different yet complementary data relating to the one phenomenon from three equally weighted parallel independent data strands using consistent constructs drawn from the theoretical framework underpinning this research. These consistent constructs also provided a framework to guide the independent data analysis and the comparison of data during Phase 4, data convergence and interpretation (Bazeley, 2009).

Phase 4: Convergence of multilevel data and triangulation of methodological approaches gave rise to understanding of intergenerational similarities and disparities and resulted in an integration of inferences into a comprehensive interpretation of the overall results (Creswell & Plano-Clark, 2007).

This methodological approach was best suited to the research questions as it increased the confidence in the meaning of this study’s results (Creswell, Fetters, & Ivankova, 2004; Teddlie & Tashakkori, 2009) by providing a comprehensive multilevel intergenerational analysis and a valid well substantiated multidimensional understanding of the research problem (Bazeley, 2009; Creswell, 2009; Creswell & Plano-Clark, 2007; Risjord, Dunbar, & Moloney, 2002; Spicer, 2004; Teddlie & Tashakkori, 2009). Referred to as a concurrent converging triangulation mixed methods approach in the co-authored paper included in Chapter 2, the most current iteration of this mixed methods design is used in this thesis (Creswell, 2014).
Concern raised by community

Community consultation and reference group formation
Formulation of the research questions, design, and methodological approach

**Phase 1**
Conceptualisation, planning, and design

- **Strand 1** (QUAN)
  - Survey with 16-24 year olds

- **Strand 2** (QUAL)
  - Interviews with 16-24 year olds

- **Strand 3** (QUAL)
  - Community FGD

**Phase 2**
Pilot study

- Pilot survey
- Discussion guide refinement
  - → Pilot FGD
  - ↔ Discussion guide refinement

**Phase 3**
Data collection and analysis

- Data collection
  - Preliminary iterative data analysis
  - ↔ Preliminary iterative data analysis

- Data collection
  - Data analysis

- Data collection
  - Data analysis

**Phase 4**
Convergence and interpretation

- Results
  - ↔ Findings
  - Findings

Interpretation of overall results

QUAL + QUAL + QUAL represents equally weighed parallel datasets;

FGD - Focus Group Discussion

+ indicates parallel, concurrent data collection and analysis;

↓ indicates sequential flow;

↔ indicates data convergence and comparison

*Figure 3.1: Convergent parallel mixed methods design*
3.3 Method

3.3.1 Target population

The target population for the project was the Queensland Sudanese community (approximately 2 400 people).

3.3.2 Sampling

Non-probability convenience snowball sampling in conjunction with quota sampling was used for each phase of the research (Daniel, 2012; Polit & Beck, 2012). Quota sampling using age, gender, and tribal affiliation as quota controls was used to achieve a gender balanced sample with representation of a range of ages and tribal affiliations reflective of the wider community (Daniel, 2012; Polit & Beck, 2012).

The use of multiple active strategies of recruitment continually widened the snowball recruitment chains, which facilitated access to participants from a diverse range of community entry points and prevented over dependence on one established community subgroup, social network, or geographical location. Recruitment strategies included:

1. Information sessions and distribution of research information to:
   a. Community members by the researcher, RG members, and peer recruiters (PR) at venues and events identified as locations frequented by the target population, e.g., youth centres, sporting events, community meetings, social gatherings.
   b. Government and non-government organisations providing services to the target population. Research information was distributed to clients and stakeholder networks as per the relevant organisational policy.

2. Regular consultation with peer recruiters, RG, community members, and participants to identify potential venues for future meetings, dissemination of research information, and recruitment.
3.4 Phase 1: Project Conceptualisation, Planning, and Design

Phase 1 consisted of extensive discussions with members of the target community and the formation of a RG. The purpose of this phase was to establish an open cyclic dialogue and rapport with the community in a manner that promoted active community participation and sharing of contextualised community knowledge. Early and open discussions with community members enabled the researcher to develop greater understanding of the target community’s sociocultural reality and their concerns regarding the young community members’ sexual health, a key motivator leading to the undertaking of this study. Outcomes of Phase 1 community discussions also facilitated the development of a culturally safe research environment and method that supported the overall success of the research (Israel et al., 2005; Lantz et al., 2006; Sadler et al., 2006; Wallerstein et al., 2005; Westoby, 2008; Wilson & Neville, 2009). Any person over the age of 16 years who self-identified as a member of the Queensland Sudanese community or an interested stakeholder could volunteer to participate in the community discussions or join the RG.

3.4.1 Community consultation

The purpose of the community consultations was to introduce the community to this study and to gather information about how the community viewed sexual health. The principal researcher discussed the concept of this study with a cross-section of the target community, encompassing different genders and a diverse range of ages, ethnicities/tribal affiliations, and geographical locations across southeast Queensland at planned and opportunistic meetings. Consultations were kept as informal discussions and led by topics raised by the community members. Discussions occurred with:

1. Representatives of formal community associations and groups,
2. Individuals and/or groups of community adults and youth at formal cultural and religious festivals and other informal social and sporting events,
3. A range of government and non-government service providers, and
4. Community bilingual workers and youth leaders employed with various government and non-government organisations.
The discussions occurred in groups or on a one-to-one basis depending on the situation and participant’s preference. In some instances, at the request of individuals present, discussions were conducted in a community language with the voluntary assistance of bilingual RG members. This ensured greater levels of input from community members who might normally be excluded due to language barriers. The principal researcher met with young people separately to ensure they could express their views freely and safely, away from potential adult gatekeepers. Community consultations were more frequent and planned during the conceptualisation, planning, and design phase of this study; however, as the study progressed, consultation with the broader community was of a more opportunistic nature.

The discussions were not audio recorded or documented verbatim. Field notes made by the principal researcher immediately following the discussions were used to frame the issue and guide planning and design of this study. Information collected during this phase was not formally analysed nor included in the results of this study.

### 3.4.2 Reference group

A RG was formed to formalise the community consultation process and to provide ongoing cultural and social guidance and support to the researcher during the development of this project and throughout the research process. The RG also reviewed the study information sheets and Phase 3 data collection tools to evaluate cultural appropriateness and acceptability prior to the Phase 2 pilot study (Tompkins et al., 2006). The formation of a RG ensured timely cyclic exchange of information and ensured that the community continually had a direct voice in the research. The four community members who initially identified the research topic as an area of community concern to the researcher established preliminary communication pathways with key community leaders and the broader community. These four individuals were founding members of the RG and remained active participants in the development of the project.

The RG consisted primarily of community members who expressed an interest in being actively involved with the research during the community consultation process. RG membership was voluntary and based on a verbal agreement between the individual and the researcher. The RG generally contained approximately 10 members, however,
membership changed throughout the duration of the research in response to members’ varying levels of availability and to address changing needs of the research process. People recruited to this study and new community contacts were able to join the RG if they expressed an interest. This diversity and fluidity of membership provided opportunity for increased community involvement, improved the overall community representation, and prevented any member becoming a gatekeeper or sole voice representing the broader community’s attitudes and beliefs (Temple & Moran, 2006). However, the diversity and number of tribal subsets of the target population meant it was not possible to form a RG that was truly representative of the community demographics.

Communication between the researcher and the RG members was maintained via regular phone, email, text messages, and face-to-face meetings. Managing RG processes can be complex, time-consuming, and expensive for both the researcher and participants (Horsley & Dyson, 2007). Therefore, given the recognised challenges of resettlement (Commonwealth of Australia, 2007; Gifford et al., 2006) and a desire to limit demands and potential stresses on the members, formal face-to-face meetings were not held regularly after the initial planning phase, and communication was primarily via email and telephone. Meetings and other verbal communications with RG members were not audio recorded or documented verbatim. Field notes made by the principal researcher immediately following RG discussions were used to guide planning and design of this study.

Outcomes of Phase 1 community discussions and RG communications were used during the conceptualisation, planning, and design stages of this research and continually referred to throughout the research process. Ongoing community consultation and collaboration with the RG throughout the research process ensured continued community trust and identification with the research (Dean et al., 2012). Dissemination of information and research findings to the community, key stakeholders, and academic audiences via a range of media was implicit in this research.
3.5 Phase 2: Pilot Study

The primary purpose of the Phase 2 pilot study was to gather logistical information from procedural implementation of this study’s proposed research process to facilitate a systematic and streamlined approach to recruitment, data collection, and analysis in the subsequent phases of this study (Arain, Campbell, Cooper, & Lancaster, 2010; Kezar, 2000; Lancaster, Dodd, & Williamson, 2004; Secomb & Smith, 2011). Early identification of methodological challenges associated with researching a sensitive topic with a highly visible ‘hard-to-reach’ population facilitated timely revision of the research process and improved the overall trustworthiness and rigour of this study’s methodological approach and outcomes (Secomb & Smith, 2011; van Teijlingen & Hundley, 2002). A pilot survey and community FGD were conducted in the pilot study phase. Results of the pilot study are presented in this section as they inform the methodological approach implemented in Phase 3 of this study.

3.5.1 Pilot survey

The purpose of the pilot survey was to assess and refine the clarity and cultural acceptability of the survey instrument. The aim was not to estimate internal consistency or reliability of the survey instrument. Face validity was, however, addressed by determining participants’ interpretation of the concept being explored within individual items. The survey pilot also assessed the feasibility of the Phase 3 survey and interview strand sampling and recruitment strategies.

3.5.1.1 Inclusion criteria

Any person between the ages of 16 and 24 years who self-identified as a member of the Queensland Sudanese community was eligible. Individuals requiring an interpreter were excluded from the pilot survey.

3.5.1.2 Sampling and recruitment

Recruitment was via convenience sampling of eligible young people identified during community consultations conducted during Phase 1 of this study.
### 3.5.1.3 Sample

The sample required was 30 participants, approximately 10% of the estimated sample size for the survey strand of Phase 3 (Billingham, Whitehead, & Julious, 2013; Hertzog, 2008).

### 3.5.1.4 Survey instrument

The survey was an anonymous cross-sectional self-administered composite survey in English. It consisted of 135 items in total and included three sections: demographic data [13 items], cultural identity [12 items], and knowledge, attitudes and beliefs, and behaviour [110 items] (See Appendix A). These sections are congruent with the variables known to directly affect behavioural intent and behaviour contained within the theoretical frame underpinning this research (Fishbein, 2000). The sections were ordered based on RG feedback, supported by literature (Aday & Cornelius, 2006), according to perceived sensitivity. Items considered non-threatening, such as demographic data and those requiring recall of knowledge, attitudes, and beliefs, preceded items perceived as potentially threatening, such as the recall of personal and/or current sexual behaviour: This aimed to improve data collection by providing participants time to orientate themselves to the survey topic (Aday & Cornelius, 2006).

The survey was accompanied by a participant survey information sheet which included information about the study, participant’s involvement, informed consent processes, and specific details of the complaints mechanism, the ethics committee, and contact details for researchers. Contact details for relevant support groups and what to do if participants experienced anxiety or any negative outcomes as a result of participating were also clearly outlined (See Appendix B).

**Section 1: Demographic data**

Section 1 consisted of 13 items that gathered demographic data contextualised to the target community. Basic demographic data items such as age, gender, place of birth, religion, relationship status, relationship to household members, educational level, and language spoken at home were consistent with Australian Bureau of Statistic standards (Australian Bureau of Statistics, 2014). Additional items, such as tribal affiliation and
length of time living in Australia, were derived from this study’s Phase 1 community consultation processes and supported by the review of literature (Berry, 1997; McMichael, 2008; Stansfeld et al., 2003). Inclusion of these contextualised items allowed a clear description of the sample, and the use of standardised items enabled comparison with other populations (Aday & Cornelius, 2006). Inclusion of the participant’s postcode allowed for geographic categorisation to guide sampling.

Section 2: Cultural identity

The 12 items used in this section were derived from the Research with East London Adolescents Community Health Survey (RELACHS) (six items) (Bhui et al., 2008; Stansfeld et al., 2003), and review of literature relating to acculturation and cultural identity (six items) (Berry, 1997, 2005; Berry, Phinney, Sam, & Vedde, 2006; Bhugra & Becker, 2005). These items were included to explore the participant’s degree of identification with their Sudanese cultural background and level of acculturation with the Australian culture, using cultural preference for friends, clothes, and language as indicators (Berry, 1997; Stansfeld et al., 2003). Consistent with the theoretical framework underpinning this study (Fishbein, 2000), acculturation theory suggests a substantial relationship between acculturation and the behaviour of youth post resettlement (Berry et al., 2006). Therefore, these items were included for factors influencing the constructs explored in section 3 of this survey (knowledge, attitudes, and behaviours) (Berry, 2005; Berry & Sabatier, 2010; Gerressu & Stephenson, 2008; Khawaja & Milner, 2012; Zhou, 2012). The six items derived from the literature have been used previously to evaluate individuals’ commitment to their culture and perceptions of how their cultural normative beliefs influenced their behaviours (Berry & Sabatier, 2010).

The RELACHS items were used as published findings indicated the items had strong face and content validity (Bhui, Lawrence, et al., 2005) and effectively predicted cultural identity in African background youth, the focus for this study (Bhui et al., 2008; Bhui, Lawrence, et al., 2005; Bhui, Stansfeld, et al., 2005). The RELACHS combined four of their cultural identity items exploring cultural preference for clothes and friends to form a score that was then used to classify participants according to Berry’s cultural identity categories: integration, assimilation, traditionalism, marginalisation (Berry,
To date, there is no data on the internal consistency or Cronbach’s alpha coefficient for the RELACHS cultural identity items (Appendix C: Personal email communication dated 13th July 2012 with the RELACH study’s primary investigator, Professor Russell Viner).

The 12 cultural identity and acculturation items in this study were included to form a composite score with higher scores indicating greater identification with Australian cultural traits. Reliability and validity of this scale are presented in Chapter 4.

Section 3: Knowledge, attitudes and beliefs, and behaviour

The 110 items in this section were primarily derived from the 3rd and 4th National Survey of Australian Secondary Students and Sexual Health (NSASSSH) (Smith, Agius, et al., 2003; Smith et al., 2009). These items were grouped according to the IBM related construct being explored by this study’s research questions and included:

1. Knowledge of STI and HIV (23 items),
2. Attitudes and beliefs towards sexual health related issues (24 items),
3. Confidence communicating about sex (10 items), and
4. Behaviour, including i) drug and alcohol consumption, ii) information and health care seeking practices, and iii) sexual experiences (53 items).

No published psychometric data were available for the NSASSSH instrument at commencement of this study (Confirmed via email communication dated 1st July 2008 with the NSASSSH primary investigator, Professor Anthony Smith - Appendix D). Consequent reviews of literature have derived no further information. The NSASSSH was selected as it was congruent with this study’s theoretical framework, provided a comprehensive assessment of the constructs being explored within this study’s research questions, and was considered appropriate and sensitive by this study’s RG. It also enabled comparison of this current study’s results with those of the NSASSSH, a cross-sectional survey of a representative sample of Australian secondary school students aged between 13 to 18 years that has been repeated every five years since its instigation in 1992 (Agius, Dyson, Pitts, Mitchell, & Smith, 2006; Agius et al., 2010; Smith, Agius, et al., 2003).
Section 3 originally consisted of 92 items selected from the 3rd NSASSSH 2002 (Smith, Agius, et al., 2003). The 4th NSASSSH 2008 results were released in July 2009, just prior to commencing data collection for this study (Smith et al., 2009). Section 3 was consequently reviewed and four items were added to capture items added to the 4th NSASSSH in response to emerging issues affecting young people in Australia, such as the introduction of the Human Papilloma Virus (HPV) vaccine (Smith et al., 2009). The 3rd and 4th NSASSSH items were selected based on their consistency with the theoretical framework underpinning this study and the variables influencing behaviour discussed within the literature review chapter (Fishbein, 2000; Glanz, Rimer, & Viswanath, 2008; Kasprzyk et al., 1998; Montaño & Kasprzyk, 2008).

The remaining 14 items in this section were derived from Phase 1 community consultation and the review of literature to further explore issues of concern that led to the undertaking of this study (Korner, 2007; Lemoh et al., 2008; McMichael, 2008). An example of added items includes: HIV is not a problem in Australia; Young people have sex too easily in Australia; and Living in Australia has affected how I think about sex. This also included one open ended question: Why do you think young people may have sex before they are married? to provide participants opportunity to express anonymously their attitude and beliefs about this culturally sensitive topic, thereby gathering data that provided a deeper contextualised understanding of a key issue of concern to the community (Creswell & Plano-Clark, 2007).

The 3rd and 4th NSASSSH used three aggregated scores to measure knowledge of STI (11 items, Cronbach α = 0.70), hepatitis (seven items, Cronbach α = 0.64) and HIV (11 items, Cronbach α = 0.51) (Agius, Dyson, et al., 2006; Agius et al., 2010). The NSASSSH knowledge scales were derived from the national secondary school sexual health syllabus, thus addressing face validity (Agius et al., 2010). One item derived from community consultation was added to the NSASSSH 11 item aggregated HIV score to form the HIV knowledge score of 12 items for this study. The NSASSSH items measuring STI and viral hepatitis knowledge were combined and condensed into one STI knowledge score of 11 items. This revised 11 item composite STI knowledge score addressed this study’s research questions and reduced the potential for burden on participants by cutting the length of time needed to complete the survey (Aday &
Reliability and validity of the two knowledge scales for the current study are presented in Chapter 4.

In the 3rd and 4th NSASSSH, the items pertaining to sexual behaviour and confidence in communicating about sex were analysed as individual items (Agius, Dyson, et al., 2006; Agius, Pitts, et al., 2006; Agius et al., 2010; Smith, Agius, et al., 2003; Smith et al., 2009). Nonetheless, this current study’s survey instrument was structured to allow for 10 items exploring confidence in communicating about sex and 25 items exploring patterns of sexual risk behaviour to be aggregated into two composited scales: (i) Confidence In Communicating About Sex Score (CCASS); and (ii) Sexual Risk Behaviour Score (SRBS). Aggregated scores measuring factors influencing young people’s behaviour (Feinberg et al., 2007) and exploring the influence of confidence and self-efficacy on communicating about sex (Basen-Engquist et al., 1999; Gloppen et al., 2010; Rosenthal et al., 1991; Seal, Minichiello, & Omodei, 1997) have been found to generate accurate and reliable data to guide analysis and understanding of behavioural intent in a number of studies relating to sexual risk and protective behaviours (Evans et al., 2004; Reiter, Katz, Fercketich, Ruffin, & Paskett, 2009; Seal et al., 1997). This current study may have benefited from using a validated or recognised scale to measure sexual behaviours and confidence (Kotchick, Shaffer, Miller, & Forehand, 2001). However, this would have limited this study’s ability to compare and contrast results with those of the NSASSSH, a process that provided understanding of the noteworthy parallels and points of difference between the young people involved in this study and a representative sample of their contemporary Australian peers (Agius et al., 2010).

The 25 items selected for this study’s aggregated SRBS were consistent with sexual risk behaviour items from previously used and validated scales (Adefuye, Abiona, Balogun, & Lukobo-Durrell, 2009; Evans et al., 2004; Reiter et al., 2009; Rosenthal et al., 1991; Seal et al., 1997). It used factors with known association with sexual risk and protective behaviours, such as age of first sexual encounter, frequency of partner change, patterns of condom and contraception use, alcohol and drug use, as discussed in the literature review chapter (Basile et al., 2006; Bearinger et al., 2007; Feinberg et al., 2007; Moilanen et al., 2010). Reliability data for the aggregated CCASS and the SRBS is presented in Chapter 4.
**Phase 2 Strand 2 interview recruitment**

At the end of the survey participants were invited to volunteer to participate in the Phase 3 interview strand. All participants were provided with the interview information sheet (See Appendix F) and directed to complete the contact details form attached to the back of the survey instrument if interested (See Appendix A). The contact detail form could be returned to the principal research at completion of the survey or via the provided reply paid envelope. All contact details were separated from the returned survey and stored in a secure locked cupboard.

### 3.5.1.5 Data collection

Data for the pilot survey phase were collected using three separate groups of young people. The young people recruited into the pilot survey phase were asked to:

1. Complete the survey instrument, and
2. Participate in a group discussion to:
   a. Appraise the survey instrument in regards to time required to complete, language level and literacy requirements, cultural appropriateness, clarity, understanding, interpretation and perceived meaning of each item, and the appropriateness of the thankyou gift.
   b. Identify potential locations for distribution of research information and recruitment, and any contextualised youth specific issues that may create barriers for recruitment and the successful completion of this study (Aday & Cornelius, 2006; van Teijlingen & Hundley, 2001).

Field note data were collected to document the researcher’s observations, the time taken to complete the survey, and the participants’ feedback to the points listed above.

### 3.5.1.6 Data Analysis

Basic descriptive analysis including frequency counts and percentages were used to determine time to complete the survey, method of recruitment success, and response rates. The field note data were analysed using basic iterative inquiry (Grbich, 2004,
Tentative propositions were developed and used in conjunction with RG feedback to refine the survey and discussion guides and to guide the research process.

The survey data were not analysed as part of the pilot survey phase. The survey data analysis plan and missing data management are described later in the Phase 3 section of this chapter.

### 3.5.1.7 Results

The pilot sample included 30 \((n = 30)\) 16-24 year old members of the target community (Mean age = 19 years) who completed the survey. Participants were recruited and the surveys distributed via a range of methods over a one month period. Recruitment of participants and on-site completion of the self-administered survey at a community social or formal event with the researcher present was identified as the most effective method of recruitment for the Phase 3 survey strand (See Table 3.1). Surveys returned by reply paid envelope took between one to four weeks to return and had a 30\% return rate. Community organisation staff indicated workloads and competing demands impacted on their ability to assist in recruitment.

Two group discussions involving 20 of the pilot survey sample were conducted at separate locations. The participants took between 20 to 40 minutes to complete the survey instrument. The majority of participants considered this acceptable as they felt the content was important and informative and the length of time would not place an undue burden on participants in regards to time, effort, and stress (Aday & Cornelius, 2006; Bloch, 2007). Ordering of items was also thought to be acceptable. Prior to testing of the survey with the pilot sample, the survey instrument had been reviewed by the RG during Phase 1 to evaluate cultural appropriateness and acceptability (Tompkins et al., 2006). This Phase 1 RG consultation considered face validity which was further addressed through consultation with the pilot sample (Polit & Beck, 2012). Questions were generally found to be culturally appropriate, clear in meaning. Only minor changes to the wording of four items to clarify meaning were suggested, which did not impact on the original intent of the items. Thus, the pilot indicated the acceptability and feasibility of the survey.
Table 3.1

Pilot survey participant recruitment and response rates

<table>
<thead>
<tr>
<th>Method of recruitment and survey distribution</th>
<th>Surveys Distributed</th>
<th>Surveys Returned</th>
<th>Response Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-administered at community social and formal events and venues with principal researcher present</td>
<td>24</td>
<td>24</td>
<td>100.0</td>
</tr>
<tr>
<td>2. Survey and reply paid envelope supplied to people at above events for completion and/or distribution to social networks</td>
<td>20</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td>3. Survey and reply paid envelope supplied to staff at a community organisation for distribution to clients</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The pilot survey participants acknowledged poor English literacy and language skills could be a barrier to administering the surveys to some young people. Nonetheless, participants indicated translating the survey into Sudanese Arabic and/or a tribal dialect would probably not improve participation rates due to two factors: tribal dialects are often not written languages (U. Burgoyne & Hull, 2007a) and, while some young people are fluent in spoken Sudanese Arabic and/or a tribal dialect, they often have limited literacy in this language. Therefore, as there was no common or predominant written or spoken language identified across this heterogeneous community (U. Burgoyne & Hull, 2007a), the use of written and spoken English was considered appropriate and acceptable. Consultation with the RG members supported this proposal.

When asked about potential recruitment entry points and barriers, the participants recommended avoiding schools, religious venues, and church youth groups due to the sensitivity of the research topic. Community social and sporting events were suggested as acceptable points of access and recruitment, supporting the feasibility of using this recruitment strategy as the primary recruitment strategy for the Phase 3 survey strand. Feedback from the pilot survey group discussions indicated it was acceptable for the researcher to attend these events to distribute information, recruit, and/or collect data. This would limit the need for Phase 3 survey participants to travel and provided
opportunity for young people to become familiar and to build rapport with the researcher. The presence of an older bilingual community member was identified as a possible barrier for young people participating; however, they suggested a younger bilingual person working with the researcher would be acceptable. Age matched peer recruiters were employed to assist the researcher in Phase 3.

Participants suggested there was no need to separate young males and females during the distribution of research information and surveys. However, they felt providing them with a range of options on how and where to complete and return the survey would allow young people a choice and improve participation rates. This feedback was taken into consideration, and survey return via reply paid envelopes was maintained and a range of recruitment strategies was implemented in Phase 3.

The use of two movie tickets as a thank you gift was considered cultural appropriate and acceptable by all pilot phase participants and RG feedback.

Feedback from the participants regarding the survey items and language level were used to refine the FGD. Outcomes of the pilot phase required no amendment to this study’s ethical approval (See Appendix I).

3.5.2 Pilot community focus group discussion

The primary aim of the pilot FGD was to assess and refine the clarity and cultural acceptability of the FGD guide. Feasibility of the Phase 3 FGD strand sampling and recruitment strategies was also determined.

3.5.2.1 Inclusion criteria

Any person over the age of 16 years who self-identified as a member of the target population was eligible. Individuals requiring an interpreter were excluded from the pilot FGD.
3.5.2.2 Sampling and recruitment

Recruitment was via convenience sampling from eligible people identified during Phase 1 community consultations.

3.5.2.3 Sample

One community FGD of five \((n = 5)\) community members was considered adequate.

3.5.2.4 Discussion guide structure

The FGD guide was structured to include structured questions and prompts derived from the survey, the literature review, and key determinants of behaviour from theoretical framework underpinning this study (Fishbein, 2000), together with the Phase 1 community and RG consultation data. The FGD guide was structured into six sections, which were again congruent with the IBM variables used within the survey instrument:

1. FGD information including informed consent processes and group rules;
2. Social and cultural attitudes and beliefs;
3. Sexual health knowledge, attitudes, and beliefs;
4. Relationships and behaviour of young people;
5. Issues of concern; and
6. Education, information, and health care needs (See Appendix E).

The community FGD guide was designed to explore the community level sociocultural normative beliefs and expectations (Ingham & Stone, 2001) and to avoid individual personal level beliefs and behaviours that may have been perceived as threatening and, as a result, stifle spontaneous open discussion among participants (Lettenmaier et al., 1994). The sections were, therefore, ordered based on RG feedback supported by the literature (Aday & Cornelius, 2006) to flow from exploration of these broader community level sociocultural attitudes and beliefs to the relationship and sexual behaviours and needs of the young people that could be considered as threatening and personal in nature.
The semistructured discussion format and use of prompts and open ended questions enabled the researcher to create an interactive conversational relationship with the participants (Grbich, 2004, 2007; Holloway & Wheeler, 2010; Liampittong, 2013; Minichiello, Madison, Hays, & Parmenter, 2004; Power, 2002). This facilitated clarification and exploration of the participants’ responses while providing opportunity for participants to independently raise topics they considered relevant, thus providing greater understanding and sharing of the participants’ knowledge, stories, and experiences (Liampittong, 2013).

Results of the Phase 2 pilot survey testing and FGD trial were used to refine the Phase 3 interview strand discussion guide to ensure consistency of items and constructs being explored.

3.5.2.5 Data collection

Facilitated by the researcher, the pilot FGD was conducted in English at a public venue chosen by the participants. The FGD was audio taped, however, this data were not analysed during the pilot FGD phase. Following completion of the pilot FGD, participants were asked to:

1. Appraise the FGD guide items and research process in regards to language and literacy requirements, clarity, understanding and cultural appropriateness of questions, number of participants in a FGD, and duration of FGD,

2. Identify potential locations for distribution of research information and recruitment, and

3. Identify any issues that may create barriers to recruitment and the successful completion of this study (van Teijlingen & Hundley, 2001).

Written field notes were made to document participants’ feedback on the points listed above and the researcher’s observations of the pilot FGD process.
3.5.2.6 Data Analysis

The detailed feedback from the participants and the researcher’s observation data recorded in the filed notes were analysed using basic iterative inquiry (Grbich, 2004, 2007) and used to guide refinement of the discussion guides for the Phase 3 interview and FGD strands and the research process.

3.5.2.7 Results

The pilot FGD sample included five ($n = 5$) female community members aged between 24 and 40 years of age. Participant feedback indicated the use of English to collect FGD data was acceptable and would not exclude large numbers due to the level of English proficiency among most of the community. Ethnically matched interpreters can increase the accuracy of recording participants’ responses (Fenton et al., 2002); however, consistent with previous research, participants considered the presence of an interpreter might reduce participants’ willingness to disclose sensitive information (Fenton et al., 2002) and affect the focus group dynamics (Culley et al., 2007). A scribe to collect field notes was not recommended for the same reasons (Holloway & Wheeler, 2010; Tonkiss, 2004). Consultation with the RG members supported these proposals.

Participants suggested small size groups (five to six participants) would facilitate open discussion, ensure all participants had the chance to be heard, and limit the logistical challenges associated with getting larger groups together. This is supported by the literature (St John, 2004; Tonkiss, 2004).

The FGD took approximately 40 minutes to complete. The majority of participants considered this acceptable as they felt the topic, while culturally sensitive, was important. Questions were generally found to be culturally appropriate and clear in their intent. Participants, supported by RG feedback, agreed an AUS$30.00 shopping voucher as a thankyou gift was considered cultural appropriate and acceptable. Participants suggested meeting in venues that were known and trusted by participants would be preferable. They also agreed snowball sampling was an acceptable recruitment approach as it would result in the wide distribution of research information, particularly as the researcher became known and trusted within the community.
No changes were made to the discussion guide or proposed recruitment strategies; thus, the pilot indicated the feasibility of the focus group discussion guide and recruitment strategies.

### 3.5.3 Inclusion of pilot results

Data collected from pilot studies are generally not intended for inclusion in the end findings due to the potential for contamination of findings (van Teijlingen & Hundley, 2001). However, as there was no significant modification to the survey, it was decided to include the surveys completed in the pilot phase. It was also decided to include the pilot FGD data in the analysis for similar reasons (van Teijlingen & Hundley, 2001).

### 3.6 Phase 3: Data Collection and Analysis

Phase 3 consisted of the concurrent collection and analysis of data from three equally weighted parallel independent data strands:

- **Stand 1.** Surveys with 16-24 year old young people,
- **Stand 2.** Interviews with a subset of the survey participants, and
- **Stand 3.** Community level focus groups discussions (See Figure 3.1, pp. 67).

Data from the three strands yielded different yet complementary data addressing this study’s research questions, thus providing enhanced validity of results and multidimensional understanding of the research problem (Creswell & Plano-Clark, 2007; Polit & Beck, 2012; Teddlie & Tashakkori, 2009).

#### 3.6.1 Strand 1: Survey with 16-24 year olds

The survey methods and data collection were assessed in the Phase 2 pilot and found to be culturally acceptable and methodologically sound. Consequently, the same processes were used for the Phase 3 survey strand, which provided a broad numeric description of the 16-24 year old participants’ sexual health knowledge, attitudes, beliefs, and behaviour patterns.
3.6.1.1 Sample

The target population was the 16-24 year old members of the Queensland Sudanese community (approximately 600).

Using an established Needed Sample Sizes table by Reaves (1992), the sample size was determined to be between 220 to 240 to ensure that at the 95% confidence level the sample population would be within +/- 0.05 accuracy of the population proportion (Reaves, 1992). A power analysis was not performed due to the lack of sufficient data to make precise statistical calculations (Schofield, 2004).

Assessment of logistical limitations during Phases 1 and 2 suggested it was probably not feasible to meet these numbers within the timeframe and capacity of this study. A pragmatic timeframe of 12 months was, therefore, set for survey data collection. Critical analysis of previous research involving African refugees (Drummond, Mizan, & Wright, 2008; Neale et al., 2007; Onwumere, Holttum, & Hirst, 2002; Tiong, 2006; Tiong et al., 2006; Tompkins et al., 2006) and other hidden, marginalised, and hard-to-reach populations (Smith & Pitts, 2007; Temple & Moran, 2006) determined a sample size of 100 to 150 as an achievable alternative target that would still result in valid findings (Davis & Scott, 2007), while limiting potential biases, harm, or unrealistic demands on participants or the community (Roberts & Taylor, 2002).

3.6.1.2 Inclusion and exclusion criteria

Any person between the ages of 16 and 24 years who self-identified as a member of the target population was eligible. Exclusion criteria included any young person who did not have the maturity and capacity to provide informed consent. Young people with limited English language and literacy were not excluded from Strand 1 if they requested involvement and voluntarily agreed to language assistance from one of the trained peer recruiters.
3.6.1.3 Sampling and recruitment

A combination of convenience snowball and quota sampling using the multiple active strategies of recruitment indicated in Phase 1 was employed. Recruitment for Strand 2 interviews was conducted simultaneously.

3.6.1.4 Data Collection

Informed consent for the Phase 3 survey was implied by the voluntary completion and return of the written survey. To maximise engagement and recruitment opportunities, data collection was conducted at a range of venues and pre-existing youth specific events determined from Phases 1 and 2 data. These included:

- Sporting events such as football and basketball games/tournaments,
- Community organised events and social youth gatherings,
- Community based organisation arranged youth events, and
- Private homes.

Peer Recruiters

Two Peer Recruiters (PR) of Sudanese background, one male and one female, over the age of 18 years and with proficient English language and literacy skills, were employed to assist with recruitment and data collection. The PR’ key role was to identify eligible peers and additional strategies for recruitment. However, on request of participants with limited English literacy skills, the PR also assisted with data collection. While it is recognised this assistance can increase the risk of response bias, this increased participation of those who may otherwise have been excluded on the basis of language (Bloch, 2007; Lee, Sulaiman-Hill, R, & Thompson, 2014). As outlined in the literature review chapter and Phase 2 pilot results, the use of PR was strongly supported as a culturally appropriate and community accepted means to facilitate access (Correa-Velez et al., 2011; Elliott et al., 2002; Luchters et al., 2008; Simon & Mosavel, 2010; Vargo et al., 2004).

The PR were from two different social, tribal, and geographical groups within the community, thus providing different networks to begin seeding for snowball sampling
and recruitment, while decreasing the risk of overrepresentation of any one group. Both had existing knowledge and understanding of sexual health and HIV related issues, demonstrated a keen interest in this study, and expressed a desire to learn more about research processes. They were also both active in their community, appeared respected among their peers, and comfortable to discuss the research topic openly with peers and other members of the community.

The PR were provided training on their role and responsibilities as PR by the researcher in regards to recruitment, informed voluntary consent, principles of confidentiality, and data collection. They were also provided information on the research background, objectives, and methodology. A recruitment bag containing research information sheets, guidelines on inclusion and exclusion criteria, surveys with reply paid envelopes, researcher contact details, pens, and a Survey Distribution Tracking Sheet was given to each PR. They were also provided with a range of agreed responses to questions likely to be encountered in the field.

The researcher and PR communicated regularly via a combination of phone, texting, email, and face-to-face meetings. This allowed exchange of field stories, a prompt response should the PR have any questions, identification of upcoming community events, and a streamlined process for future planning of sampling and recruitment strategies. Completed surveys were exchanged and the recruitment bags replenished at these meetings and on demand.

The PR recruited participants via three strategies, which supported a consistent approach and process. These strategies included:

1. PR joined the researcher at organised youth events where a research information stall was established. Participants were given three options for completing the survey on recruitment:
   a. Self-administered survey in the field with return that day via a sealed envelope to a locked box at the research information stall,
   b. Survey administered with the assistance of the researcher or PR at the time, e.g., on request of participants with limited English literacy skills, and
c. Survey and reply paid envelope supplied for return at a later date to the researcher.

2. PR independently recruited participants and distributed surveys and reply paid envelopes via their social networks within the community.

3. PR invited the researcher to attend social gatherings with young people identified from among their friends’ peers and social networks. Surveys were completed at the time or returned via reply paid envelopes.

**Chain recruitment by participants**

To assist with accessing a broader range of subgroups, participants who expressed an interest in assisting with the research were, following brief training by the researcher on the principles of confidentiality and their role and responsibilities as a recruiter, provided surveys with attached reply paid envelopes for distribution to their social networks. Contact details for the researcher were given to each participant recruiter should support be needed or questions arise.

A thankyou gift of two movie tickets was given to each participant either in person or via mail on return of a completed survey.

Surveys were sequentially coded to allow monitoring of the recruitment and data collection methods for future research design.

**3.6.1.5 Data storage and management**

**Storage**

All data were de-identified, clearly labelled, or coded as appropriate and stored in accordance with the Australian Code for the Responsible Conduct of Research and the National Statement on Ethical Conduct in Human Research (Australian Government, 2007, 2014). Coding of data was performed by the principal researcher to ensure consistency. A separate secure record of codes and participant numbers was kept electronically in a logbook. A code book, both paper and electronic, was kept to record
mapping of variables and data columns used in the Statistical Package for the Social Sciences (SPSS) program Version 20 (IBM Corp., Released 2011).

Data Checking

Data were checked for completeness and quality by the researcher through a number of screening steps (Pallant, 2013). Data verification and cleaning occurred continually throughout data entry by regular manual checks and comparisons of selected survey instruments, which were compared against entered computerised data files and coding sheets. On completion of data entry, a random sample of survey instruments (10%) was reviewed in their entirety for completeness and accuracy of data entry (Roberts & Taylor, 2002; B. Taylor, Kermode, & Roberts, 2006). The data file was also checked for errors, such as missing data and out-of-range values, by case sorting of the 207 variables. Categorical variables were checked pre- and post variable case sorting for errors in a selection of frequency distribution and descriptive tables. The data were also checked for the percentage of missing data and rate of non-respondents for each variable. All errors were rectified.

Missing data

Data for each survey were reviewed item-by-item to determine treatment of missing values. Missing data were dealt with in standard ways (Polit & Beck, 2012). Deductive imputation was performed for missing data items where an item could be logically deduced with certainty by using the individual participant’s responses to other items in the survey (Aday & Cornelius, 2006). As with the NSASSSH (Agius et al., 2010), imputation of means were actioned where appropriate for random and single missing responses on the basis that the mean value reflected the majority of the data (Aday & Cornelius, 2006; Polit & Beck, 2012). For the aggregated knowledge scales, missing items were computed using an individual participant’s mean score for valid responses, unless greater than 50% of items was missing, in which case no score was imputed and the scale was excluded from analysis for that scale (Agius et al., 2010). For other sections of the survey, if more than one data item was missing but less than 25% for an individual participant, the missing data was awarded the case mean of the individual participant’s response for that section. If greater than 25% of data but less than 50% was missing from an individual section, the group mean for that item was awarded for
missing item data (Aday & Cornelius, 2006; Polit & Beck, 2012). Sections with greater than 50% of data missing were removed from the analysis of that section on the basis that their data could not be generated with any certainty. Duplicate datasets were created once analysis began to ensure original data were protected and not lost.

### 3.6.1.6 Data analysis

The data were analysed using the IBM Statistical Package for the Social Sciences (SPSS) Statistics for Windows, Version 20 (IBM Corp., Released 2011). A detailed analytical plan was developed to guide the statistical analysis. Where possible, similar data analysis models to those used in analysis of the 4th NSASSSH were applied during the exploratory phase of analysis. This allowed comparison of this study’s results with those from a study involving a representative sample of young Australians, which was conducted at a similar time to this current study (Agius et al., 2010; Smith et al., 2009).

The 5th NSASSSH (2013) results were released in April 2014 during the final stages of writing this thesis. The data analysis plan for this current study was not revised as there were a number of changes in the data collection items and data analysis for this offering of the NSASSSH.

Descriptive statistics were initially conducted to examine sample characteristics. Summary statistics for each item and the aggregated scales knowledge, confidence, and sexual risk behaviour were calculated in order to part way address the following research questions:

1. What is the knowledge of the 16-24 year old Sudanese background youth in Queensland regarding sexually transmissible infections (STI) and HIV?  
2. What are the attitudes and beliefs of the 16-24 year old Sudanese background youth in Queensland regarding sexual health and behaviour?  
3. How confident are the 16-24 year old Sudanese background youth in Queensland communicating about sex?  
4. What are the self-reported patterns of sexual behaviour among the 16-24 year old Sudanese background youth in Queensland?
5. What are the services used by the 16-24 year old Sudanese background youth in Queensland for sexual health information and health care?

Correlational analysis and Multivariate Analysis of Variance (MANOVA) were then performed to part way address the research question:

9. What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?

These data were grouped according to the research questions and the corresponding IBM theoretical determinants of behaviour (Fishbein, 2000; Fishbein & Cappella, 2006; Fishbein & Yzer, 2003) into continuous outcome and independent variables as follows:

1. Continuous outcome variables:
   a. Cultural identity and acculturation,
   b. Knowledge,
   c. Attitudes and beliefs,
   d. Confidence (Self-efficacy), and
   e. Behaviour.

2. Independent variables:
   a. Gender (Categorical),
   b. Age (Ordinal),
   c. Length of time in Australia (Ordinal), and
   d. Age of arrival in Australia (Ordinal).

**Preliminary analysis**

Initially, data were described and summarised using univariate descriptive analysis, including means, standard deviations, frequency counts, percentages, medians, and interquartile ranges, in an attempt to convey the essential characteristics of the sample
and to summarise data (B. Johnson & Christensen, 2004). Summary statistics for the individual items and subscales of the survey domains were calculated. Contingency tables were used to present the two dimensional frequency distribution of variables cross-tabulated with gender to allow exploration of variance and similarities between genders (Polit & Beck, 2012). For purposes of comparison to the NSASSSH, the 5 point likert scales were collapsed into a 3 category scale for items used to measure attitudes and beliefs (Strongly agree/agree, Not sure, and Strongly disagree/disagree) and confidence (Very confident/confident, Not sure, and Not very confident/not confident), and descriptive analysis findings presented as percentages.

Cultural identity and acculturation items were recorded using a 5 point likert scale. Each item was analysed separately using descriptive analysis to further describe sample characteristics. The 12 cultural identity and acculturation items were aggregated to form a composite score, with higher scores indicating greater identification with Australian cultural traits. Reliability data for this aggregated score is presented in Chapter 4.

Confidence items were also recorded using a 5 point likert scale for 10 items. Again, after each question was analysed separately using descriptive analysis, an aggregated Confidence in Communicating about Sex Score (CCASS) of zero to 40 was calculated.

Attitudes and beliefs of respondents to a range of items were also measured using a 5 point likert scale. An aggregated score was not calculated for this variable as the items did not represent a single entity. For these items, results of the descriptive analysis by gender were used during triangulation and comparison of findings from the interview and FGD.

Knowledge of STI (11 items) and HIV (12 items), recorded using yes, no, and not sure responses, were analysed separately before being aggregated to determine a total STI knowledge and a total HIV knowledge scores. Consistent with the NSASSSH, the knowledge items were scored according to correct response for each question item, with no and not sure responses being grouped as the incorrect category when item responses were aggregated to derive an STI knowledge score (zero to 11) and an HIV knowledge
score (zero to 12). Higher scores indicate poorer knowledge levels for both dependent variables.

Items pertaining to patterns of alcohol and drug use (11 items), information and health care seeking (eight items), and sexual behaviour (34 items) were also described and summarised using univariate descriptive analysis.

An aggregated Sexual Risk Behaviour Score (SRBS) (zero to 84) was calculated using 25 items selected from the 34 items measuring sexual behaviour patterns for each respondent who reported yes to the question: Have you ever had sex? (See underlined items in Survey Section 4 in Appendix A). As outlined earlier, these 25 items reported on factors associated with sexual risk and protective behaviours (Basile et al., 2006; Bearinger et al., 2007; Feinberg et al., 2007; Moilanen et al., 2010) previously used in validated scales (Adefuye et al., 2009; Evans et al., 2004; Reiter et al., 2009; Rosenthal et al., 1991; Seal et al., 1997). Not sure responses were considered as a risk response and grouped accordingly. The group mean was used to replace missing data items.

Analysis of influencing factors

Correlational analysis was then conducted to examined the strength and direction of the relationship between four confounding variables - gender, age, length of time in Australia, age of arrival in Australia - and the dependent outcome variables - STI knowledge, HIV knowledge, confidence in communicating about sex, and sexual risk behaviours - aggregated scores (Polit & Beck, 2012).

The four confounding independent variables were determined following the review of the literature and comparable studies, in conjunction with analysis of the interview and FGD data. Literature reports that age and gender are factors that influence knowledge and predict sexual behaviour patterns (Fenton et al., 2005; Gerrasusu & Stephenson, 2008; Marston & King, 2006; Romer et al., 1994). This is supported by the range of external demographic variables associated with the IBM underpinning this study (Fishbein, 2000), the independent variables used in analysis of the NSASSSSH (Smith, Agius, et al., 2003; Smith et al., 2009), and the Australian Study of Health and Relationships data (de Visser et al., 2006; Smith, Pitts, Shelley, Richters, & Ferris,
Use of age and gender to guide analysis enabled comparison of data from this study with equivalent NSASSSH item data. ‘Length of time in Australia’ and ‘age of arrival’ emerged as common themes across the interview and community FGD data that influence knowledge and the sexual behaviour patterns of the target population’s young people. Therefore, these data were also analysed looking at length of time in Australia and age of arrival in relation to the predictive and outcome variables. Use of these confounding variables to analyse the data is supported by the theory of acculturation (Berry, 1997, 2005; Berry et al., 2006).

Reporting correlation coefficients, computed using Pearson’s r, allowed for the evaluation of importance and statistical significance of the results (Nakagawa, 2004). The choice and number of tests conducted during the descriptive bivariate analysis phase were guided by the data and results were used only for descriptive purposes. It is acknowledged that conducting multiple testing for correlations and variance increases the risk of a Type 1 error occurring. However, as it was not the intent to reject a null hypothesis, to use results to change practice, or to control for experimental wise error rates of any form, an adjustment for multiple testing using a true Bonferroni procedure was not used (Bender & Lange, 2001; Grove & Andreasen, 1982). Nonetheless, in an attempt to avoid a Type 1 error, correlations were only considered significant at the level of \( p \)-value .01.

This study was not designed to test a null hypothesis or to determine a causal link between predictive or confounding variables and behaviour. However, results from the preliminary data analysis informed the decision to conduct descriptive bivariate correlational analysis for individual items and in-depth iterative analysis using a one way between-group Multivariate Analysis of Variance (MANOVA) to explore for associations between the four dependent continuous variables - Sexually Transmissible Infections (STI) knowledge, HIV knowledge, confidence in communicating about sex, and sexual risk behaviours aggregated scores - and the four confounding independent variables - gender, age, time in Australia, and age of arrival in Australia. This level of analysis part way addressed research question 9: What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?
Multivariate Analysis of Variance (MANOVA) was used to analyse the relationship among knowledge, acculturation, confidence, and behaviour using aggregated total scores for the four selected confounding factors - gender, age, length of time in Australia, and age of arrival. Mention and violations of any underlying statistical assumptions and their management are discussed in the relevant sections of Chapter 4 Quantitative results. MANOVA was conducted rather than a series of Analysis of Variances (ANOVA) to increase detection of a true interaction among the variables and to protect against a Type I error associated with multiple tests exploring correlated dependent variables (Field, 2009; L. M. Harris & Heard, 2004; Pallant, 2013; Tabachnick & Fidell, 2013). Bonferroni adjustment procedure was used during this confirmatory analysis of data to control for Type I error (Bender & Lange, 2001; Pallant, 2013; Polit & Beck, 2012; Tabachnick & Fidell, 2013). An adjusted Bonferroni alpha level of .01 was used in order to further reduce the risk of Type 1 error (Coakes & Ong, 2011; Pallant, 2013). It is acknowledged that random sampling was not used for recruitment of this phase; therefore, the probability theory that underlies inferential statistics cannot be applied and findings from this phase cannot be seen as representative of the population (B. Johnson & Christensen, 2004).

The other variables that construct the Integrated Behaviour Model (Fishbein, 2000) were explored and analysed in qualitative phases of this research. It is proposed that results from the exploratory data analysis also assist in understanding the findings of the other phases of this study and guide formulation of hypotheses for testing in future research.

3.6.2 Strand 2: Interviews with 16-24 year olds

3.6.2.1 Purpose

Interviews were designed to explore in greater depth the sexual health knowledge, attitudes, and beliefs of the 16-24 year old Sudanese Queenslanders, along with their thoughts on related risk factors including perceived barriers to service access, knowledge acquisition, and behaviour. Findings from this phase enriched the survey findings and provided opportunity to explore for intergenerational differences by comparison with the community level FGD data.
3.6.2.2 Sample

The interviews consisted of semistructured face-to-face interviews with 16-24 year old young people recruited from the survey sample.

3.6.2.3 Inclusion and Exclusion Criteria

Inclusion criteria were the same as applied in the survey strand (See page 87).

3.6.2.4 Sampling and Recruitment

As discussed earlier, survey participants interested in participating in the interview process self-identified during the survey recruitment and data collection process. The researcher contacted potential participants to assess eligibility and to answer any questions. Details of age, gender, and ethnic/tribal background were collected during this discussion. Quota sampling (Polit & Beck, 2012; Tonkiss, 2004) was applied to achieve a gender balanced sample reflective of the broader community (Atkinson & Flint, 2001; Elam & Fenton, 2003). Arrangements were made at this point of contact regarding a meeting point and time acceptable to both the researcher and participants for conducting the interview.

3.6.2.5 Data Collection

The one-on-one semistructured interviews conducted in English by the researcher commenced with an outline of the overall purpose of the research. Participants were then offered an opportunity to ask questions to ensure concerns and queries were addressed early. This also allowed the researcher time to assess eligibility, English language skills, and maturity and capacity to provide informed consent. Access to an interpreter was offered to participants regardless of English language skills. All participants declined this offer.

The nature of the topic and age of participants may have resulted in the disclosure or identification of past experiences of sexual assault, gender violence, and/or illegal activities such as under age sexual activity, or illicit drug use. The researcher, a Registered Nurse with 20 years clinical experience in sexual and reproductive health,
was highly skilled in the management of these issues. Referral pathways to community based organisation and specialist agencies skilled in providing services to culturally and linguistically diverse communities were established prior to project commencement for ongoing support and care if requested by participants and/or deemed necessary by the researcher. These pathways were contained and approved within the HREC procedure.

Participants were given a copy of the Participant Information Sheet and consent for participation was obtained in writing (Appendix F). Participants were informed that they could withdraw their consent and cease participation at any time. No participants withdrew their consent.

Data collection continued until preliminary data analysis conducted at the completion of each interview indicated no new information was being obtained and data saturation had occurred (Grbich, 2007; Polit & Beck, 2012).

**Venue**

The interviews were conducted at a site nominated by the participants to provide a relaxed and safe environment (Gallagher, 2009; Holloway & Wheeler, 2010). The researcher assessed the nominated location to determine its suitability and the safety for the researcher and participants. A safety plan was developed and adhered to at all times (Dickson-Swift et al., 2007; Parkman & Bixby, 1996). A nominated safety contact was notified of the location, date, and time scheduled, along with the expected time of departure of each interviewee. As the interviews were often conducted out of office hours, the nominated safety person was usually the researcher’s next of kin. The researcher had mobile phone coverage at all times and made contact with the nominated safety contact on arrival and departure from the venue. The nominated safety contact knew to initiate contact and/or to implement the agreed actions if the researcher failed to ring by the expected time of completion.

**Semistructured interview guide**

The semistructured interviews were guided by questions and prompts derived from the survey, the theoretical framework underpinning the study (Fishbein, 2000), together with Phase 1 data (See Appendix G). The open ended question format enabled the
researcher to create an interactive conversational relationship with the participants, which facilitated clarification and exploration of the participants’ responses while providing opportunity for participants to independently raise topics they considered relevant (Grbich, 2004, 2007; Holloway & Wheeler, 2010; Liamputtong, 2013; Minichiello et al., 2004; Power, 2002). This provided greater understanding and sharing of the participants’ stories (Liamputtong, 2013). During the interview, the researcher provided a brief summary of the participant’s response in order to provide opportunity for the participant to reflect and to clarify points discussed. The interviews continued until the natural end of the conversation or until the conclusion of the pre-set two hour duration.

**Recording data**

A combination of digital audio recording and written field notes was used to collect data. The researcher reviewed field notes and audio tapes at the completion of each interview and noted immediate reactions and emerging themes that could be explored in greater depth in subsequent interviews (Holloway & Wheeler, 2010).

**Transcription of Data**

The audio recordings were transcribed verbatim by a professional digital audio transcription service with extensive experience transcribing health related research. Five transcripts, chosen at random by the researcher, were checked for accuracy against the audio recordings and field notes (Braun & Clarke, 2006). All were found to be an accurate account of the proceedings.

**3.6.2.6 Data Storage**

As with the survey data, all interview data were stored in accordance with the Australian Code for the Responsible Conduct of Research (Australian Government, 2007). Audio recordings were deleted from the Digital Audio recorder on completion of transfer to a secure computer file. All paper copies were stored in a locked secure filing cabinet specifically dedicated to storage of research material. Computer files were password protected. The researcher was the sole person with authorisation and means to access the locked filing cabinet or password protected computer files.
3.6.2.7 Data Analysis

Data analysis involved a two-step process: immediate preliminary iterative analysis of data on completion of each individual interview, followed by in-depth thematic analysis of data on completion of data collection. Data analysis was designed to answer the research questions:

1. What is the knowledge of the 16-24 year old Sudanese background youth in Queensland regarding sexually transmissible infections (STI) and HIV?
2. What are the attitudes and beliefs of the 16-24 year old Sudanese background youth in Queensland regarding sexual health and behaviour?
3. How confident are the 16-24 year old Sudanese background youth in Queensland communicating about sex?
4. What are the self-reported patterns of sexual behaviour among the 16-24 year old Sudanese background youth in Queensland?
5. What are the services used by the 16-24 year old Sudanese background youth in Queensland for sexual health information and health care?
6. What are the sexual health related issues causing concern to the 16-24 year old Sudanese background youth and the broader Queensland Sudanese community?
7. What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?

Immediate preliminary data analysis using a basic iterative inquiry approach was conducted at the completion of each interview using a critical reflective process to identify emerging issues, patterns, or trends (Grbich, 2004, 2007). Tentative propositions and emerging themes were developed and noted on each transcript and used to guide data collection processes in the following interviews. This immediate review of data assisted the researcher to become immersed in the data and to develop a greater sensitivity to the perspectives of the participants.

At completion of data collection, data transcripts were organised and prepared by numerical coding of each sentence and notes were made on reflection about the data with each review. Each transcript was read a number of times to achieve a familiarity
with and immersion in the data (Creswell, 2007, 2009). This helped to develop a general understanding and a sense of the whole that enabled themes and patterns of repeated words or phrases to be gathered and refined across the dataset (Braun & Clarke, 2006; Creswell, 2007, 2009). Patterns and trends identified during preliminary data analysis were refined and checked in context, then grouped into themes using conceptual mapping.

The constructs consistent with the survey sections and IBM variables within the research questions being addressed by this strand of the study - knowledge, attitudes and beliefs, and behaviour - were used as a framework on which to build the conceptual mapping process and group emerging themes.

Subsequent in-depth analysis of the transcript data occurred using thematic analysis (Grbich, 2004, 2007). Thematic analysis, a theoretically flexible and useful approach for community participatory models of research, enabled the identification of themes representative of the views of the participants (Braun & Clarke, 2006). Potential themes and patterns were recorded continually through the thematic analysis process and built onto a concept map that emerged from the preliminary iterative analysis process. Emerging themes were clustered where appropriate, according to the structured question topics, to seek out repeated patterns of meaning and issues that address the related research questions (Braun & Clarke, 2006). The emerging patterns within the question topics were then clustered to create key categories underpinning each research question construct. The exploratory descriptive nature of this research meant that analysis focused on identifying emerging themes and patterns within these specific constructs rather than attempting to develop a theory or establish a link between the identified themes or patterns.

Findings from the thematic analysis were recorded using a block and file approach enabling tracks of data to be kept intact (Grbich, 2007). The conceptual map developed during the preliminary analysis phase was amended, providing a brief concise summary for reference. Each identified theme was reviewed, analysed, refined, and named to reflect the sense and meaning of the theme and its position within the overall dataset and relevance to the research questions being address by this strand. This step also limited potential overlap and generated clarity on the themes. Limiting overlap and
contradiction between themes presented a plausible interpretation and analysis, which was consistent with the context and meaning of the data and the theoretical framework underpinning the research (Braun & Clarke, 2006).

3.6.3 Strand 3: Community focus group discussions

3.6.3.1 Purpose

The overall purpose of the community FGD was to explore knowledge, attitudes, and beliefs regarding sexual health from the social, cultural, and contextual perspective of the broader Sudanese community level, thus providing opportunity to explore for intergenerational similarities and differences.

The community FGD enabled the collection of data that reflected the broader community’s experiences, perspectives, and key normative beliefs. FGD have been used successfully to explore and elicit information about beliefs and attitudes (Culley et al., 2007) in relation to both sexual health and cultural related research (Connell et al., 2004; Gibbs, 1997; Power, 2002; Tonkiss, 2004). Information collected during this phase provided access to invaluable contextualised cultural and social insight, and increased understanding of the adult perspective of attitudes and beliefs regarding the sexual health and wellbeing of the young members of the community (St John, 2004; Tonkiss, 2004).

The aim was to facilitate group discussion and interaction (Tonkiss, 2004); therefore, emphasis was taken off the individual participant’s perspective and participants were guided to focus on the collective normative beliefs of the broader community (Gibbs, 1997; Power, 2002). Exploring the diverse array of perspectives and observing the interaction of the participants assisted in producing data that was suggestive of the contextual influence social interaction has on shaping the communities and individuals sexual health related attitudes and beliefs (Gibbs, 1997; Tonkiss, 2004).

3.6.3.2 Sample

The target population for this strand was any member of the Queensland Sudanese community over the age of 16 years.
3.6.3.3 Inclusion and Exclusion Criteria

Any person over the age of 16 years who self-identified as a member of the target population was eligible to be included.

3.6.3.4 Sampling and Recruitment

Consistent with the interview strand, convenience snowball and quota sampling were used to recruit participants until data saturation had occurred (Grbich, 2007; Polit & Beck, 2012). Recruitment and participant information sheets and informed consent processes were similar to those implemented during the interview strand.

Access to interpreters was again offered and declined by all participants. A written consent to participate was completed (Appendix H). Participants were informed that they could withdraw their consent and cease participation at any time as part of the informed consent process. No participant withdrew their consent. Consent also included a statement outlining an agreement not to disclose FGD proceedings outside the FGD setting. Participants were informed that while the focus group structure cannot be considered a fully confidential or anonymous setting (Gibbs, 1997), consenting to participate reflected their agreement to respect and to maintain the confidentiality and privacy of all participants. This is of particular importance in smaller communities such as the target population, which can be considered marginalised (Smith & Pitts, 2007) and a collective (Commonwealth of Australia, 1999).

3.6.3.5 Data Collection

The FGD commenced with an introduction and welcome that included the establishment of a confidentiality and group participation agreement.

**Venue**

Similar to the interview strand, the FGD were conducted in venues nominated by the participants. As with the interviews, the safety plan was followed at all times. Refreshments were provided and participants offered reimbursement for any travel
expenses incurred. Reimbursement was capped at a maximum of $50.00 and provided only on provision of evidence of incurred expense.

**Facilitator**

The principal researcher facilitated the community FGD in English. Discussion in dialect occurred at times and was not stopped. The researcher closely monitored group dynamics and body language to observe for participant discomfort, gatekeeping, or participants not being given opportunity to freely express their thoughts by other group members.

**Semistructured FGD guide**

Consistent with the interviews, the semistructured FGD were guided by structured questions and prompts derived from the survey tool, the theoretical framework underpinning the study (Fishbein, 2000), together with Phase 1 community consultation data (See Appendix E). However, while the interviews explored individual thoughts and feelings, the community FGD were guided to identify and explore the broader community level sociocultural normative beliefs and expectations (Ingham & Stone, 2001), while avoiding individual personal level beliefs that may have stifled spontaneous and independent discussion among participants (Lettenmaier et al., 1994).

Discussions were conducted until the natural end of the conversation or until the conclusion of the pre-set two hour duration.

**Recording and transcription of data**

A combination of digital audio recording and written field notes was again used to collect data. Field notes and audio recordings were reviewed and reflected upon to identify emerging trends or patterns (Holloway & Wheeler, 2010). The digital audio recordings were transcribed verbatim by the same professional digital audio transcription service used for the transcription of interview data.
3.6.3.6 Data Storage and Management

The community FGD data were stored and managed as per Strand 2 interview data.

3.6.3.7 Data Analysis

Data were analysed using the same two-step data analysis plan implemented during the analysis of the interview data. The comparison and convergence of the interview and community FGD datasets that followed facilitated exploration of the cross-generational narratives and identified themes.

3.7 Phase 4: Convergence, Triangulation, and Interpretation of Results

As outlined in the introduction to this chapter, the parallel convergent mixed methods design involves the separate concurrent collection and analysis of quantitative and qualitative data relating to the same phenomenon from three equally weighted data stands in Phase 3 (QUAN + QUAL + QUAL) (Creswell & Plano-Clark, 2007). Following the independent analysis of each strand data, data were converged without transformation via a two-step process: Stand 1 survey results with Strand 2 interview findings, and interview findings with those of Strand 3 community focus group discussions (See Figure 3.1). Convergence of the datasets generated findings that allowed personal perspectives and associated cognitive rationalisations to be interlaced with the survey numerical findings, while providing deeper intergenerational understanding.

Comparing and contrasting outcomes of separate data analyses facilitated corroboration of results generated in the separate data strands and provided a deeper multilevel understanding of the research phenomenon being explored (Creswell et al., 2004; O'Cathain, Murphy, & Nicholl, 2010; Teddlie & Tashakkori, 2009). Corroboration of results also provided an inference quality check, thereby supporting credibility and validity of interpretations and results (Casey & Murphy, 2009; Polit & Beck, 2012; Williamson, 2005). Interpretative integration of the data during this process also identified divergent and nuanced results, thus leading to an overall complete interpretation of results (Polit & Beck, 2012). Results of this phase of data analysis are
presented in Chapter 6 of this thesis. Discrepancies arising from comparison of the datasets will be discussed in the last two chapters.

Merging of the survey data with the interview data was implemented through a process of comparing and contrasting data without transformation using a matrix approach (Creswell, 2009; Creswell & Plano-Clark, 2007; Polit & Beck, 2012). The matrix was constructed using the consistent constructs used throughout the independent parallel data analysis plans. It is recognised the qualitative findings cannot be generalised to the quantitative phase, participants, or the broader community of 16-24 year old Sudanese Queenslanders. Integration of the survey and interview datasets, however, provided a greater depth, richness, validity and accuracy of findings and inferences through evidence triangulation of key results (Creswell & Plano-Clark, 2007; Polit & Beck, 2012).

The convergence of the interview data with the community FGD data occurred via a twostep process. First, the themes grouped under the consistent constructs and categories identified during in-depth thematic analysis of each of these independently analysed parallel strands were reviewed to identify any similarities and disparities. This resulted in the identification of meta-themes that were consistent across these two datasets (O’Cathain et al., 2010). Second, the individual transcripts and accompanying findings from preliminary iterative analysis for each strand were then revisited to ensure the intent of the discussion was maintained. This also ensured the subtle intergenerational and cultural nuances expressed in the participants’ responses were captured. Triangulation of data from these two primary qualitative data sources resulted in multilevel inferences that provided intergenerational insight into the commonalities and disparities in normative beliefs and influencing external factors. Relevant quotes from both these strands have been incorporated to reflect the macrocommunity level themes and personal microlevel perspectives of young people. Inclusion of these themes and personal narratives provides findings that highlight the multiple determinants that may influence the behaviour of the young people and the broader Queensland Sudanese community.

As outlined earlier in this chapter, the survey results were also compared and contrasted with the like item results of the NSASSSH. Interpretation of the similarities and
variance in results across these studies was considered with caution given the differences between the samples and survey items; however, comparison provided further understanding of this study’s results.

### 3.8 Qualitative Analysis, Trustworthiness, and Confirmability

Issues of representation and interpretation were considered important due to the cross-cultural and English second language nature of this research. Multiple strategies were applied to limit the potential for the researcher’s cultural subjectivity to be dominant in the data analysis process. These strategies included engagement and observation by the researcher of the target community’s social and cultural norms and practices at a range of community events, and review of coding with the researcher’s supervisors to determine intercoder agreement. Employing these strategies provided opportunity for the researcher to reflect and to control for potential bias and to strengthen the credibility of findings (Bloomberg & Volpe, 2008; Creswell, 2007; Creswell & Plano-Clark, 2007). Application of these strategies also aimed to increase the trustworthiness of the analysis.

The interviews and focus groups were conducted in English, the first language of the researcher but not that of the participants. This could result in inaccuracies in interpretation of participants’ meanings, and in the researcher’s perspective becoming dominant in the interpretation of data and construction of the findings (Temple, 2005). To reduce the potential for these occurring, the researcher ensured that the English level used in all interactions was kept simple in construct and terminology to support understanding and overall communication. Participants were offered access to interpreters to assist in communication; however, the majority of participants appeared comfortable with the English level used and all refused access to the offered interpreters. Creating a conversational nature to the interview and focus group environment provided opportunity for the researcher to develop some understanding of the participants’ terminology, context, and meaning (Liamputtong, 2013), and to negate the potential for researcher bias to occur. Verbatim transcription, including informal and emotive expressions recorded in the audio tapes, assisted in capturing the true nature and intent of the interview for analysis (Braun & Clarke, 2006). Revisiting and comparing the digital audio tape recordings, field notes, and transcripts also aided in
maintaining accuracy and capturing the participants’ contextual perspectives and meanings.

As mentioned earlier, the researcher spent prolonged periods of time in the field visiting Queensland Sudanese community leaders and community members, along with attending large community gatherings throughout southeast Queensland. This provided an opportunity for the researcher to observe and engage with the community, ensuring an understanding of the cultural and social dynamics of that community (Creswell, 2007). Time spent building rapport and trust with the community, combined with the researcher’s experience of living and working in Southern Sudan in 2000, meant the researcher had an understanding of Sudanese culture and traditions from both a pre- and post arrival perspective. This observation and immersion in the day-to-day pre- and post arrival experiences of the target community led to greater confidence in identification of codes and potential themes that are relevant to the context of the participants (Creswell, 2007). This also limited the risk of misinterpretation and distortion of intent during the overall analytical process. To ensure that the experience of living in Sudan and relationship with the community were not influencing or distorting the analysis and interpretation of data, the researcher met regularly with her supervisors and reference group members. These discussions allowed the researcher to reflect and to be challenged on emerging impressions and patterns, thereby providing opportunity to identify potential biases and misinterpretations (Koch et al., 2006; Shenton, 2004).

To further increase the trustworthiness and reliability of the study, the credibility and authenticity of coding were corroborated by consensual agreement of identified themes by review of a selection of the transcripts (Creswell, 2007). Two of the researcher’s supervisors, who had no prior access to the data or findings, acted as additional coders. Identification, interpretation, and agreement of categories and themes provided an opportunity to determine the plausibility of the researcher’s interpretation of the transcripts. In addition, this process further increased the rigour and confirmation of credibility of interpretation and resulting themes (Bloomberg & Volpe, 2008; Creswell, 2007).
The supervisors in their role as coders analysed six randomly selected transcripts to identify emerging themes or patterns of topics. Identified themes were then reviewed for consistency with the researcher’s interpretation. Overall, there was a high degree of consistency between the researcher’s findings and those of the coders, which demonstrated confidence in the analysis process and findings. When inconsistency or questioning of interpretation occurred, the researcher reviewed the data and findings in consultation with the other coders to determine the code or theme that most accurately reflected the participant’s intent (Bloomberg & Volpe, 2008; Creswell & Plano-Clark, 2007). A joint decision was made as to the final interpretation. No further transcripts were reviewed due to the overall consistency of agreement between the researcher’s and the coders’ findings.

This combination of strategies provided an opportunity to externally check and to question the interpretation of transcripts and to reduce the risk of the researcher’s past experience and closeness to the research influencing the analysis of data (Creswell, 2007). This process, in combination with the research audit trail, increased the credibility and trustworthiness of the findings and overall confirmability of the research.

### 3.9 Ethical Considerations

This research was conducted according to the National Statement on Ethical Conduct in Research Involving Humans 2007 (Australian Government, 2014). Ethical clearance was obtained from Griffith University (NRS/02/09/HREC). Refer to Appendix I for confirmation of ethical approval.

The purpose of the research was exploratory in nature, to gain understanding of the sexual health knowledge, attitudes, beliefs, and patterns of behaviour of the target community. The conduct of the research had the wellbeing of all participants and the collective as the paramount concern. It did not involve an intervention or treatment of any kind and did not propose or intend to influence the participants in any way. Risks associated with the research were deemed minimal and any potential risks were negated or minimised by the research design and experience and expertise of the researcher.
Data collection was conducted primarily by or under supervision of the researcher, a registered nurse highly skilled and competent in gathering and managing sensitive confidential sexual health information and in assessing a young person’s maturity and competence to consent. The researcher, also an expert in the management of complex sexual health scenarios involving culturally and linguistically diverse populations and young people, was also considered culturally aware and competent due to personal experience of working in Sudan, together with the support and advice provided by the Phase 1 community consultation and RG processes.

3.9.1 Privacy and confidentiality

As the target population is a group of people who can be defined or linked due to their distinct social and/or cultural structures into a common identity, careful consideration was given to ensure confidentiality was maintained at all times and that the research process and participation did not induce harm on individual participants or result in disclosure of identifying information to the wider community.

Phase 1 community consultation and RG discussions indicated that for purposes of this research it was acceptable for the target population to be broadly defined and identified as the Queensland Sudanese Community.

All information was de-identified prior to analysis. Participants were not identified by name or suburb/town of residence. Participants were clustered using age, gender, tribal group, and postcodes, grouped into urban or regional areas of Queensland. To limit potential risk or harm from internal community dynamics and histories, findings were not differentiated or associated to individual tribes or subgroups within the community. Participants’ identifications by inference were also protected by limiting and controlling identifiable information, stories, or experiences from being included in the findings. Participants’ details were not linked to their responses at any stage of the research.

Any documentation with personal details was stored separately in a locked filing cabinet in the School of Nursing and Midwifery, Logan Campus, Griffith University to ensure no link could be made between the identity of the interested participant or any datasets. The researcher was the only person to have access to any personal
information. Personal contact information was destroyed immediately the participants had been contacted and their involvement was completed.

3.9.2 Informed consent

Participants who voluntarily participated in this research were provided with a Participant’s Information Sheet and Consent Form specific to the phase in which they were involved.

Research information was also given orally and an opportunity to ask questions was provided to each participant. Access to an independent interpreter to ensure impartial, accurate, and confidential interpretation and understanding of the information (Kizito, 2001) was offered but declined by all participants. If clarification was sought in dialect, the PR were used in the Phase 3 survey and interview stands. They had been given privacy and confidentiality training, which included exploration of the PR perspectives and beliefs about the topic to limit potential for personal bias to hinder their ability to be neutral and accurate. Though the use of family and friends as interpreters can be considered problematic for accuracy of translation, misrepresentation, and gate keeping (Gilbert, 2005), it was agreed, based on findings of Phase 1 community consultation and RG discussions, to allow focus group members to explain questions and responses in dialect to other members. All participants agreed and stated they were comfortable and safe with this process. The researcher observed for any verbal and non-verbal signs of discomfort or gate keeping.

To further ensure understanding and each participant’s maturity and capacity to provide independent voluntary informed consent, the researcher asked a range of open ended questions before obtaining informed consent. Participants were informed that they could withdraw from any phase of the research without penalty or comment and choose not to answer any question. While some participants found some questions challenging due to cultural sensitivity, they voluntarily answered all questions and no participants withdrew from the research. Participants were provided with contact details of the researcher and the Human Research Ethics Committee (HREC) in case of future questions or complaints.
3.9.3 Research involving minors

Research involving minors, illegal activities, and people in dependent or unequal relationships requires careful consideration and attention to the design, conduct, and ethical review (Australian Government, 2014; Dean et al., 2012). The research method took these issues into consideration, was age appropriate, and resulted in benefits that outweighed any potential harm or risk to the participants or minors involved.

This research was not designed to identify or expose illegal activity; but due to the nature of the topic and age of participants it is acknowledged that disclosure or identification of illegal activities such as under age sexual activity, illicit drug use and suspected harm, abuse, and neglect of a minor may have occurred. The researcher’s expertise and established networks of referral and support provided the necessary framework to address the legal and/or ethical obligations, especially in regards to suspected harm, abuse, and neglect of a minor. While no such issue was identified or disclosed during the research process, participants were provided with contact details of professional services that provide free confidential counselling and relevant services.

Even though most of the research participants arrived in Australia as refugees under the Humanitarian program, they were not considered as dependent or in an unequal relationship with the researcher. The researcher was not an employee of a government body responsible for their welfare or visa application processes, and had no personal or professional relationship with participants that could have been considered influential or potentially unequal or dependent. Participants were assessed on a case-by-case basis on recruitment to ensure that they were capable and able to give independent voluntary consent and that there was no coercion by the researcher, RG members, other participants, or anyone associated with the research in any way.

Consideration was given to the potential for conflict between parental and young people’s values and interest in the research and overall findings. This was managed and negated by:

1. Establishing the Reference Group to provide cultural and social advice throughout,
2. Involving the community in the development of the research to promote ownership, validity, and cultural appropriateness and acceptance,

3. Involving young people in the RG and consultation processes, and

4. Obtaining ethical clearance to allow participants between 16 and 18 years of age to be the primary provider of informed consent.

Consideration was also given to the impact that the researcher’s personal experience and relationship with the community may have on the ability to maintain the ethical and scientific objectivity of the research. To ensure that the researcher’s experience of living in Sudan and the researcher’s relationship with the community was not influencing the scientific objectivity of the research, a process of debriefing with supervisors was established. This provided the opportunity to externally check and to question any arising issues or proposed changes to the research process, thereby reducing the risk of the researcher’s past experience influencing the research objectivity and overall validity (Creswell, 2007). Community consultation and discussion with the Reference Group indicated that the community was committed to the research and that community members were not concerned by the involvement of minors from the age of 16 years upward or their ability to provide primary informed consent. The community considered the research was important to the health and wellbeing of their younger members and considered the benefits outweighed any potential harm.

3.10 Summary

This chapter has outlined the methods used to address the research questions and aims of this research. It provided an overview of the convergent parallel mixed methods design including examination of the research design, data analysis, and associated ethical considerations. A multiphase research using a mixed method was necessary to explore the sensitive topic from a cross-cultural context with this small collective ‘highly visible’ community. The analysis and findings from each parallel strand form the focus of the next two chapters. The participants’ voices begin to emerge within the following chapters of this thesis as the interviews and community FGD findings are compared and converged with the numerical findings of the survey. This convergence of findings will provide a platform on which to build the discussion chapter and the implications for practice outlined in the concluding chapter of this thesis.
Chapter 4 Quantitative Results

4.1 Introduction

Results of data analysis from the Phase 3 three independent parallel strands are presented in the next two chapters. This includes the presentation of the quantitative data analysis from the survey with young Queensland Sudanese community members ($n = 229$) in this chapter and the qualitative findings from the interviews with young people and the community FGD in Chapter 5. Results of data analysis from each of these strands will be presented according to how they relate to the research questions and thus the variables contained within the theoretical framework underpinning this study (See Table 1.1, page 10). Presenting the data in this manner helped to identify salient findings that can be used to inform future IBM based behavioural change interventions and research. Using the same constructs to present the quantitative and qualitative findings enhanced the ability to identify common or divergent results and themes during the convergence of data from these three concurrently analysed data strands (Creswell & Plano-Clark, 2007). The manner in which these three strands converge will be highlighted and discussed in Chapter 6.

4.2 Data Cleaning

Data management strategies undertaken to ensure an accurate dataset are outlined in Chapter 3. As a result of these data management strategies, a small number of code errors were identified (0.13%) and corrected by verification with the original survey instrument responses. The extent of missing data varied across the different survey sections and items. Analysis of the missing data identified higher rates for items reporting patterns of sexual behaviours (range: 2%-26%). For a small number of cases ($n = 20$), missing items (such as gender, tribal group, or language spoken at home), were able to be logically imputed based on other responses from the same participant (Aday & Cornelius, 2006). As per the process outlined in Chapter 3, 25 (11%) respondents had missing data imputed via individual mean case or mean group data accordingly for the two (0.8%) to 12 (5%) data items missing from individual items within section 3 and 4.1 (cultural identity and knowledge of STI and HIV, respectively) of the survey instrument. Data from these same sections for two participants were excluded from analysis as there was greater than 50% in total of missing data.
4.3 Sample and Response Rate

During the 12 month survey data collection period, 199 of the 420 surveys distributed to young people were returned yielding a response rate of 47.4%. As outlined in Chapter 3, the 30 surveys completed during the Phase 2 pilot were included resulting in a total survey sample of 229, thus achieving the estimated sample size needed to ensure that at the 95% confidence level the sample population would be within +/- 0.05 accuracy of the population proportion (Reaves, 1992).

Surveys were sequentially coded to allow monitoring of the recruitment methods for future research design. Recruitment in the community with both the principal researcher and peer recruiters present was the most effective method of recruitment (See Table 4.1).

Table 4.1
Survey recruitment methods

<table>
<thead>
<tr>
<th>Recruitment strategies</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community gatherings with principal researcher and peer recruiters</td>
<td>151</td>
<td>75.9</td>
</tr>
<tr>
<td>Survey and reply paid envelope supplied to people at above events and returned via Australia Post</td>
<td>35</td>
<td>17.6</td>
</tr>
<tr>
<td>Community gatherings with principal researcher</td>
<td>13</td>
<td>6.5</td>
</tr>
<tr>
<td>Total</td>
<td>199</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.4 Reliability of the Aggregated Composite Scores

The internal consistency and interrelatedness among the items within the five aggregated composite scores measuring cultural identity, STI and HIV knowledge, confidence in communicating about sex, and sexual risk behaviour was computed using Cronbach’s alpha (α) with the acceptable reliability set at .70 or higher (Pallant, 2013).

4.4.1 Cultural Identity Scale

Cronbach’s alpha coefficient (α) for the 12 cultural identity (CI) items was .089 (See Table 4.2), indicating that they were not reliably measuring the critical attribute of cultural identity (P. Allen & Bennett, 2012; Pallant, 2013; Polit & Beck, 2012). Examination of the six items from the RELACHS (CI 1 to 6) (Cronbach α = .083) and
the six items derived from acculturation literature (CI 7 to 12) (Cronbach $\alpha = .407$) separately (See Table 4.2) indicated these groupings also did not reliably measure the unique critical attribute of cultural identity or acculturation level (Pallant, 2013; Polit & Beck, 2012). Consequently, they were not aggregated into a composite score for this study (Pallant, 2013; Polit & Beck, 2012). Analysis of data from CI items 1 to 6 were instead used to describe sample characteristics and CI items 7 to 12 data were analysed to address research question 9: *What do the 16–24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?*

Table 4.2
*Reliability statistics for cultural identity (CI) items*

<table>
<thead>
<tr>
<th>CI Items</th>
<th>No. of Items</th>
<th>$\alpha$</th>
<th>Based on Standardised Items</th>
<th>Summary Item Statistics - Inter-Item Correlations*</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI 1 to 12</td>
<td>12</td>
<td>0.089</td>
<td>0.093</td>
<td>Mean -0.549 Min 0.610 Max 1.159 Range -1.111 Variance 0.62</td>
</tr>
<tr>
<td>CI 1 to 6</td>
<td>6</td>
<td>0.083</td>
<td>0.110</td>
<td>Mean -0.281 Min 0.406 Max 0.687 Range -1.446 Variance 0.051</td>
</tr>
<tr>
<td>CI 7 to 12</td>
<td>6</td>
<td>0.407</td>
<td>0.442</td>
<td>Mean -0.549 Min 0.610 Max 1.159 Range -1.111 Variance 0.152</td>
</tr>
</tbody>
</table>

*Mean inter-item correlations values reported as < 10 items per grouping (Pallant, 2013), n = 227*

### 4.4.2 STI Knowledge Scale

In this current study, a Cronbach’s alpha coefficient of .67 was found for the 11 STI knowledge items composite score, suggesting an internal consistency just below the acceptable .70 for this item grouping with this sample (Pallant, 2013) (See Table 4.3). This means the accuracy of judgments about relationships between variables based on this scale may be attenuated (Schmitt, 1996; Yang & Green, 2011). Nonetheless, this score was used as a continuous outcome variable in this study as the content was considered meaningful in addressing the research questions (Schmitt, 1996) and enabled the comparison of this study’s STI knowledge score with the NSASSSH STI knowledge score, which had a similar Cronbach’s $\alpha$ of .70 (Agius et al., 2010).
4.4.3 HIV Knowledge Scale

The Cronbach’s alpha coefficient for this study’s 12 item HIV knowledge composite score was .83, indicating good internal consistency; thus, this scale was used as a continuous outcome variable in this study (See Table 4.3).

4.4.4 Confidence in Communicating About Sex Scale

The Cronbach’s alpha coefficient for the 10 item confidence in communication composite score was .86, suggesting good internal consistency reliability. This scale was, therefore, used as a continuous outcome variable in this study (See Table 4.3).

4.4.5 Sexual Risk Behaviour Scale

The Cronbach’s alpha coefficient value for the 25 item sexual risk behaviour composite score used in this study was .9, suggesting good internal consistency reliability. This scale was, therefore, used as a continuous outcome variable in this study (See Table 4.3).

Table 4.3

*Reliability statistics for aggregated score items*

<table>
<thead>
<tr>
<th>Composite Score Items</th>
<th>No. of Items</th>
<th>Current Study</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>α</td>
<td>α Based on Standardised Items</td>
<td></td>
</tr>
<tr>
<td>STI knowledge</td>
<td>11</td>
<td>.670</td>
<td>.664</td>
<td></td>
</tr>
<tr>
<td>HIV knowledge</td>
<td>12</td>
<td>.829</td>
<td>.830</td>
<td></td>
</tr>
<tr>
<td>Confidence in communicating</td>
<td>10</td>
<td>.864</td>
<td>.868</td>
<td></td>
</tr>
<tr>
<td>Sexual risk behaviour</td>
<td>25</td>
<td>.904</td>
<td>.905</td>
<td></td>
</tr>
</tbody>
</table>

* * α = Cronbach alpha coefficient

4.5 Sample Characteristics

Of the 229 participants, 149 were male (65.1%) and 79 female (34.5%) with gender unspecified for one participant. The mean age was 19.2 years (range: 14-27 years, SD = 2.7 years) (See Table 4.4).
Potential participants were informed at point of recruitment that they were required to be between 16-24 years. However, data analysis identified 14 participants who self-reported their age was outside this inclusion criteria (two reported they were 14 years of age, one 15 years, and 11 between the ages of 25 and 27 years). Data from these 14 surveys were however included in the data analysis as all participants had been assessed by the principal researcher as having the maturity and capacity to provide informed consent at the point of recruitment.

Table 4.4  
*Gender and age group characteristics*

<table>
<thead>
<tr>
<th>Gender</th>
<th>&lt; 16</th>
<th>16-18</th>
<th>19-24</th>
<th>&gt; 24</th>
<th>Unknown Age</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>.7</td>
<td>70</td>
<td>47.0</td>
<td>62</td>
<td>41.6</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>2.5</td>
<td>28</td>
<td>35.4</td>
<td>44</td>
<td>55.7</td>
</tr>
<tr>
<td>Unknown gender</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>1.3</td>
<td>98</td>
<td>42.8</td>
<td>106</td>
<td>46.3</td>
</tr>
</tbody>
</table>

The majority of respondents were of Christian faith (91%) (See Table 4.5) and originated from a range of predominantly Southern Sudanese ethnic and tribal groups including: Dinka (38%), Nubian (10.9%), Bari (8.7%), Nuer (7%), KuKu (4.8%), Madi (4.8%), and Azande (3.9%), with the remaining 17.8% identifying as groups such as Acholi, Ashanti, Balanda, Chadian, Cholo, Kakwa, Kwalib, Luo, Lova, Mali, Moru, Mundari, Pojulu, and Shillik.

Table 4.5  
*Reported religion (n = 229)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Christian</th>
<th>Muslim</th>
<th>Other</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>136</td>
<td>91.3</td>
<td>3</td>
<td>2.0</td>
</tr>
<tr>
<td>Female</td>
<td>73</td>
<td>92.4</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>209</td>
<td>91.3</td>
<td>6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

*Other = Pentecostal, Rastafarian* 

Over three quarters (79%) of the respondents reported they were born in Sudan, with the remainder reporting they were born in African countries such as Kenya (3.5%), Egypt
(2.6%), Uganda (2.6%), Ethiopia (1%), Liberia (1%), and Libya (0.5%). Almost half (44.5%) of the participants reported they had spent time in refugee camps in countries such as Kenya (56.9%), Uganda (12.7%), Egypt (2%), Ghana (2%), and Ethiopia (1%).

The mean years since arrival in Australia was 6.3 years ($SD = 2.5$ years; range: 1-18 years) (See Table 4.6) and the mean age on arrival was 13 years ($SD = 3.3$ years; range: 1-20.6 years). Nearly one quarter (23%) reported arriving in Australia unaccompanied by an adult relative or guardian. The most common languages spoken at home were Arabic (38.9%), Dinka (35.4%), or another tribal dialect (14.3%), with 9.6% identifying English.

Table 4.6

<table>
<thead>
<tr>
<th>Gender</th>
<th>≤ 6 years</th>
<th>≥ 7 years</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>43.6</td>
<td>74</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>57.0</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>48.0</td>
<td>107</td>
</tr>
</tbody>
</table>

The majority reported they were single (68.1%), 26.6% had a boy/girlfriend but were not living together, 2.1% were married or living with their boy/girlfriend, and two participants (.9%) reported they were widowed. Most of the participants (86.3%) reported they were living in a household with adult supervision, either parents (32.3%), mother as a sole parent (26%), aunt/uncle (10%), or father as a sole parent (2.6%). The remaining participants (21.8%) reported they were living with siblings, cousins, or friends.

The majority of the respondents reported they were attending an educational institution (86%) including secondary school (38.4%), Technical and Further Education (TAFE) (24%), or university (23.6%). The remainder were employed (7.9%) or unemployed (5.2 %). Ninety-six (41.9%) of the respondents reported they had completed education to a year 12 level, 14.0% a TAFE certificate, and a small number reported they had achieved a university qualification (5.7%) (See Table 4.7).
Table 4.7

*Educational level achieved (%) (male = 149; female = 79)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Primary School</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
<th>Year 12</th>
<th>TAFE certificate</th>
<th>University degree</th>
<th>Postgrad degree</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0</td>
<td>2.0</td>
<td>4.0</td>
<td>16.1</td>
<td>19.5</td>
<td>36.2</td>
<td>14.8</td>
<td>4.7</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Female</td>
<td>2.5</td>
<td>2.5</td>
<td>1.3</td>
<td>8.9</td>
<td>13.9</td>
<td>53.2</td>
<td>12.7</td>
<td>3.8</td>
<td>1.3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>.9</td>
<td>2.2</td>
<td>3.1</td>
<td>13.5</td>
<td>17.5</td>
<td>41.9</td>
<td>14.0</td>
<td>4.4</td>
<td>1.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

*TAFE - Technical and Further Education*

Participants’ location of residence was classified and grouped by Queensland postcodes into metropolitan and regional areas, with ‘regional’ classified as more than a one hour drive from the Brisbane (state capital) central business district. Of the 209 participants who reported their postcode of residence, all were from the southeastern region of Queensland, with 116 (55.5%) reporting they lived in the metropolitan Brisbane area and 93 (44.5%) in regional areas of southeast Queensland.

### 4.5.1 Cultural identity

As outlined earlier, due to poor reliability (Cronbach’s α = .083) the cultural identity (CI) items 1 to 6 are reported individually. Nearly half of the respondents (41.5%) identified they like to wear clothes similar to people of a Sudanese background. Similarly, 49.8% reported they strongly agree or agree that they preferred to wear clothes similar to those of an Australian background (See Table 4.8). Two thirds (60.2%) reported most of their friends were of Sudanese background; however, 78.6% reported they liked to have friends from both Australian and Sudanese backgrounds. More males (47.7%) indicated a preference for friends from an Australian background compared to female respondents (22.8%). Nearly half (48.5%) of the respondents reported they strongly agree or agree that they prefer to speak English.

### 4.5.2 Summary of characteristics

The survey participants lived in a range of urban metropolitan suburbs of Brisbane and in regional areas of southeast Queensland. The mean age was 19.2 years and there were more male than female participants. The majority originated from predominantly South Sudanese tribal groups following transition through refugee settings and countries such
as Egypt, Kenya, Uganda, and Ethiopia. Christianity was the dominant religion reported. The most common languages spoken at home were Sudanese Arabic and Dinka; however, there appeared to be a preference for speaking English among half of the sample. The majority reported having mainly Sudanese background friends; however, there was a preference for having friends from both Sudanese and Australian backgrounds.

The following sections present the results of the survey analysis according to how they relate to the research questions (See Table 1.1, page 10).

<table>
<thead>
<tr>
<th>Cultural identity items #</th>
<th>Gender</th>
<th>Strongly agree/Agree</th>
<th>Not Sure*</th>
<th>Strongly disagree/Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like to wear similar clothes to people with a Sudanese background</td>
<td>Male</td>
<td>73</td>
<td>49.0</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22</td>
<td>27.8</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>95</td>
<td>41.5</td>
<td>62</td>
</tr>
<tr>
<td>2. I prefer to wear clothes that are similar to people from an Australian background</td>
<td>Male</td>
<td>75</td>
<td>50.3</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>39</td>
<td>49.4</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>114</td>
<td>49.8</td>
<td>61</td>
</tr>
<tr>
<td>3. Most of my friends are from a Sudanese background</td>
<td>Male</td>
<td>97</td>
<td>65.1</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>41</td>
<td>51.9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>60.3</td>
<td>33</td>
</tr>
<tr>
<td>4. I prefer to have friends that are from an Australian background</td>
<td>Male</td>
<td>71</td>
<td>47.7</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>18</td>
<td>22.8</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>89</td>
<td>38.9</td>
<td>79</td>
</tr>
<tr>
<td>5. I prefer to have both Australian &amp; Sudanese friends</td>
<td>Male</td>
<td>117</td>
<td>78.5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>63</td>
<td>79.7</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>180</td>
<td>78.6</td>
<td>31</td>
</tr>
<tr>
<td>6. I prefer to speak English</td>
<td>Male</td>
<td>80</td>
<td>53.7</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>31</td>
<td>39.2</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>111</td>
<td>48.5</td>
<td>67</td>
</tr>
</tbody>
</table>

*Analysis of not sure responses detected no pattern of characteristics. # Cronbach’s α = .083
Note. Item numbering correlates with Survey Instrument item numbering (See Appendix A); (male = 148; female = 79)
4.6  Research Question 1: What is the Knowledge of the 16-24 Year Old Sudanese Background Youth in Queensland Regarding STI and HIV?

4.6.1  STI Knowledge

When examining STI knowledge items, the highest level of knowledge reported was regarding STI transmission, with 57.7% of the respondents reporting a correct response to the item ‘some STI can be passed on during oral sex’ (See Table 4.9). Knowledge of STI signs and symptoms and prevention was low, with 34.8% believing they will always know when they have an STI, and the majority (66.9%) incorrect or unsure if the contraceptive pill prevented contraction of an STI. More than a third of respondents (range: 33.9-62.6%) reported they were not sure of each item, with the highest level of uncertainty in relation to chlamydia causing infertility (62.6%) and the Human Papilloma Virus (HPV) causing cervical cancer (61.7%) (See Table 4.9).

The aggregated STI knowledge score (Cronbach’s α = .67) ranged from zero to 10 ($M = 3.6$, $SD = 2.4$), with a higher score indicating higher levels of knowledge. The relationship between STI knowledge (as measured by the aggregated score) and the two independent variables, gender and age, consistent with the 4th NSASSSH (Smith et al., 2009), was investigated using Pearson product–moment correlation coefficient. Preliminary analyses indicated no violation of the assumptions of normality, linearity, and homoscedasticity. A significant small positive correlation was found between the STI knowledge and gender ($r = .237$, $n = 227$, $p < .001$, 5.6% shared variance), with higher mean levels of knowledge associated with females ($M = 4.4$, $SD = 2.4$) compared to males ($M = 3.6$, $SD = 2.3$) (See Table 4.9). There was no significant correlation between STI knowledge and age.

Table 4.9

<table>
<thead>
<tr>
<th>Composite score</th>
<th>Gender</th>
<th>$n$</th>
<th>Mean</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>STI knowledge score (0 to 11)</td>
<td>Male</td>
<td>148</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>79</td>
<td>4.4</td>
<td>$r = .237$, $n = 227$, $p &lt; .001$</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>227</td>
<td>3.6</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.9 Continued

*Mean STI knowledge score with frequency of individual STI knowledge items (n = 227)*

<table>
<thead>
<tr>
<th>STI knowledge items #</th>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You will always know when you have caught an STI</td>
<td>Male 47</td>
<td>31.8</td>
<td>28</td>
<td>18.9</td>
</tr>
<tr>
<td></td>
<td>Female 32</td>
<td>40.5</td>
<td>10</td>
<td>12.7</td>
</tr>
<tr>
<td></td>
<td>Total    79</td>
<td>34.8</td>
<td>38</td>
<td>16.7</td>
</tr>
<tr>
<td>2. All STI except HIV can be cured</td>
<td>Male 50</td>
<td>33.8</td>
<td>36</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>Female 32</td>
<td>40.5</td>
<td>18</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>Total    82</td>
<td>36.1</td>
<td>54</td>
<td>23.8</td>
</tr>
<tr>
<td>3. Some STI can be passed on during oral sex</td>
<td>Male 77</td>
<td>52.0</td>
<td>18</td>
<td>12.2</td>
</tr>
<tr>
<td></td>
<td>Female 54</td>
<td>68.4</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Total    131</td>
<td>57.7</td>
<td>19</td>
<td>8.4</td>
</tr>
<tr>
<td>4. Using a condom will keep you safe from all STI</td>
<td>Male 79</td>
<td>53.4</td>
<td>36</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>Female 38</td>
<td>48.1</td>
<td>12</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>Total    117</td>
<td>51.5</td>
<td>33</td>
<td>14.5</td>
</tr>
<tr>
<td>5. The contraceptive pill will prevent you getting an STI</td>
<td>Male 38</td>
<td>25.7</td>
<td>37</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td>Female 10</td>
<td>12.7</td>
<td>38</td>
<td>48.1</td>
</tr>
<tr>
<td></td>
<td>Total    48</td>
<td>21.1</td>
<td>75</td>
<td>33.0</td>
</tr>
<tr>
<td>6. Chlamydia is an STI that only affects women</td>
<td>Male 22</td>
<td>14.9</td>
<td>23</td>
<td>15.5</td>
</tr>
<tr>
<td></td>
<td>Female 17</td>
<td>21.5</td>
<td>24</td>
<td>30.4</td>
</tr>
<tr>
<td></td>
<td>Total    39</td>
<td>17.2</td>
<td>47</td>
<td>20.7</td>
</tr>
<tr>
<td>7. Chlamydia can lead to infertility in women</td>
<td>Male 48</td>
<td>32.4</td>
<td>7</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>Female 28</td>
<td>35.4</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total    76</td>
<td>33.5</td>
<td>9</td>
<td>4.0</td>
</tr>
<tr>
<td>8. Hepatitis B can be transmitted sexually</td>
<td>Male 52</td>
<td>35.1</td>
<td>13</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Female 41</td>
<td>51.9</td>
<td>9</td>
<td>11.4</td>
</tr>
<tr>
<td></td>
<td>Total    93</td>
<td>41.0</td>
<td>22</td>
<td>9.7</td>
</tr>
<tr>
<td>9. I can be vaccinated against Hepatitis B</td>
<td>Male 61</td>
<td>41.2</td>
<td>9</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Female 48</td>
<td>60.8</td>
<td>4</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Total    109</td>
<td>48.0</td>
<td>13</td>
<td>5.7</td>
</tr>
<tr>
<td>10. The virus that causes genital warts (HPV) can cause cervical cancer in women</td>
<td>Male 38</td>
<td>25.7</td>
<td>11</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>Female 32</td>
<td>40.5</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Total    70</td>
<td>30.8</td>
<td>17</td>
<td>7.5</td>
</tr>
<tr>
<td>11. Women can be vaccinated against HPV</td>
<td>Male 49</td>
<td>33.1</td>
<td>12</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>Female 40</td>
<td>50.6</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Total    89</td>
<td>39.2</td>
<td>18</td>
<td>7.9</td>
</tr>
</tbody>
</table>

*Note: Correct response in Green, Item numbering correlates with Survey Instrument item numbering (See Appendix A). HPV – Human Papilloma Virus;*
4.6.2 HIV Knowledge

In respect of the HIV knowledge items, the majority of respondents answered items about heterosexual transmission (72.2%) and condoms reducing HIV risk (60.4%) correctly; however, a third (35.7%) reported incorrectly ‘You can get HIV from mosquitoes’. ‘Not sure’ responses ranged from 21.6% to 41.9% for each of the 12 items. Combined with the range of incorrect responses, this indicates there was limited knowledge of HIV among some participants. The highest level of uncertainty was found in relation to knowledge regarding transmission of HIV between male-to-male sexual contacts (41.9%) (See Table 4.10).

The aggregated HIV knowledge scores (Cronbach’s $\alpha = .83$) ranged from zero to 12 ($M = 6.8$, $SD = 3.4$). Investigation using Pearson product–moment correlation coefficient, conducted following preliminary analyses indicated no violation of the assumptions of normality, linearity, and homoscedasticity, found a significant small positive correlation between HIV knowledge and gender ($r = .272$, $n = 227$, $p < .001$, 7.4% shared variance), with higher mean levels of HIV knowledge associated with females ($M = 8.1$) compared to the male participants ($M = 6.1$) (See Table 4.10). There was no significant correlation between HIV knowledge and age.

Table 4.10

<table>
<thead>
<tr>
<th>Composite score</th>
<th>Gender</th>
<th>$n$</th>
<th>Mean</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV knowledge score (0 to 12)</td>
<td>Male</td>
<td>148</td>
<td>6.1</td>
<td>$r = .272$, $n = 227$, $p &lt; .001$</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>79</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>227</td>
<td>6.8</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Correct response in **BOLD**, Item numbering correlates with Survey Instrument item numbering (See Appendix A).
Table 4.10 continued

*Mean HIV Knowledge score with frequency of individual items (n = 227)*

<table>
<thead>
<tr>
<th>HIV knowledge items</th>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>1. You can get HIV when someone with HIV coughs or sneezes on you</td>
<td>Male</td>
<td>33</td>
<td>22.3</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12</td>
<td>15.2</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>19.8</td>
<td>127</td>
</tr>
<tr>
<td>2. You can get HIV by hugging someone who has it</td>
<td>Male</td>
<td>19</td>
<td>12.8</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10</td>
<td>12.7</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29</td>
<td>12.8</td>
<td>146</td>
</tr>
<tr>
<td>3. You can get HIV from mosquitoes</td>
<td>Male</td>
<td>35</td>
<td>23.6</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>21</td>
<td>26.6</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56</td>
<td>24.7</td>
<td>81</td>
</tr>
<tr>
<td>4. You can get HIV by sharing a needle and syringe with someone when injecting drugs</td>
<td>Male</td>
<td>94</td>
<td>63.5</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>68</td>
<td>86.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>162</td>
<td>71.4</td>
<td>16</td>
</tr>
<tr>
<td>5. Condoms used during sex helps protect people from getting HIV</td>
<td>Male</td>
<td>91</td>
<td>61.5</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>46</td>
<td>58.2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>137</td>
<td>60.4</td>
<td>27</td>
</tr>
<tr>
<td>6. A man can get HIV through having sex with a man</td>
<td>Male</td>
<td>60</td>
<td>40.5</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>51</td>
<td>64.6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>111</td>
<td>48.9</td>
<td>21</td>
</tr>
<tr>
<td>7. A woman can get HIV through having sex with a man</td>
<td>Male</td>
<td>95</td>
<td>64.2</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>69</td>
<td>87.3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>164</td>
<td>72.2</td>
<td>9</td>
</tr>
<tr>
<td>8. A pregnant woman with HIV can pass HIV to her baby</td>
<td>Male</td>
<td>80</td>
<td>54.1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55</td>
<td>69.6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>135</td>
<td>59.5</td>
<td>11</td>
</tr>
<tr>
<td>9. A man can get HIV through having sex with a woman</td>
<td>Male</td>
<td>94</td>
<td>63.5</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>62</td>
<td>78.5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>156</td>
<td>68.7</td>
<td>14</td>
</tr>
<tr>
<td>10. Someone who looks very healthy cannot pass on HIV infection</td>
<td>Male</td>
<td>41</td>
<td>27.7</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>12</td>
<td>15.2</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>53</td>
<td>23.3</td>
<td>104</td>
</tr>
<tr>
<td>11. HIV only infects gay men (men who have sex with other men) in Australia</td>
<td>Male</td>
<td>32</td>
<td>21.6</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>14</td>
<td>17.7</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>46</td>
<td>20.3</td>
<td>101</td>
</tr>
<tr>
<td>12. HIV is not a problem in Australia</td>
<td>Male</td>
<td>23</td>
<td>15.5</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>11.4</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>32</td>
<td>14.1</td>
<td>115</td>
</tr>
</tbody>
</table>
4.7 Research Question 2: What are the Attitudes and Beliefs of the 16-24 Year Old Sudanese Background Youth in Queensland Regarding Sexual Health and Behaviour?

The 23 items designed to explore participants’ thoughts and feeling (attitudes and beliefs) were analysed by gender only and are discussed in greater depth during the Phase 4 convergence and interpretation of results. The majority of respondents strongly agreed/agreed they should always use condoms when having sex (65.9%) and that young people were mostly using condoms (53.2%) (See Table 4.11). Nearly half (45%) reported they did not think themselves to be at risk of getting an STI; however, 22.1% of males compared to 11.4% of females strongly agreed/agreed they were at risk. A third (37.2%) reported they were more afraid of getting pregnant than contracting an STI, and the majority agreed being pregnant and unmarried brought shame on the family (60.3%) (See Table 4.11).

The majority (67.2%) strongly agreed/agreed young people have sex too easily in Australia and use drugs and alcohol too much (62.4%). Nearly half strongly agreed/agreed living in Australia had affected how they think about sex (45.4%) and how they behaved sexually (42.3%). Again, nearly half (45.4%) strongly agreed/agreed their parents didn’t understand what it was like being young in Australia and 48.8% felt they were not able to talk to their parents about sex (See Table 4.11). The majority reported being attracted only to people of the opposite sex; however, 19.7% reported being attracted to people of both sexes and 13.5% reported same sex attraction. A quarter of respondents reported they would stop being friends with someone who was diagnosed with HIV (26.6%) or who was gay (26.2%).
Table 4.11
Participants’ sexual health attitudes and beliefs (*n = 227*)

<table>
<thead>
<tr>
<th>Attitudes and beliefs items#</th>
<th>Gender</th>
<th>Strongly agree / Agree</th>
<th>Not sure</th>
<th>Strongly disagree / Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condoms are the responsibility of men</td>
<td>Male</td>
<td>74</td>
<td>49.7</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>16</td>
<td>20.3</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>90</td>
<td>39.3</td>
<td>53</td>
</tr>
<tr>
<td>2. Young people mostly use condoms if they have sex</td>
<td>Male</td>
<td>85</td>
<td>57.0</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>37</td>
<td>46.8</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>122</td>
<td>53.3</td>
<td>68</td>
</tr>
<tr>
<td>3. Young people have sex too easily in Australia</td>
<td>Male</td>
<td>98</td>
<td>65.8</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>56</td>
<td>70.9</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>154</td>
<td>67.2</td>
<td>59</td>
</tr>
<tr>
<td>4. Sex before marriage is wrong</td>
<td>Male</td>
<td>59</td>
<td>39.6</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>38</td>
<td>48.1</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>97</td>
<td>42.4</td>
<td>81</td>
</tr>
<tr>
<td>5. Being pregnant and unmarried would bring shame on our family</td>
<td>Male</td>
<td>81</td>
<td>54.4</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>57</td>
<td>72.2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>138</td>
<td>60.3</td>
<td>58</td>
</tr>
<tr>
<td>6. It is OK for young people to have an abortion</td>
<td>Male</td>
<td>35</td>
<td>23.5</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>13</td>
<td>16.5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>48</td>
<td>21.0</td>
<td>79</td>
</tr>
<tr>
<td>7. I would be happy to have a gay friend</td>
<td>Male</td>
<td>42</td>
<td>28.2</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>44</td>
<td>55.7</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>86</td>
<td>37.6</td>
<td>66</td>
</tr>
<tr>
<td>8. I would stop being friends with someone if I found out they were gay</td>
<td>Male</td>
<td>44</td>
<td>29.5</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>16</td>
<td>20.3</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>26.2</td>
<td>73</td>
</tr>
<tr>
<td>9. Young people use drugs and alcohol too much in Australia</td>
<td>Male</td>
<td>85</td>
<td>57.0</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>58</td>
<td>73.4</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>143</td>
<td>62.4</td>
<td>62</td>
</tr>
<tr>
<td>10. I would stop being friends with someone if they got HIV</td>
<td>Male</td>
<td>48</td>
<td>32.2</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>13</td>
<td>16.5</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>61</td>
<td>26.6</td>
<td>88</td>
</tr>
<tr>
<td>11. People with HIV have only themselves to blame</td>
<td>Male</td>
<td>52</td>
<td>34.9</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24</td>
<td>30.4</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>76</td>
<td>33.2</td>
<td>88</td>
</tr>
<tr>
<td>12. People who have HIV should not be allowed to stay at school</td>
<td>Male</td>
<td>45</td>
<td>30.2</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>19.0</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>60</td>
<td>26.2</td>
<td>75</td>
</tr>
<tr>
<td>Attitudes and beliefs items</td>
<td>Gender</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>24. I think I am at risk of getting an STI</td>
<td>Male</td>
<td>33</td>
<td>22.1</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>9</td>
<td>11.4</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>42</td>
<td>18.3</td>
<td>82</td>
</tr>
<tr>
<td>25. Living in Australia has affected how I think</td>
<td>Male</td>
<td>60</td>
<td>40.3</td>
<td>56</td>
</tr>
<tr>
<td>about sex</td>
<td>Female</td>
<td>44</td>
<td>55.7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>104</td>
<td>45.4</td>
<td>70</td>
</tr>
<tr>
<td>26. Living in Australia has affected how I behave</td>
<td>Male</td>
<td>60</td>
<td>40.3</td>
<td>58</td>
</tr>
<tr>
<td>sexually</td>
<td>Female</td>
<td>37</td>
<td>46.8</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>97</td>
<td>42.4</td>
<td>76</td>
</tr>
<tr>
<td>27. My parents don't understand what it is like</td>
<td>Male</td>
<td>63</td>
<td>42.3</td>
<td>51</td>
</tr>
<tr>
<td>being young in Australia</td>
<td>Female</td>
<td>41</td>
<td>51.9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>104</td>
<td>45.4</td>
<td>67</td>
</tr>
<tr>
<td>28. My parents are not able to talk to me about</td>
<td>Male</td>
<td>64</td>
<td>43.0</td>
<td>46</td>
</tr>
<tr>
<td>sex</td>
<td>Female</td>
<td>46</td>
<td>58.2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>110</td>
<td>48.0</td>
<td>58</td>
</tr>
<tr>
<td>29. I am more afraid of getting pregnant than</td>
<td>Male</td>
<td>52</td>
<td>34.9</td>
<td>56</td>
</tr>
<tr>
<td>getting an STI</td>
<td>Female</td>
<td>33</td>
<td>41.8</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>85</td>
<td>37.1</td>
<td>76</td>
</tr>
<tr>
<td>30. The best way to protect yourself against an</td>
<td>Male</td>
<td>47</td>
<td>31.5</td>
<td>59</td>
</tr>
<tr>
<td>STI is not to have sex</td>
<td>Female</td>
<td>41</td>
<td>51.9</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>88</td>
<td>38.4</td>
<td>82</td>
</tr>
<tr>
<td>31. I should always use condoms when I have sex</td>
<td>Male</td>
<td>91</td>
<td>61.1</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>60</td>
<td>75.9</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>151</td>
<td>65.9</td>
<td>58</td>
</tr>
<tr>
<td>32. I am attracted only to people of the opposite</td>
<td>Male</td>
<td>79</td>
<td>53.0</td>
<td>44</td>
</tr>
<tr>
<td>sex</td>
<td>Female</td>
<td>45</td>
<td>57.0</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>125</td>
<td>54.6</td>
<td>63</td>
</tr>
<tr>
<td>33. I am attracted to people of both sexes</td>
<td>Male</td>
<td>30</td>
<td>20.1</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>19.0</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>19.7</td>
<td>62</td>
</tr>
<tr>
<td>34. I am only attracted to people of my own sex</td>
<td>Male</td>
<td>21</td>
<td>14.1</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>10</td>
<td>12.7</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31</td>
<td>13.5</td>
<td>55</td>
</tr>
</tbody>
</table>

* Item numbering correlates to Survey Instrument item numbering (See Appendix A); * Data for participant with unspecified gender missing for items 1-12; Data for one female missing for items 24-34.
4.8 Research Question 3: How Confident are the 16-24 Year Old Sudanese Background Youth in Queensland Communicating about Sex?

The majority of respondents reported being very confident or confident to talk to their boyfriend or girlfriend about sex (72.1%) and using a condom (72.5%), along with saying ‘no’ when their boyfriend or girlfriend wanted sex (62.0%) (See Table 4.12). The lowest level of confidence was associated with talking with parents about sex (27.9%) and contraception (34.5%). Respondents reported being very confident or confident talking about drugs (73.8%) and alcohol (73.0%), and the majority reported they were very confident or confident (73.4%) to seek help for STI from a doctor or nurse.

The aggregated confidence in communicating about sex score (CCASS) from the 10 items (Cronbach’s $\alpha = .86$) ranged from one to 40 ($M = 27.1, SD = 8.3$), with higher scores associated with higher levels of confidence. Female respondents reported higher levels of confidence ($M = 28.3, SD = 7.5$) compared to the males ($M = 26.5, SD = 8.7$). The relationship between confidence in communicating about sex (as measured by the aggregated score), gender, and age was investigated using Pearson product–moment correlation coefficient. Preliminary analyses indicated no violation of the assumptions of normality, linearity, and homoscedasticity. There was no significant relationship between confidence and gender; however, a significant small positive correlation was found between the CCASS and age ($r = .231, n = 216, p = .001, 5.3\%$ shared variance), with higher levels of confidence associated with increasing age.

Table 4.12

*Mean CCASS with frequency of individual items*

<table>
<thead>
<tr>
<th>Composite score</th>
<th>Gender</th>
<th>$n$</th>
<th>Mean</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in communicating about sex mean score (0 to 40)</td>
<td>Male</td>
<td>140</td>
<td>26.5</td>
<td>$r = .231, n = 216, p = .001$</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>76</td>
<td>28.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>216</td>
<td>27.1</td>
<td></td>
</tr>
<tr>
<td>Confidence items</td>
<td>Gender</td>
<td>Very confident to confident</td>
<td>Not sure</td>
<td>Not very confident to not confident</td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
<td>----------------------------</td>
<td>----------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>14. How confident are you to say no when your boy/girlfriend wants sex?</td>
<td>Male</td>
<td>85</td>
<td>57.0</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>56</td>
<td>70.9</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>142</td>
<td>62.0</td>
<td>49</td>
</tr>
<tr>
<td>15. How confident are you to talk to your boy/girlfriend about sex?</td>
<td>Male</td>
<td>108</td>
<td>72.5</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>56</td>
<td>70.9</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>72.1</td>
<td>38</td>
</tr>
<tr>
<td>16. How confident are you to talk to your boy/girlfriend about using a condom?</td>
<td>Male</td>
<td>103</td>
<td>69.1</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>62</td>
<td>78.5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>166</td>
<td>72.5</td>
<td>32</td>
</tr>
<tr>
<td>17. How confident are you to talk to someone you just met about using a condom?</td>
<td>Male</td>
<td>67</td>
<td>45.0</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30</td>
<td>38.0</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>97</td>
<td>42.4</td>
<td>70</td>
</tr>
<tr>
<td>18. How confident are you to talk to your parents about sex?</td>
<td>Male</td>
<td>42</td>
<td>28.2</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22</td>
<td>27.8</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>64</td>
<td>27.9</td>
<td>72</td>
</tr>
<tr>
<td>19. How confident are you to talk to your parents about contraception?</td>
<td>Male</td>
<td>52</td>
<td>34.9</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>26</td>
<td>32.9</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>79</td>
<td>34.5</td>
<td>66</td>
</tr>
<tr>
<td>20. How confident are you to go to a doctor or nurse if you needed help for an STI?</td>
<td>Male</td>
<td>105</td>
<td>70.5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>68</td>
<td>78.5</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>175</td>
<td>76.4</td>
<td>28</td>
</tr>
<tr>
<td>21. How confident are you to say no if your friends offered you drugs?</td>
<td>Male</td>
<td>101</td>
<td>67.8</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67</td>
<td>84.8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>169</td>
<td>73.8</td>
<td>27</td>
</tr>
<tr>
<td>22. How confident are you to say no if your friends offered you alcohol?</td>
<td>Male</td>
<td>99</td>
<td>66.4</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67</td>
<td>84.8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>167</td>
<td>72.9</td>
<td>28</td>
</tr>
<tr>
<td>23. How confident are you to stop drinking alcohol if you think you have had too much?</td>
<td>Male</td>
<td>105</td>
<td>70.5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>69</td>
<td>87.3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>175</td>
<td>76.4</td>
<td>25</td>
</tr>
</tbody>
</table>

*Item numbering correlates with Survey Instrument item numbering (See Appendix A).
*Data for one female missing in items 14-23 (n = 227; male 148; female = 78; Unspecified = 1).
4.9 Research Question 4: What are the Self-Reported Patterns of Sexual Behaviour Among the 16-24 Year Old Sudanese Background Youth in Queensland?

Ninety-five males and 45 females (61.1%) self-reported they had experienced sex. The aggregated sexual risk behaviour score (SRBS) (Cronbach’s $\alpha = .9$) for these 140 sexually active participants ranged from seven to 70 ($M = 27.91, SD = 14.1$), with increasing scores associated with increased levels of reported risk related behaviours (See Table 4.13). Investigation using Pearson product–moment correlation coefficient, conducted following preliminary analyses indicated no violation of the assumptions of normality, linearity and homoscedasticity, found a significant medium negative correlation between the sexual risk behaviour score and gender ($r = -.332, n = 140, p < .001, 11.0\%$ shared variance) was found, with higher sexual behaviour risk scores associated with male gender (See Table 4.13). No significant correlation between sexual risk behaviour and age was found.

<table>
<thead>
<tr>
<th>Gender</th>
<th>$n$</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>95</td>
<td>31.13</td>
<td>14.7</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>21.13</td>
<td>9.9</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>27.91</td>
<td>14.1</td>
</tr>
</tbody>
</table>

4.9.1 Sexual initiation

A reported 42.4% of the survey participants had experienced having a boy/girlfriend by 16 years of age; however, the majority reported they did not commence physical sexual contact until 18 years or over (See Table 4.14). Male participants reported younger ages for their first experience in each category. Among the 140 sexually active participants, 15% reported first experiencing vaginal sex with a condom and 16% without by 15 years of age. Of the 79 participants who reported they had never experienced sex, 26% reported having a boy/girlfriend before 16 years of age, with 5% reported having experienced genital touching from their partner, while none reported giving or receiving oral sex.
Table 4.14

Age of first sexual activity for total survey sample (%) (n = 229)

<table>
<thead>
<tr>
<th>Type of sexual activity</th>
<th>Age (Years) when first experienced sexual activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Having a boy/girlfriend</td>
<td>19.2</td>
</tr>
<tr>
<td>A deep kiss</td>
<td>21.4</td>
</tr>
<tr>
<td>First touching a partner's genitals with your hands</td>
<td>32.3</td>
</tr>
<tr>
<td>First had your genitals touched by a partner's hands</td>
<td>31.9</td>
</tr>
<tr>
<td>First gave oral sex</td>
<td>47.6</td>
</tr>
<tr>
<td>First received oral sex</td>
<td>46.3</td>
</tr>
<tr>
<td>First had vaginal sex without a condom</td>
<td>46.7</td>
</tr>
<tr>
<td>First had vaginal sex with a condom</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Age of first sexual activity for sexually active participants (%) (n = 140)

<table>
<thead>
<tr>
<th>Type of sexual activity</th>
<th>Age (Years) when first experienced sexual activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Having a boy/girlfriend</td>
<td>2.1</td>
</tr>
<tr>
<td>A deep kiss</td>
<td>1.4</td>
</tr>
<tr>
<td>First touching a partner's genitals with your hands</td>
<td>6.4</td>
</tr>
<tr>
<td>First had your genitals touched by a partner's hands</td>
<td>5.0</td>
</tr>
<tr>
<td>First gave oral sex</td>
<td>24.3</td>
</tr>
<tr>
<td>First received oral sex</td>
<td>22.1</td>
</tr>
<tr>
<td>First had vaginal sex without a condom</td>
<td>20.7</td>
</tr>
<tr>
<td>First had vaginal sex with a condom</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Age of first sexual activity for participants who self-reported they have never had sex (%) (n = 79)

<table>
<thead>
<tr>
<th>Type of sexual activity</th>
<th>Age (Years) when first experienced sexual activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Having a boy/girlfriend</td>
<td>50.6</td>
</tr>
<tr>
<td>A deep kiss</td>
<td>57.0</td>
</tr>
<tr>
<td>First touching a partner's genitals with your hands</td>
<td>79.7</td>
</tr>
<tr>
<td>First had your genitals touched by a partner's hands</td>
<td>81.0</td>
</tr>
<tr>
<td>First gave oral sex</td>
<td>92.4</td>
</tr>
<tr>
<td>First received oral sex</td>
<td>92.4</td>
</tr>
</tbody>
</table>
4.9.2 Past sexual experience

Of the 140 participants who reported they were sexually active, 68.2% reported always using condoms (See Table 4.15). A comparison of condom use by gender found nearly three quarters of the sexually active male participants (73.3%) reported always using condoms compared to 57.1% of the female participants.

Table 4.15
Condom use patterns for sexual active participants (n = 132)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Always use condoms</th>
<th>Almost always use condoms</th>
<th>Sometimes use condoms</th>
<th>Never use condoms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>66</td>
<td>73.3</td>
<td>5</td>
<td>5.6</td>
</tr>
<tr>
<td>Female</td>
<td>24</td>
<td>57.1</td>
<td>5</td>
<td>11.9</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>68.2</td>
<td>10</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Four sexually active respondents (3.1%) reported having been diagnosed with an STI (M age = 20.3 years, SD = 3.8, range: 16-25 years) and 12 (9%) reported they had experienced a pregnancy (M age = 20.6 years, SD = 2.3, range: 16-25 years) (See Table 4.16). Three female respondents reported they had been pregnant more than once and six reported they had experienced an abortion (M age = 21 years, SD = 2.2, range: 19-25 years).

Table 4.16
Sex leading to an STI, pregnancy, and/or abortion among the sexually active participants

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender (n)</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>STI</td>
<td>Male (88)</td>
<td>1</td>
<td>1.1</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Female (42)</td>
<td>3</td>
<td>7.1</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Total (130)</td>
<td>4</td>
<td>3.1</td>
<td>126</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>Male (89)</td>
<td>2</td>
<td>2.2</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Female (44)</td>
<td>10</td>
<td>22.7</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Total (133)</td>
<td>12</td>
<td>9.0</td>
<td>118</td>
</tr>
<tr>
<td>Abortion</td>
<td>Male (89)</td>
<td>0</td>
<td>0.0</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Female (44)</td>
<td>6</td>
<td>13.6</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Total (133)</td>
<td>6</td>
<td>4.5</td>
<td>123</td>
</tr>
</tbody>
</table>
Forty-four (33.1%) sexually active respondents reported having experienced unwanted sex, with the frequency of unwanted sex higher for males (34.4%) compared to females (28.9%) (See Table 4.17). Participants reported the unwanted sex occurred between the ages of six to 25 years ($M = 15.8$ years, $SD = 3.5$), with men experiencing unwanted sex at a younger age ($M = 15.3$ years, $SD = 3.7$) compared to females ($M = 17.6$ years, $SD = 2.1$). The majority (77.3%) reported the unwanted sex occurred post arrival in Australia at locations such as the home of the participant, of their boyfriend, or a friend, in a car, park, or motel, or at school and/or parties. The majority of participants reported the unwanted sexual experience occurred because either their partner (35.9%) or friends (33.3%) thought they should have sex. Being too drunk (7.7%) or high on drugs (5.1%) were the least common reasons given. Two female participants identified the unwanted sexual encounter as rape.

Table 4.17

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
<td>34.4</td>
<td>59</td>
<td>65.6</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>28.9</td>
<td>30</td>
<td>69.8</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>33.1</td>
<td>89</td>
<td>66.9</td>
</tr>
</tbody>
</table>

4.9.3 Sexual activity in the last 12 months

Of the 140 participants who reported they had experienced sex, 60.7% reported experiencing oral sex in the last 12 months, 67.9% vaginal sex, and 32.9% anal sex. A higher percentage of sexually active females reported engaging in oral (64.4%) and anal (35.6%) sex compared to males (58.9%, 31.6% respectively). Of the 85 who had reported oral intercourse in the last 12 months, the majority (94.3%) reported also having vaginal intercourse. Nearly half (46.3%) of the 95 respondents who reported vaginal intercourse in the last 12 months reported also having anal intercourse.

Of the sexually active respondents who reported they had experienced vaginal sex in the last 12 months, 32.9% reported having only one partner. A higher percentage of male respondents reported three or more partners in this time period for each of the sexual behaviours (See Table 4.18).
Table 4.18

Frequency of sexual partners in the last 12 months for oral, vaginal, and anal sex among the sexually active participants (%) (n = 140)

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>None %</th>
<th>1 %</th>
<th>2 %</th>
<th>3 or more %</th>
<th>Missing %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral sex</td>
<td>Male</td>
<td>11.6</td>
<td>15.8</td>
<td>11.6</td>
<td>31.6</td>
<td>29.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24.4</td>
<td>55.6</td>
<td>4.4</td>
<td>4.4</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15.7</td>
<td>28.6</td>
<td>9.3</td>
<td>22.8</td>
<td>23.6</td>
</tr>
<tr>
<td>Vaginal sex</td>
<td>Male</td>
<td>3.2</td>
<td>25.3</td>
<td>8.4</td>
<td>28.5</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>11.1</td>
<td>48.9</td>
<td>13.3</td>
<td>17.7</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.7</td>
<td>32.9</td>
<td>10.0</td>
<td>25.0</td>
<td>26.4</td>
</tr>
<tr>
<td>Anal sex</td>
<td>Male</td>
<td>34.7</td>
<td>10.5</td>
<td>7.4</td>
<td>13.8</td>
<td>33.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55.6</td>
<td>31.1</td>
<td>0.0</td>
<td>4.4</td>
<td>8.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41.4</td>
<td>17.1</td>
<td>5.0</td>
<td>10.7</td>
<td>25.7</td>
</tr>
</tbody>
</table>

4.9.4 Last sexual experience

Of the sexually active subgroup (n = 140), 68.9% reported the most recent sexual encounter occurred with their current girlfriend or boyfriend (See Table 4.19). The majority of last sexual encounters took place at the respondents’ home (41.1%) or at their boy/girlfriend’s house (26.4%) (See Table 4.20).

Table 4.19

Relationship with last sexual partner (male = 95; female = 45)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Current boyfriend/girlfriend</th>
<th>Someone known, but no previous sex</th>
<th>Someone met for the first time</th>
<th>Husband/wife</th>
<th>Other*</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
<td>n %</td>
</tr>
<tr>
<td>Male</td>
<td>60 63.2</td>
<td>8 8.4</td>
<td>9 9.5</td>
<td>1 1.1</td>
<td>2 2.1</td>
<td>15 15.8</td>
</tr>
<tr>
<td>Female</td>
<td>36 80.0</td>
<td>1 2.2</td>
<td>0 0.0</td>
<td>3 6.7</td>
<td>1 2.2</td>
<td>4 8.9</td>
</tr>
<tr>
<td>Total</td>
<td>96 68.9</td>
<td>9 6.4</td>
<td>9 6.4</td>
<td>4 2.9</td>
<td>3 2.1</td>
<td>19 13.5</td>
</tr>
</tbody>
</table>

* Last girlfriend, storeman
Table 4.20

*Place where the last sexual encounter occurred (%) (n = 140)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Home</th>
<th>Boy/girlfriend’s house</th>
<th>Friend’s house</th>
<th>In a car</th>
<th>School</th>
<th>In a park</th>
<th>Other*</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>47.4</td>
<td>16.8</td>
<td>10.5</td>
<td>2.1</td>
<td>2.1</td>
<td>4.2</td>
<td>3.2</td>
<td>13.7</td>
</tr>
<tr>
<td>Female</td>
<td>28.9</td>
<td>46.7</td>
<td>6.7</td>
<td>6.7</td>
<td>2.2</td>
<td>0.0</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>41.4</td>
<td>26.4</td>
<td>9.3</td>
<td>3.6</td>
<td>2.1</td>
<td>2.9</td>
<td>3.6</td>
<td>10.7</td>
</tr>
</tbody>
</table>

*(male = 95; female = 45)*

 Approximately one third (36.4%) reported their last sexual partner was Sudanese (See Table 4.21). Males (44.2%) reported a higher frequency of non-Sudanese background sexual partners compared to females (35.6%), with 12 males compared to one female reporting their last partner was Australian.

Table 4.21

*Nationality of last sexual partner (male = 95; female = 45)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sudanese</th>
<th>Other*</th>
<th>Don’t know</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>27 28.4</td>
<td>42 44.2</td>
<td>10 10.5</td>
<td>16 16.8</td>
</tr>
<tr>
<td>Female</td>
<td>24 53.3</td>
<td>16 35.6</td>
<td>1 2.2</td>
<td>4 8.9</td>
</tr>
<tr>
<td>Total</td>
<td>51 36.4</td>
<td>58 41.4</td>
<td>11 7.9</td>
<td>20 14.2</td>
</tr>
</tbody>
</table>

*Backgrounds of other partners: Australia, New Zealand, United Kingdom, PNG, Congo, Ethiopia, Egypt, Sierra Leone, Uganda, Zambia*

The majority of the sexually active respondents reported the last person with whom they had a sexual encounter was in a similar age group to themselves, with 26.4% reporting the last person they had sex with was less than 16 years of age (See Table 4.22).
Table 4.22

*Age of last sexual partner by gender and age group (%) (n = 140)*

<table>
<thead>
<tr>
<th>Age of participant (years)</th>
<th>Gender</th>
<th>&lt; 16</th>
<th>16–17</th>
<th>18–19</th>
<th>20–24</th>
<th>≥ 25</th>
<th>Unknown</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 16</td>
<td>Male</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16-18</td>
<td>Male</td>
<td>25.0</td>
<td>37.5</td>
<td>15.6</td>
<td>3.1</td>
<td>-</td>
<td>-</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>30.8</td>
<td>53.8</td>
<td>7.7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7.7</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17.8</td>
<td>35.6</td>
<td>26.7</td>
<td>4.4</td>
<td>0.0</td>
<td>0.0</td>
<td>15.5</td>
</tr>
<tr>
<td>19-24</td>
<td>Male</td>
<td>9.8</td>
<td>15.7</td>
<td>45.1</td>
<td>9.8</td>
<td>5.9</td>
<td>2.0</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>6.7</td>
<td>0.0</td>
<td>13.3</td>
<td>43.3</td>
<td>30.0</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8.6</td>
<td>9.9</td>
<td>33.3</td>
<td>22.2</td>
<td>14.8</td>
<td>2.5</td>
<td>8.6</td>
</tr>
<tr>
<td>≥25</td>
<td>Male</td>
<td>-</td>
<td>-</td>
<td>16.7</td>
<td>33.3</td>
<td>33.3</td>
<td>-</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>-</td>
<td>0.0</td>
<td>50.0</td>
<td>50.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>-</td>
<td>12.5</td>
<td>37.5</td>
<td>37.5</td>
<td>-</td>
<td>-</td>
<td>12.5</td>
</tr>
<tr>
<td>Missing</td>
<td>Male</td>
<td>-</td>
<td>60.0</td>
<td>20.0</td>
<td>20.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The majority of the sexually active respondents reported their last sexual encounter was with a person of the opposite gender (See Table 4.23), while 7.4% of males and 11.1% of females reported a partner of the same sex. Five of the seven males who reported their last sexual encounter as male reported they had experienced anal sex in the last 12 months.

Table 4.23

*Gender of last sexual partner (male = 95; female = 45)*

<table>
<thead>
<tr>
<th>Gender of participant</th>
<th>Male</th>
<th>Female</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td>7.4</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>36</td>
<td>80.0</td>
<td>5</td>
</tr>
</tbody>
</table>

Close to half of the respondents (46.4%) reported that they had used a condom with their last sexual encounter, with females reporting lower rates (37.8%) compared to male respondents (50.5%) (See Table 4.24).
“I don’t like condoms” was the most frequently (34.7%) reported reason for not using a condom at last sexual encounter (Table 4.25). More females (42.9%) reported not liking condoms compared to males (28.6%). Condoms were reported as the most common form of contraception used at the last sexual encounter (60.7%), use of other methods of contraception was low (See Table 4.26).

Table 4.24
Reported patterns of condom use at the last sexual encounter (n = 140)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Condom used</th>
<th>No condom used</th>
<th>Don’t know</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>50.5</td>
<td>25</td>
<td>26.3</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>37.8</td>
<td>15</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>46.4</td>
<td>40</td>
<td>28.6</td>
</tr>
</tbody>
</table>

Table 4.25
Reported reason why condoms were not used with the last sexual encounter (n = 49)

<table>
<thead>
<tr>
<th>Gender</th>
<th>I don’t like condoms</th>
<th>It just happened</th>
<th>Both had HIV/STI tests</th>
<th>My partner doesn’t like condoms</th>
<th>I was too embarrassed</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>8</td>
<td>28.6</td>
<td>8</td>
<td>28.6</td>
<td>4</td>
<td>14.3</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>42.9</td>
<td>7</td>
<td>33.3</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>34.7</td>
<td>15</td>
<td>30.6</td>
<td>7</td>
<td>14.3</td>
</tr>
</tbody>
</table>

* Other: Can’t be bothered, forgot, no reason, regular partner, trust, wife.

Table 4.26
Reported contraception use with the last sexual encounter (%) (n = 140)

<table>
<thead>
<tr>
<th>Gender</th>
<th>None</th>
<th>Condom</th>
<th>Pill</th>
<th>Injection</th>
<th>Implanon</th>
<th>EC</th>
<th>Diaphragm</th>
<th>Withdrawal</th>
<th>IUD</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>8.4</td>
<td>64.2</td>
<td>5.3</td>
<td>1.1</td>
<td>0</td>
<td>1.1</td>
<td>0</td>
<td>1.1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>13.3</td>
<td>53.3</td>
<td>6.7</td>
<td>6.7</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
<td>0</td>
<td>0</td>
<td>2.2</td>
</tr>
<tr>
<td>Total</td>
<td>10.0</td>
<td>60.7</td>
<td>5.7</td>
<td>2.9</td>
<td>.7</td>
<td>1.4</td>
<td>.7</td>
<td>.7</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* EC = Emergency Contraception, IUD = Intrauterine device, (16.5% missing).
A small number reported being drunk (5.7%) or high on drugs (2.1%) the last time they had sex (See Table 4.27).

Table 4.27

Reported alcohol and drugs use at the last sexual encounter (n = 140)

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Don’t know</th>
<th>%</th>
<th>Missing</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drunk at last sexual encounter</td>
<td>Male</td>
<td>5</td>
<td>5.3</td>
<td>58</td>
<td>61.1</td>
<td>13</td>
<td>13.7</td>
<td>19</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3</td>
<td>6.7</td>
<td>27</td>
<td>60.0</td>
<td>3</td>
<td>6.7</td>
<td>12</td>
<td>26.6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>5.7</td>
<td>85</td>
<td>60.7</td>
<td>16</td>
<td>11.4</td>
<td>31</td>
<td>22.1</td>
</tr>
<tr>
<td>High on drugs at last sexual</td>
<td>Male</td>
<td>2</td>
<td>2.1</td>
<td>63</td>
<td>66.3</td>
<td>11</td>
<td>11.6</td>
<td>19</td>
<td>20.0</td>
</tr>
<tr>
<td>encounter</td>
<td>Female</td>
<td>1</td>
<td>2.2</td>
<td>27</td>
<td>60.0</td>
<td>2</td>
<td>4.4</td>
<td>15</td>
<td>33.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3</td>
<td>2.1</td>
<td>90</td>
<td>64.3</td>
<td>13</td>
<td>9.3</td>
<td>34</td>
<td>24.2</td>
</tr>
</tbody>
</table>

The majority of the sexually active respondents (62.8%) reported feeling positive “I felt good”, “happy”, “loved” or “fantastic” after their last sexual encounter. A higher percentage of males (53.7%) compared to females (44.4%) reported they had enjoyed their last sexual encounter (See Table 4.28). Females were, however, more likely to discuss safer sex measures and sexual pleasure without intercourse (See Table 4.29).

Table 4.28

Reported enjoyment at last sexual encounter (male = 95, female = 45)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Don’t know</th>
<th>%</th>
<th>Missing</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>51</td>
<td>53.7</td>
<td>17</td>
<td>17.9</td>
<td>13</td>
<td>13.7</td>
<td>14</td>
<td>14.7</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>44.4</td>
<td>7</td>
<td>15.6</td>
<td>7</td>
<td>15.6</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td>Total</td>
<td>71</td>
<td>50.7</td>
<td>24</td>
<td>17.1</td>
<td>20</td>
<td>14.3</td>
<td>25</td>
<td>17.8</td>
</tr>
</tbody>
</table>
### Table 4.29

*Sexual health related issues discussed with partner prior to last sexual encounter*  
(*n = 140*)

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><em>n</em></td>
<td>%</td>
<td><em>n</em></td>
<td>%</td>
</tr>
<tr>
<td>Using a condom</td>
<td>Male</td>
<td>53</td>
<td>55.8</td>
<td>23</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>31</td>
<td>68.9</td>
<td>10</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>84</td>
<td>60.0</td>
<td>33</td>
<td>23.6</td>
</tr>
<tr>
<td>Avoiding pregnancy</td>
<td>Male</td>
<td>33</td>
<td>34.7</td>
<td>32</td>
<td>33.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>28</td>
<td>62.2</td>
<td>10</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>61</td>
<td>43.6</td>
<td>42</td>
<td>30.0</td>
</tr>
<tr>
<td>Avoiding HIV infection</td>
<td>Male</td>
<td>34</td>
<td>35.8</td>
<td>33</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>25</td>
<td>55.6</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>59</td>
<td>42.1</td>
<td>44</td>
<td>31.4</td>
</tr>
<tr>
<td>Avoiding STI</td>
<td>Male</td>
<td>31</td>
<td>32.6</td>
<td>34</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>23</td>
<td>51.1</td>
<td>13</td>
<td>28.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54</td>
<td>38.6</td>
<td>47</td>
<td>33.6</td>
</tr>
<tr>
<td>How to get sexual pleasure</td>
<td>Male</td>
<td>25</td>
<td>26.3</td>
<td>34</td>
<td>35.8</td>
</tr>
<tr>
<td>without intercourse</td>
<td>Female</td>
<td>18</td>
<td>40.0</td>
<td>16</td>
<td>35.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>43</td>
<td>30.7</td>
<td>50</td>
<td>35.7</td>
</tr>
</tbody>
</table>
4.10 Research Question 5: What are the Services Used by the 16-24 Year Old Sudanese Background Youth in Queensland for Sexual Health Information and Health Care?

4.10.1 Information sources and level of trust

In total, 141 (61.6%) participants reported having sought information or advice concerning sexual health related issues. A higher percentage of female respondents reported seeking information or advice (70.9%) compared to male respondents (57%) (See Table 4.30).

Table 4.30

Respondents who sought sexual health information or advice (n = 229)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Missing</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>85</td>
<td>57.0</td>
<td>59</td>
<td>39.6</td>
<td>5</td>
<td>3.4</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>70.9</td>
<td>20</td>
<td>25.3</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>61.6</td>
<td>79</td>
<td>34.5</td>
<td>9</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Table 4.31 presents the sources of information participants reported they had accessed by order of use. Doctors were the most commonly accessed source of information and advice (46.3%) and ranked highest in the level of trust (72%). While friends were more commonly used sources of information (39.2%) compared with mothers (21.4%) or fathers, who were the least used source (16.6%), they appeared to be equally trusted sources. A quarter of respondents reported they had accessed the internet (25.8%) and/or magazines (24.5%), however, respondents nominated these two sources along with television, with the lowest levels of trust (27.6%). In the school setting, respondents nominated school programs (29.3%) and teachers (27.5%) as the most commonly used sources of advice and information, although school nurses were more trusted (43.7%).
Table 4.31
Sources of sexual health information by order of reported use and level of trust (%) (n = 229)

<table>
<thead>
<tr>
<th>Source Used (% with ranking)</th>
<th>Participant Information source</th>
<th>%</th>
<th>Rank</th>
<th>Level of trust (%) with ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Strongly trust /Trust Not sure</td>
</tr>
<tr>
<td>1. Doctor</td>
<td>Male 40.9</td>
<td>46.3</td>
<td>1.</td>
<td>65.1</td>
</tr>
<tr>
<td></td>
<td>Female 57.0</td>
<td></td>
<td></td>
<td>86.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td>72.0</td>
</tr>
<tr>
<td>2. Friends</td>
<td>Male 33.6</td>
<td>38.3</td>
<td>4.</td>
<td>38.3</td>
</tr>
<tr>
<td></td>
<td>Female 50.6</td>
<td>50.6</td>
<td></td>
<td>50.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>42.4</td>
<td></td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>Female 41.8</td>
<td>27.9</td>
<td></td>
<td>27.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27.7</td>
<td></td>
<td>27.7</td>
</tr>
<tr>
<td>4. School program</td>
<td>Male 28.2</td>
<td>37.6</td>
<td>7.</td>
<td>37.6</td>
</tr>
<tr>
<td></td>
<td>Female 31.6</td>
<td>41.8</td>
<td></td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>38.8</td>
<td></td>
<td>38.8</td>
</tr>
<tr>
<td>5. Teacher</td>
<td>Male 28.2</td>
<td>35.6</td>
<td>8.</td>
<td>35.6</td>
</tr>
<tr>
<td></td>
<td>Female 26.6</td>
<td>36.7</td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35.8</td>
<td></td>
<td>35.8</td>
</tr>
<tr>
<td>6. Internet</td>
<td>Male 22.8</td>
<td>24.2</td>
<td>11.</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>Female 31.6</td>
<td>39.2</td>
<td></td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29.2</td>
<td></td>
<td>29.2</td>
</tr>
<tr>
<td>7. Health service</td>
<td>Male 23.5</td>
<td>53.0</td>
<td>2.</td>
<td>53.0</td>
</tr>
<tr>
<td></td>
<td>Female 27.8</td>
<td>67.0</td>
<td></td>
<td>67.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.7</td>
<td></td>
<td>57.7</td>
</tr>
<tr>
<td>8. School nurse</td>
<td>Male 20.8</td>
<td>39.6</td>
<td>3.</td>
<td>39.6</td>
</tr>
<tr>
<td></td>
<td>Female 32.9</td>
<td>51.9</td>
<td></td>
<td>51.9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>43.7</td>
<td></td>
<td>43.7</td>
</tr>
<tr>
<td></td>
<td>Female 31.6</td>
<td>30.3</td>
<td></td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>27.6</td>
<td></td>
<td>27.6</td>
</tr>
<tr>
<td>10. Mother</td>
<td>Male 22.1</td>
<td>40.9</td>
<td>3.</td>
<td>40.9</td>
</tr>
<tr>
<td></td>
<td>Female 20.3</td>
<td>49.4</td>
<td></td>
<td>49.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>43.7</td>
<td></td>
<td>43.7</td>
</tr>
<tr>
<td>11. School counsellor</td>
<td>Male 18.8</td>
<td>32.2</td>
<td>9.</td>
<td>32.2</td>
</tr>
<tr>
<td></td>
<td>Female 22.8</td>
<td>38.0</td>
<td></td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.1</td>
<td></td>
<td>34.1</td>
</tr>
<tr>
<td>12. Youth worker</td>
<td>Male 18.8</td>
<td>34.2</td>
<td>7.</td>
<td>34.2</td>
</tr>
<tr>
<td></td>
<td>Female 22.8</td>
<td>44.3</td>
<td></td>
<td>44.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37.6</td>
<td></td>
<td>37.6</td>
</tr>
<tr>
<td>13. Brother or Sister</td>
<td>Male 20.1</td>
<td>41.0</td>
<td>6.</td>
<td>41.0</td>
</tr>
<tr>
<td></td>
<td>Female 20.3</td>
<td>39.2</td>
<td></td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.2</td>
<td></td>
<td>40.2</td>
</tr>
<tr>
<td>14. Other relative</td>
<td>Male 18.8</td>
<td>31.5</td>
<td>10.</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td>Female 21.5</td>
<td>39.2</td>
<td></td>
<td>39.2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.0</td>
<td></td>
<td>34.0</td>
</tr>
<tr>
<td>15. Other community member</td>
<td>Male 18.8</td>
<td>30.2</td>
<td>12.</td>
<td>30.2</td>
</tr>
<tr>
<td></td>
<td>Female 16.5</td>
<td>25.4</td>
<td></td>
<td>25.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>28.4</td>
<td></td>
<td>28.4</td>
</tr>
<tr>
<td>16. Father</td>
<td>Male 18.8</td>
<td>43.6</td>
<td>5.</td>
<td>43.6</td>
</tr>
<tr>
<td></td>
<td>Female 12.7</td>
<td>36.7</td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>41.0</td>
<td></td>
<td>41.0</td>
</tr>
</tbody>
</table>
4.10.2 Service utilisation

A local doctor was the preferred source for sexual health (51.1%) and contraception health (52.4%) care (See Table 4.32). More males compared to females reported they did not know where they would go to seek help for sexual health and contraception.

Table 4.32

*Participant’s preferred sources of medical help for sexual and contraception health care (%) (male = 149; female = 79)*

<table>
<thead>
<tr>
<th>Response</th>
<th>Gender</th>
<th>Local doctor</th>
<th>SH clinic</th>
<th>FPQ</th>
<th>Don’t know</th>
<th>Other</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual health, HIV or STI concerns</td>
<td>Male</td>
<td>51.0</td>
<td>33.6</td>
<td>2.7</td>
<td>8.1</td>
<td>-</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>51.9</td>
<td>41.8</td>
<td>1.3</td>
<td>2.5</td>
<td>-</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>51.1</td>
<td>36.2</td>
<td>2.2</td>
<td>6.1</td>
<td>-</td>
<td>4.4</td>
</tr>
<tr>
<td>Contraception concerns</td>
<td>Male</td>
<td>49.7</td>
<td>22.8</td>
<td>4.0</td>
<td>17.4</td>
<td>.7</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>58.2</td>
<td>32.9</td>
<td>3.8</td>
<td>1.3</td>
<td>-</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>52.4</td>
<td>26.2</td>
<td>3.9</td>
<td>11.8</td>
<td>.4</td>
<td>5.2</td>
</tr>
</tbody>
</table>

* Sexual health clinic (SH clinic), Family Planning Queensland (FPQ)

4.10.3 HIV testing

Thirty-one percent of the respondents reported they had been tested for HIV, with similar percentages reporting testing occurring prior to coming to Australia and after arrival (See Table 4.33). Time since testing had occurred ranged from two months to 10 years ($M = 2.9$ years, $SD = 2.6$).

Table 4.33

*Reported HIV testing patterns*

<table>
<thead>
<tr>
<th>Ever had an HIV test?</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Male $(n = 149)$</td>
<td>46</td>
<td>30.9</td>
<td>88</td>
<td>59.1</td>
</tr>
<tr>
<td>Female $(n = 79)$</td>
<td>25</td>
<td>31.6</td>
<td>48</td>
<td>60.8</td>
</tr>
<tr>
<td>Total $(n = 229)$</td>
<td>71</td>
<td>31.0</td>
<td>136</td>
<td>59.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where did you have your last HIV test?</th>
<th>Prior to coming to Australia</th>
<th>After arriving in Australia</th>
<th>Don’t remember</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>%</td>
<td>$n$</td>
<td>%</td>
</tr>
<tr>
<td>Male $(n = 46)$</td>
<td>20</td>
<td>43.5</td>
<td>19</td>
<td>41.3</td>
</tr>
<tr>
<td>Female $(n = 25)$</td>
<td>10</td>
<td>40.0</td>
<td>9</td>
<td>36.0</td>
</tr>
<tr>
<td>Total $(n = 71)$</td>
<td>30</td>
<td>42.3</td>
<td>28</td>
<td>39.4</td>
</tr>
</tbody>
</table>
4.11 Research Question 9: What do the 16-24 Year Old Sudanese Background Youth and Broader Queensland Sudanese Community Perceive as Factors that Influence Sexual Health Knowledge, Attitudes, Beliefs, and Patterns of Behaviours?

Data from the cultural identity items (CI 7 to 12), the 11 alcohol and drug use items and the open ended question (Why do you think young people may have sex before they are married?) were analysed to address Research Question 9 in conjunction with a one-way between-groups multivariate analysis of variance (MANOVA).

4.11.1 Culture, religion, parents, and friends

Three quarters of the respondents strongly agree/agree culture (76.9%) and religion (76.4%) had an important place in their life. Friends were reported as having less influence on how participants thought and felt about sex (40.6%) compared to their culture, religion, and parents (See Table 4.34).

4.11.2 Alcohol and drugs use

Approximately one quarter (27.1%) reported they drink alcohol. The majority reported this occurred either rarely (27.4%) or only at weekends (27.4%). A higher percentage of females reported drinking daily (9.1%) compared to male respondents (2.5%) (See Table 4.36). When asked how many alcoholic drinks they had on a day when they drank, 30.6% reported three or more and 8.1% of respondents reported they ‘binge’ drink (See Table 4.37).

A small percentage reported they had injected illicit drugs (3.5%), smoked marijuana (4.8%), or used other social/recreational drugs (2.2%) (See Table 4.35). Half of the five males and three females who reported that they had injected themselves with drugs reported they had done so in the last 12 months, with one female reporting daily use. Three (37.5%) reported sharing injecting equipment (See Table 4.38). The reported age of first injecting drug use ranged between nine and 18 years.
Table 4.34

*Frequency of participants’ responses to cultural identity items 7 to 12*

<table>
<thead>
<tr>
<th>Cultural identity items *</th>
<th>Strongly agree / Agree</th>
<th>Not sure*</th>
<th>Strongly disagree / Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>7. My culture has an important place in my life</td>
<td>Male</td>
<td>112</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>64</td>
<td>81.0</td>
</tr>
<tr>
<td>8. My culture affects how I think or feel about sex</td>
<td>Male</td>
<td>69</td>
<td>46.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>44</td>
<td>55.7</td>
</tr>
<tr>
<td>9. My has an important place in my life</td>
<td>Male</td>
<td>112</td>
<td>75.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>63</td>
<td>79.7</td>
</tr>
<tr>
<td>10. My religion affects how I think or feel about sex</td>
<td>Male</td>
<td>76</td>
<td>51.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>44</td>
<td>55.7</td>
</tr>
<tr>
<td>11. My parents affect how I think or feel about sex</td>
<td>Male</td>
<td>77</td>
<td>51.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>42</td>
<td>53.2</td>
</tr>
<tr>
<td>12. My friends affects how I think or feel about sex</td>
<td>Male</td>
<td>61</td>
<td>40.9</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>32</td>
<td>40.5</td>
</tr>
</tbody>
</table>

* Analysis of ‘not sure’ responses detected no pattern of characteristics. *Cronbach’s α = .407, n = 227

Note: Item numbering corresponds with Survey instrument items (See Appendix A)

Table 4.35

*Reported alcohol and drugs use (n = 219)*

<table>
<thead>
<tr>
<th>Items</th>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Do you drink alcohol?</td>
<td>Male</td>
<td>40</td>
<td>26.8</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22</td>
<td>27.8</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>27.1</td>
<td>152</td>
<td>66.4</td>
</tr>
<tr>
<td>Have you ever injected yourself with drugs?</td>
<td>Male</td>
<td>5</td>
<td>3.4</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3</td>
<td>3.8</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>3.5</td>
<td>207</td>
<td>90.4</td>
</tr>
<tr>
<td>Do you smoke marijuana?</td>
<td>Male</td>
<td>9</td>
<td>6.0</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>2</td>
<td>2.6</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>4.8</td>
<td>204</td>
<td>89.1</td>
</tr>
<tr>
<td>Do you use other social or recreational drugs?</td>
<td>Male</td>
<td>4</td>
<td>2.7</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>1</td>
<td>1.3</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>2.2</td>
<td>207</td>
<td>90.4</td>
</tr>
</tbody>
</table>
Table 4.36
Patterns of alcohol consumption (%) reported by participants who drink alcohol (male = 40; female = 22)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Self-reported frequency of alcohol consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weekends</td>
</tr>
<tr>
<td>Male</td>
<td>32.5</td>
</tr>
<tr>
<td>Female</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>27.4</td>
</tr>
</tbody>
</table>

Table 4.37
Number of alcoholic drinks consumed on a day when participants drank (male = 40; female = 22)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Self-reported number of drinks consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 2</td>
</tr>
<tr>
<td>Male</td>
<td>35.0</td>
</tr>
<tr>
<td>Female</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td>38.7</td>
</tr>
</tbody>
</table>

Table 4.38
Patterns of injecting for participants who reported a history of injecting drug use (n = 8)

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you injected drugs in the last 12 months?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>40.0</td>
<td>1</td>
<td>1</td>
<td>20.0</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
<td>66.7</td>
<td>1</td>
<td>33.3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>50.0</td>
<td>2</td>
<td>25.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Do you share needles and syringes when you inject?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>40.0</td>
<td>1</td>
<td>1</td>
<td>20.0</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td>33.3</td>
<td>0</td>
<td>0.0</td>
<td>66.7</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>12.5</td>
<td>37.5</td>
</tr>
</tbody>
</table>
### 4.11.3 Sex before marriage

As outlined in Chapter 3, the open ended question ‘Why do you think young people may have sex before they are married?’ was included to provide opportunity for young people to anonymously express their attitudes and beliefs about an issue of concern identified during community consultation. In total, 27 females and 33 males (26.6%) provided a response to this open ended question. Basic iterative inquiry (Grbich, 2004, 2007) identified two overarching categories (See Table 4.39).

<table>
<thead>
<tr>
<th>Overarching Categories</th>
<th>Themes</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Factors influencing behaviour</td>
<td>Peer pressure</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>It’s the society we live in</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Choice</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Parties, alcohol, and drugs</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>No parental support</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Media influence</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Low self-esteem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lack of knowledge</td>
<td>1</td>
</tr>
<tr>
<td>2. Age appropriate behaviours</td>
<td>Fun, pleasure, and the sensation</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Curiosity, experimenting, and the experience</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Love, intimacy, and desire</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Fact of life</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>To have children</td>
<td>2</td>
</tr>
<tr>
<td>3. Not sure</td>
<td>Don’t know why</td>
<td>10</td>
</tr>
</tbody>
</table>

Factors influencing behaviour reflects emergent themes consistent with the intrinsic and extrinsic variables that influence behaviour, such as peer pressure, sociocultural context, knowledge, and self-efficacy (Fishbein, 2000). Age appropriate behaviours incorporates themes consistent with attitudes and behaviours linked to the normal transition from adolescence to young adulthood, such as experimentation (Rosenthal & Browning, 2005). The frequency of the emerging themes provided understanding of the importance of the themes from the respondents’ perspective.
*Peer pressure* was a prominent theme, especially among the younger 16 to 18 year old female respondents who expressed different attitudes towards why they felt pressured to have sex compared to males, as highlighted in the following two quotes.

“Peer pressure and [girls] think they have to as they are in love” (Female, 17 years)

“[Boys] want to show off to peers, show they can score” (Male, 20 years)

In line with the above, *love, intimacy, and desire* was noted as a theme predominantly among the female respondents. *Fun, pleasure, and the sensation* along with *curiosity, experimenting, and the experience* emerged as strong underlying themes across both genders. These themes also emerged stronger from among the younger respondents.

“They are teens and they have fun” (Male, 24 years)

“Getting married means being with one partner which they might find too boring...some say they want to experiment” (Female, 17 years)

Respondents of both genders identified that sex before marriage was against their culture. Others considered it their *choice*.

“I do not think it right to have sex before marriage it’s against my culture and religion” (Female, 21 years)

“Because they have choice to do it and want to try new things” (Female, 16 years)

*Parties, alcohol, and drugs* emerged as a strong theme with all. This was often linked to the influence of *the society and new culture* in which they are living.

“Drunk and don’t know what they are doing or they do it because they think it fun” (Male, 17 years)

“They get pressure from friends and get trick[ed] if they are drunk easily” (Male, 18 years)
“In some cases because of the use of alcohol….on their desire or if they want to and some affected by a new culture” (Female, 23 years)

“Because peer pressure mostly but it is because of the society we live in” (Female, 20 years)

4.11.4 Gender, age, time in Australia, and age of arrival

A one-way between-groups multivariate analysis of variance (MANOVA) was conducted to simultaneously test for significant mean differences between the effect of the independent variables gender, age, time in Australia, and age of arrival on the dependent variables STI and HIV knowledge scores, confidence in communicating about sex score, and sexual behaviour risk score. Appendix J displays the relevant tables for the MANOVA assumptions testing and results.

Preliminary assumptions testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multicollinearity, with no serious violations noted. The four independent variables used in the MANOVA were re-categorised into categorical variables of two equal groups: age (≤ 17 years; ≥ 18 years), time in Australia (≤ six years; ≥ seven years), and age of arrival in Australia (≤ 13 years; ≥ 14 years of age) in order to limit the linear relationship between the independent variables (Tabachnick & Fidell, 2013). The score on a variable for any one participant was independent of the scores of this variable for all other participants (Tabachnick & Fidell, 2013). Univariate normality was assessed by comparing means and 5% Trimmed Mean, boxplots, and Kolmogorov-Smirnov Sig. values. A Kolmogorov-Smirnov Sig >.05 suggests a violation of the assumption of univariate normality; however, as the sample cell sizes were all larger than 30 and the 5% Trimmed Mean did not vary greatly from the mean for each dependent variable, these extreme scores did not have a strong influence on the mean and robustness can be assumed (Pallant, 2013). No multivariate outliers were found when multivariate normality was assessed by Mahalanobis distance (16.0) comparison to the Chi-square critical value (18.47) (Pallant, 2013). Scatterplots between each variable demonstrated no obvious evidence of non-linearity therefore supporting the assumption of linearity. Correlations between the dependent variables were not excessive, indicating multicollinearity was not of concern. The Box’s M (α = .268) was non-significant at α
= > .001, indicating that homogeneity of variance-covariance matrices could be assumed (Coakes & Ong, 2011; Pallant, 2013). Finally, the Levene’s Test of Equality of Error Variances indicated the equality of variance was violated for one variable, Confidence $F(13, 191) = 1.85, p = .038$. An alpha level of .01 was therefore assumed for determining significance for confidence in the univariate F-Test (Coakes & Ong, 2011; Pallant, 2013).

4.11.4.1 Results

There was a statistically significant difference between the time participants had lived in Australia ($\leq$ six years versus $\geq$ seven years) on the combined dependent variables, $F(5, 187) = 5.0, p < .001$; Wilks’ Lambda = .882; partial eta squared ($\eta^2$) = .118. Analysis of the dependent variable individually showed no effect for confidence in communicating about sex or sexual risk with any of the independent variables. However, the dependent variable, time in Australia, was statistically significant using the Bonferroni adjusted alpha level of .01 for STI knowledge $F(1, 191) = 14.7, p < .001$, partial eta squared ($\eta^2$) = .072, and HIV knowledge $F(1, 191) = 12.6, p < .001$, partial eta squared ($\eta^2$) = .062, with participants who had been in Australia seven years or more reporting significantly higher STI and HIV knowledge than participants who had been in Australia for six years or fewer.

4.12 Summary

The analysis of the data generated in this study’s survey suggested a number of important findings. The sample consisted of 229, 16-25 year old self-identifying Sudanese background youth from Queensland. The majority were born in Sudan and had experienced life in a refugee camp. They had arrived in Australia between one to 18 years ago, at an average age of 13 years. The most common languages spoken at home were Sudanese Arabic and Dinka, although there was a preference for speaking English among half of the sample. While the majority had mainly Sudanese background friends, there was a preference for having friends from both Sudanese and Australian backgrounds.

Data analysis revealed that knowledge of STI and HIV was both generally low and inaccurate. Knowledge of HIV was higher than STI knowledge, with females
demonstrating significantly higher levels of knowledge for both HIV and STI compared to the male respondents \((p < .001)\). The length of time participants had lived in Australia significantly influenced their level of STI and HIV knowledge, with increasing time in Australia associated with increased knowledge. However, increasing time in Australia was not found to significantly influence participants’ confidence in communicating about sex or their patterns of sexual risk behaviour.

The majority of participants believed that culture, religion, and their parents and friends affected how they think and feel about sex. While the majority considered sex before marriage was wrong and against traditional Sudanese beliefs and norms, they strongly believed that living in Australia had affected how they behave sexually and that young people have sex too easily in Australia. Levels of confidence in communicating about sex increased with age. The lowest level of confidence was when talking to parents, whom they believed were unable to talk to them about sex or understand what it is like for them growing up in Australia. The majority had sought advice and sexual health information with the local doctor, the most common and trusted source. The local doctor was also reported as the service of choice for sexual health and contraception care. Two thirds had not been tested for HIV.

Two thirds of the sample reported they had experienced sex, with the majority commencing some form of sexual activity by the age of 18 years. More than two thirds \((68.2\%)\) reported always using a condom; however, only 46.4\% reported using a condom at last sexual encounter. Nine percent reported sex leading to a pregnancy and 3.1\% an STI diagnosis. The mean sexual risk behaviour subscale score indicated that generally the level of risk associated with reported sexual behaviour was low.

In conclusion, analysis of data from the survey delivers a broad numeric description of the 16-24 year old participants’ sexual health knowledge, attitudes, and beliefs along with confidence communicating about sex and patterns of sexual behaviour. These results provide an understanding of the phenomenon being explored in this research and provide valuable understanding and awareness of specific behavioural, attitudinal, and beliefs based constructs that can be incorporated in future IBM theory based targeted interventions. The findings from the interviews with young people and the community FGD data analysis presented in the next chapter build onto this understanding.
Chapter 5 Qualitative Findings

5.1 Introduction

This chapter presents the findings of data analysis for the Phase 3 interviews with young people followed by those from the community FGD. As outlined in Chapter 3.5.2.4, the interviews and FGD were guided by structured questions and prompts derived from the research questions, survey items, and behavioural determinate variables contained within the theoretical framework underpinning this research. This resulted in three consistent constructs that align with variables contained within the IBM (knowledge, attitudes and beliefs, and behaviour) being used to guide the concurrent parallel data collection and analysis for these parallel independent strands. Using these consistent constructs also facilitated alignment of the interview and FGD findings consecutively presented in this chapter with the research questions and the convergence of these findings presented in Chapter 6 (Bazeley, 2009).

Comparison of the interview and FGD findings identified that each stand’s emerging themes could be grouped under identical categories for each of the consistent constructs. The interview and community FGD findings are, therefore, presented in this chapter as a series of themes under each of these identical categories as they relate to the consistent constructs and the interrelated research questions (See Table 5.1, page 155, and Table 5.2, page 179). Presenting the findings in this manner identified key behavioural, normative, control and efficacy beliefs and provides understanding of how these IBM constructs and other salient findings can be used to inform future interventions and research.

The interviews and FGD produced an extensive amount of rich narrative data supporting each category and its underlying themes. Using multiple quotes for each theme could have transported the reader directly into the participants’ perspectives and provided greater contextualised insight and understanding (Braun & Clarke, 2006; Creswell, 2014; Ulin, Robinson, & Tolley, 2005). However, there was a need to limit the number of quotes included in this chapter in order to achieve a balance between the direct voice narratives and interpretation (Ulin et al., 2005). Therefore, each theme is accompanied by a thick descriptive interpretation of the narratives, interlaced with a selection of representative quotes from individual interview and FGD transcripts.
5.2 Strand 2: Interviews with 16-24 Year Olds

The researcher explored in depth the sexual health knowledge, attitudes, and beliefs of the younger participants. Findings from this qualitative strand enriched the survey findings and provided depth of understanding to the research questions.

5.2.1 Sample characteristics

Eleven young people aged between 19 to 24 years ($M = 20.8$ years) participated in the interviews. Participants were a purposive convenience sample from the 23 Strand 1 survey participants who indicated they were willing to participate in face-to-face interviews. Purposive sampling guided by the determined quota controls age, gender, and tribal affiliation allowed for recruitment of a variety of ages, tribal groupings and an equal gender ratio. Recruitment ceased after 11 face-to-face interviews had been conducted as preliminary iterative data analysis identified data saturation had occurred (Grbich, 2007; Polit & Beck, 2012).

There were five males ($M = 21.4$ years) and six females ($M = 20.3$ years). Participants originated from a range of predominantly South Sudanese ethnic groups, including Dinka, Nuer, Bari, Shilluk, and Balanda, so achieving the aim of variation in tribal origin. All were of Christian faith and born in Sudan. Participants had been in Australia between four to eight years ($M = 6.3$ years) with the mean arrival age of 14.5 years (range: 12-19 years). The majority were single, living with family or friends, studying at either TAFE or university. Three of the young women and no young men reported they had children. Two of these young mothers were studying at TAFE and had partners identified as a boyfriend or traditional husband and both had good family support. The third young woman was a single unemployed mother with minimal family support.

Six interviews were conducted on a one-to-one basis. At the request of the participants, two interviews were conducted as a group, with one group comprising two young women who were cousins and one with three male self-described as ‘best mates’. The interviews were between 30 to 60 minutes in duration ($M = 39.8$ minutes) and there was active participation from all participants.
Table 5.1

*Interview constructs, categories and themes, and their relation to the research questions*

<table>
<thead>
<tr>
<th>Consistent constructs</th>
<th>Categories</th>
<th>Themes</th>
</tr>
</thead>
</table>
| **Knowledge**         | Level of knowledge | 1. Knowledge is limited and often inaccurate  
2. Aware of HIV but it’s not a problem here  
3. Knowledge dependent on arrival age and time in Australia |
| Research Questions 1, 3, 5 | Sources of knowledge | 1. Knowledge from traditional sources is limited  
2. School and friends are the primary sources  
3. Trust of sources varies  
4. Limited knowledge of where to go for health care and help |
| Barriers to learning | 1. Attitudes of both parents and young people to talking about sex  
2. Education and acculturation change attitudes and reduce barriers  
3. More education and information needed |
| **Attitudes and beliefs** | Condoms and contraception | 1. Pregnancy rate indicates pattern of condom and contraception use  
2. Condoms and contraception are associated with sexual promiscuity and infertility |
| Research Question 2 | HIV and STI | 1. HIV is associated with fear, shame, and stigmatisation |
| Relationships | 1. Dating and sex before marriage are not culturally acceptable  
2. Attitudes and beliefs are changing |
| **Behaviour**         | Factors influencing behaviour | 1. Youth have more freedom  
2. Australian friends and peers influence decisions  
3. Australian culture and laws support bad behaviour  
4. Gender roles and equity  
5. Alcohol more available and acceptable  
6. Age of arrival and time since arrival |
| Research Questions 4, 9 | Pregnancy | 1. Pregnancy occurring outside the traditional boundaries of marriage |
| Research Question 8 | Relationships | 1. Changing patterns of relationships and sexual behaviours |
| Family | 1. Changing traditional family structures and parenting roles |

*See Table 1.1 (page 10) for research questions*
5.2.2 **Construct 1: Knowledge**

The first construct for the young people derived from the interviews was ’knowledge’. General discussion around knowledge suggested participants considered it was important for young Sudanese Queenslanders and the broader Queensland Sudanese community to gain knowledge and understanding of sexual health.

> “Of course, it’s important, in our community….in Africa, we don’t know what sex means until you’re old enough…like 18 or 20.” (IDI 2, p. 2, Female)

Within this construct aligning to Research Questions 1, 3, and 5 (See Table 1.1, page 10), three categories relating to knowledge emerged: level of knowledge; sources of knowledge; and barriers to learning.

### 5.2.2.1 Category 1: Level of knowledge

Within the category ‘level of knowledge’ three themes were identified.

*Theme 1: Knowledge is limited and often inaccurate*

Overall levels of sexual health knowledge and literacy appeared low among the participants. Participants revealed awareness of condoms, contraception, and HIV; however, they were generally unable to define sexual health, nor name or describe individual STI or means of protective health seeking behaviour other than the use of condoms. One female participant stated:

> “I know HIV…that’s the really big thing that happens in Africa…there’s other things that I would look at and say “Ooh what’s that?” (IDI 1, p. 1, Female)

*Theme 2: Aware of HIV but it’s not a problem here*

Participants demonstrated higher levels of HIV awareness compared to other STI; however, their knowledge was often inaccurate and appeared linked to pre-arrival experiences and misunderstanding of Australian visa health testing and entrance
requirements. For example, most participants believed that HIV was not a problem in Australia as it was not openly spoken about, and people living with HIV were not granted entry. There was limited knowledge of the Australian pattern of HIV acquisition, with most participants presenting a belief that young people were the group at highest risk of acquiring HIV, as they are more sexually active. One participant presented the belief:

“[Young people] don’t think there’s HIV in Australia I guess it's more safe here than Africa...less infection, less danger.” (IDI 4, pp. 2-4, Male)

Overall, participants considered many of the young Sudanese Queenslanders had limited awareness and understanding of sexual health. For example:

“I’m sure they do know about condoms but I’m sure they don’t know about other things.” (IDI 1, p. 2, Female)

**Theme 3: Knowledge dependent on arrival age and time in Australia**

Participants suggested the sexual health knowledge of young Sudanese Queenslanders was related to knowledge gained prior to arrival, the age they arrived in Australia, how long they have lived here, and whether they had access to sexual health education while at school in Australia. One participant said:

“Kids who have grown up here [Australia] probably...know more and use condoms.” (IDI 4, p. 14, Female)

Some participants believed that young people had higher levels of knowledge and understanding of sexual health if their friends had been settled in Australia from an earlier age and/or for longer periods of time. A higher level of knowledge was also associated with having a peer network that included Australian friends. Participants considered both these factors gave young people greater access to information.

“We are lucky enough to know this sort of stuff because we know a few Australian people.” (IDI 8-10, p. 38, Male)
5.2.2.2 Category 2: Sources of knowledge

Within the category ‘sources of knowledge’, four themes were identified.

Theme 1: Knowledge from traditional sources is limited

When questioned about where young people traditionally gained their sexual health knowledge, participants demonstrated limited awareness of any traditional teachers and/or sources. The dominant theme was that young people generally had to find out information on their own as they were reluctant to talk to parents.

“You have to find out yourself or… go to your Aunt or somebody who’s related to you…if you go to your Mum and Dad they think, ‘Oh she’s a bad girl…She wants to know about this…wants to go and do it.’ We’re a little bit kind of scared to tell our Mum and Dad about it.” (IDI 1, p. 4, Female)

Theme 2: School and friends are the primary sources

School and friends emerged as the primary sources of sexual health information for participants post arrival in Queensland. Family, community organisations, websites, and movies were also being accessed for information.

“I learned most of my information from school and friends…I hang around.” (IDI 8-10, pp. 2, 8, Male)

Theme 3: Trust of sources varies

When participants were questioned about the best source of information, there appeared to be a varying level of trust and acceptance of the different sources. Most participants highlighted a belief that young people trusted face-to-face sources such as school sessions with health care workers. Websites and movies appeared to be the least trusted sources.

“We have health workers…come [to school] and talk about sexual education and things…Websites, I believe it’s not good… somebody face-to-
face give you more advice ...the internet, there’s no advice on it...you have to know yourself whether it’s good or not.” (IDI 1, p. 22, Female)

**Theme 4: Limited knowledge of where to go for health care and help**

Although able to identify a range of information sources, participants demonstrated limited knowledge about where and when to go for help should they experience any sexual and/or reproductive health related concerns. Preference was towards attending a family doctor over a sexual health clinic; however, most participants considered this necessary only when they were experiencing signs or symptoms. Participants also highlighted the stigma and shame associated with seeking help for this type of condition.

“Yes, they trust them [Doctors]…Only a few people go [to sexual health clinics]...people look at you...its embarrassing...feel stigmatised from the community... ‘you’ve got AIDS maybe, sexual disease’.” (IDI 3, pp. 18-19, Male)

**5.2.2.3 Category 3: Barriers to learning**

Three themes relating to ‘barriers to learning’ were identified.

**Theme 1: Attitudes of both parents and young people to talking about sex**

The salient theme relating to barriers to learning was the attitudes of parents and young people to talking about sex. ‘Sex’ was identified as a complex issue. The participants highlighted that many young people were too shy or afraid to discuss this topic with parents, other community adults, or health care workers until in need of help. Fear of parental disapproval or discipline added to their reluctance to broach the topic with parents. Participants considered the broader community generally believed that talking about sex encouraged people to have sex.

“Mum and Dad were good [parents]…but they’ve never tell us anything about sex, they don’t even like to mention it...they think we’re too young to know...if we know they think we’re going to do it.” (IDI 1, p. 3, Female)
Most participants agreed that traditional cultural beliefs made it difficult and shameful to talk about sexual and reproductive health related issues. Little emphasis was placed on the effect of religious belief. One young woman commented:

“In Africa, it’s kind of shameful to talk about sex to anybody; otherwise, they’ll think you’re very rude or unrespectful to them.”  (IDI 2, p. 2, Female)

**Theme 2: Education and acculturation change attitudes and reduce barriers**

Most participants indicated moving to Australia had made young people more open and accepting of discussing sex and sexual health issues. There was a general feeling young people had broader access to information and opportunity and willingness to associate with a diverse range of people outside their familial and community social networks. Participants felt this meant young people developed greater awareness and understanding of the Queensland social and cultural norms, behaviours, and context compared to many adults within the Queensland Sudanese community.

“It’s different [in Australia] we learn at school to talk to people about it [sex], normally…it’s not bad. At home they don’t talk to you about it at all…parents should tell us about sexual stuff.”  (IDI 6/7, p. 1, Female)

Participants highlighted the importance of reducing the barriers to learning for young people. Particular emphasis was placed on the need to reduce the confusion and challenges faced by young people as they learn to live between traditional Sudanese normative beliefs and parental behavioural expectations and those in Australia. However, a young person having access to information was highlighted as a potential source of family conflict, particularly if parents were not open to talking about sexual health or receiving similar education.

“You just feel suspended, you don’t know which side to take...are your parents telling you the right thing or are people outside there telling you the better stuff.”  (IDI 3, p. 11, Male)
The majority of the participants considered their parents’ attitude towards talking about sexual health related issues was slowly changing as they gained access to knowledge and understanding of the Australian social and cultural norms.

“Families are getting more understanding…if you talk to them about sex, of course, they will feel uncomfortable, but they will give you an answer. Some Sudanese are really getting into Australian culture.” (IDI 2, pp. 2, 4, Female)

However, participants highlighted some adults within the community strongly adhere to traditional ways and have limited contact with non-Sudanese background Australians. Consequently, there were still a number of parents and community leaders opposed to discussing this topic.

“They [some adults] still think like how they used to think back in Africa…hang out with Sudanese background friends.” (IDI 11, p. 4, Female)

While acknowledging that some parents did not have sufficient access to appropriate information, some participants indicated that access to information might not necessarily reduce barriers to learning or change parental attitudes or beliefs toward talking about sex.

“Some [parents] won’t change. They will still be nervous, still say Australian people are teaching kids bad stuff and this [changing behavioural patterns] is not good.” (IDI 6/7, p. 9, Female)

**Theme 3: More education and information needed**

Most participants proposed more education and access to sexual health information were needed for both young people and the broader community. They considered this would promote open communication between parents and their children. Bridging the intergenerational differences in attitudes and beliefs was presented by most as a means of reducing family conflict.
“I want the parents to be more open to their kids. They should talk about sex because here, it’s the normal thing....” (IDI 2, p. 15, Female)

Participants also considered a person’s willingness to access information may depend on who was providing this education, along with the way and where it was presented. Participants suggested that education and information needed to be provided in a range of venues by a variety of people, including Queensland Sudanese community members, elders, health professionals, and other key experts. Community events and schools were identified as key venues. However, consideration needs to be given to the cultural awareness and skill of those presenting to ensure community members could engage and not feel threatened.

“Someone who’s from the same culture [providing the education]...is probably the good thing ...not trying to change the culture but just trying to follow the beliefs and culture of Australia.” (IDI 1, p. 26, Female)

Participants acknowledged there were cultural and traditional gender specific sensitivities and differences in regards to sexual health. Nonetheless, participants of both genders considered separating males and females when providing sexual health education was not necessary. Some participants considered combined group education together might help develop mutual understanding of sexual health issues. However, the majority suggested the choice should be given to the group and/or individual.

“Come together ... I think it would be important because then they both can know what other people think and stuff.” (IDI 11, p. 18, Female)

When asked what key messages should be included in education, participants highlighted the following: safe and effective use of condoms; delaying sexual début; value and respect of relationships, talking about how you feel, and the positive place of sex in a relationship; learning to say ‘no’ and respecting a person’s choice to say ‘no’; and safe levels of alcohol consumption. One participant suggested:

“The important message should be...stop drinking and use protection while they’re having sex....they should learn more about HIV and stuff. They
should be waiting until the time is right or when they’re ready to have sex.”

(IDI 6/7, p. 17, Female)

5.2.3 Construct 2: Attitudes and beliefs

The second construct for the young people derived from the interviews related to ‘attitudes and beliefs’. Thematic analysis of data identified three categories aligned with this construct. These categories and their underlying themes, supported by quotes, provide meaningful insight into participants’ attitudes and beliefs relating to: condoms and contraception, HIV, STI, and the development of relationships.

5.2.3.1 Category 1: Condoms and contraception

Two themes emerged from the participants’ narratives relating to condoms and contraception.

*Theme 1: Pregnancy rate indicates pattern of condom and contraception use*

Based on the number of young pregnant unmarried Sudanese Queenslanders they had observed, the majority of participants believed young people within their community were probably not consistently using condoms or contraception. For example, one participant stated:

“Well there’s a lot of them who are getting pregnant here...I believe if you’re getting pregnant then it means you’re not using anything to protect yourself.” (IDI 1, p. 14, Female)

Cultural or religious beliefs did not emerge as a strong motivator for not using condoms; rather, participants expressed a belief that condoms were not being used as they reduced sexual pleasure and young people lacked ‘fear’ of contracting an STI and/or HIV.

“The boys say they don’t enjoy it when they do it with condoms...I know it is silly...they don’t like condoms.” (IDI 4, p. 7, Female)
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“Everybody knows it’s [HIV] passed, through sex. But they’re not really afraid; they should think about it deeply. They know HIV is around, but they still want to have sex without protection.”  (IDI 2, p. 7, Female)
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When questioned as to what motivates young people to use condoms, participants expressed a belief that it was out of a fear of pregnancy rather than a protective behaviour against STI.

**Theme 2: Condoms and contraception are associated with sexual promiscuity and infertility**

Participants of both genders associated patterns of contraceptive use with traditional normative beliefs around the role of women and sociocultural expectations to have children. There appeared to be a strong underlying belief that access to condoms and contraception encourages young people to have sex and to be promiscuous. An association between contraception and infertility was also identified as a possible deterrent to young people using contraception.

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“They are afraid of it [contraception] because of side effect...if African wives never had kids...they say something’s wrong with you... a taboo, you’ve committed the worst crime ever.”  (IDI 3, p. 10, Male)
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### 5.2.3.2 Category 2: HIV and STI

The central theme highlighted when discussing how participants perceived the community response to sexual health, STI, and HIV was that they were all associated with fear, shame, and stigmatisation. This was particularly noted when discussing HIV.

**Theme 1: HIV is associated with fear, shame, and stigmatisation**

Attitudes towards HIV appeared to be strongly associated with fear of being perceived as ‘bad’, engaged in ‘bad’ behaviour, and lacking self-care. Participants considered these attitudes might not prevent people from having unprotected sexual intercourse but thought they might stop people seeking HIV testing.
“They would say the person didn’t take care of himself, that’s why he got it [HIV]. Of course there’s fear and shame, a lot of people when they hear a person has HIV, they really get far from that person…they think if you get close…then you may get it.” (IDI 2, p. 6, Female)

Participants believed that fear and stigma were not as strongly linked to other STI, possibly because people were less aware and informed about these other conditions.

5.2.3.3 Category 3: Relationships

The dominant theme identified in the category pertaining to relationships was that dating and sex before marriage were not accepted practices. This view was based on participants’ understanding of traditional Sudanese sociocultural normative beliefs, traditional practices, and behavioural expectations.

Theme 1: Dating and sex before marriage are not culturally acceptable

Participants indicated that they felt parents associated dating and sex before marriage with a loss of connectedness to traditional cultural values and practices. Also highlighted was a belief that dating encouraged sexual relationships before marriage and this induced parental fear of negative outcomes such as pregnancy. Two female participants said:

“It’s illegal to our culture to have a boyfriend… you cannot go out until you get married…If you go out with the boys… [parents] think not going to get married legally … they’re just going to get pregnant.” (IDI 1, p. 17, Female)

“In Africa, if you date, they cut off your head…[Laughs]…But here its normal.” (IDI 2, p. 11, Female)

The majority of participants considered sex before marriage was a socially acceptable practice according to their perceptions of Australian social norms. They suggested this perceived social acceptance was having considerable influence on the young SudaneseQueenslanders’ patterns of sexual behaviour. For example, one participant commented:
“Here in Australia it is different...you can have sex before you’re married, but in our tribe you have to get married first...then you can have sex.”

(IDI 6/7, p. 2, Female)

Theme 2: Attitudes and beliefs are changing

The majority of participants considered the changing attitudes and beliefs towards dating and sex before marriage among the young people was one of the main issues of concern to parents and the broader Queensland Sudanese community. Participants considered this change was a leading cause of the increasing pregnancy rates occurring among the young women in their community.

“I see that there’s a lot of young girls who are just getting pregnant here...back there [Africa] if you’re 15, 16 you’re just like a little kid.”

(IDI 1, p. 16, Female)

5.2.4 Construct 3: Behaviour

The third construct ‘behaviour’ for the young people derived from the interviews explored participants’ attitudes and beliefs towards sexual behaviour. This topic resulted in considerable open dialogue and comprised a significant component of the open conversational periods of each interview. One overarching category emerged from this narrative: factors influencing behaviour. The seven underlying themes provided valuable insight into the participants’ perceptions of factors influencing the sexual decision making of young Sudanese Queenslanders.

5.2.4.1 Category 1: Factors influencing behaviour

Generally, participants acknowledged there was a diverse range of factors influencing sexual behaviours due to varying traditional tribal beliefs, parental attitudes, pre-arrival experiences, and reactions to post arrival pressures that existed with the Sudanese and broader African background communities.

“If you move from one house to the other you realise there’s a difference in the way they react to any topic to do with sex...some would just ask me...
something to do with sex looking directly in the eye, others looking down…”

(IDI 3, p. 2, Male)

The majority of participants agreed traditional beliefs and parental attitudes remain influential post arrival in Australia. Religion, on the other hand, was thought to be having less influence on behaviour compared to what they had observed prior to arrival.

“The power of the religion is not as strong as back in Africa. In Africa the religion is very, very, very strong...But I’ve only been to the church less than five times...back in Africa if you missed going to the church you felt like maybe some evil thing just entered your spirit.” (IDI 3, p. 9, Male)

Theme 1: Youth have more freedom

Participants considered young people in Africa, especially young unmarried women, have far less freedom compared to young people living in Queensland.

“In Australia...you can go out from your house, live separately...take your own responsibilities...in Sudan we don’t have this until you get married.”

(IDI 1, p. 7, Female)

The majority of participants believed these perceptions of freedom had influenced sexual decision making and behaviour among young Sudanese Queenslanders. While the majority of the participants appeared to embrace this freedom, they highlighted that parents and other adults within the target community think this ‘freedom’ has had a considerable negative effect on the sexual behaviour of young people.

“In Africa, the moment they [parents] know you’ve had sex you’re in big trouble... might end up your wife, but here in Australia it’s free, you can have sex with anybody...” (IDI 3, p. 20, Male)

Theme 2: Australian friends and peers influence decisions

As sexual health related issues are not traditionally discussed openly among peers, participants suggested that the influence of peers on a young person’s sexual decisions and behaviour was limited. However, having Australian friends and social networks
outside of their community settings was thought to be increasingly influencing the behaviours of young Sudanese Queenslanders, as indicated below.

“If they have friends who are Australians then they just follow the behaviour…they see what they’re [Australian background peers] doing and just do the same thing…they think they have the freedom to do whatever.” (IDI 1, p. 13, Female)

**Theme 3: Australian culture and laws support bad behaviour**

Parental belief that Australian cultural norms and laws encourage bad behaviour and have a negative influence on how families address these behaviours emerged as a common theme amongst all participants. Traditionally, family issues were settled within the family and/or community network. For example:

“In Sudan if you run away from the family, [you] go to uncle or aunty house...an elder, your uncle or aunty will come back and talk with who you having trouble with in your family, when they solve it they send you home.” (IDI 5, p. 4, Male)

The majority of participants considered the availability of government social and financial support in Australia was changing how families settled issues. While some considered the Australian system helped young people, especially those in need, others proposed young people were using the government support systems as a means of forcing parents to give them more freedom. For example:

“Young people are using this freedom in the wrong direction…not listening to their parent, elders...left their home...can live because they get money from government. Back in Sudan there is no way of getting money...just parents so you don’t behave well you don’t get what you want.” (IDI 5, p. 4, Male)

Generally, participants considered the level of parental influence and control was changing, with parents becoming a less dominant force in young peoples’ lives compared to traditional family and social structures.
**Theme 4: Gender roles and equity**

The majority of participants commented on the disparity between traditional Sudanese gender role norms and behavioural expectations and what they perceived as gender equality in Australia. For example:

> “Women having sex is an offence but if a boy has sex...the dad will go, ‘Oh yeah, that’s my boy.’ But if the girl goes out...the dad you’d just hold head so low.” (IDI 3, p. 6, Male)

Generally, participants considered this disparity was influencing the behaviour of young Sudanese Queenslanders and leading to cultural and intergenerational clashes within the community. Of particular note were the changing expectations of young women to have a level of freedom equal to what they perceived was afforded to their Australian peers. The majority of participants considered it important for young people and their parents to be provided with information to help them understand the cultural and social differences they faced living within this changing pattern of gender equality.

> “Traditionally women [are] more protected, important to maintain image for future marriage but difficult due to gender equality... [in Australia]... young women consider it their right to go out...but if they don’t have the knowledge...cannot protect themselves...increase risk of getting into trouble...that’s where we clash with the Australian culture.” (IDI 8-10, p. 11, Male)

**Theme 5: Alcohol more available and acceptable**

Alcohol was identified as one of the negative influences affecting sexual behaviour. Generally, participants considered alcohol was traditionally only used by adult males as part of ceremonies and was not consumed by young people. A young male commented:

> “In ceremonies...they have alcohol... you won’t see your parents drinking in front of you... in our culture it’s all kept away, hidden.” (IDI 8-10, p. 27, Male)
The majority of participants agreed that living in Australia had changed patterns of alcohol consumption and that this was having a negative effect on the sexual behaviour of young people, particularly the young men. Changing patterns of alcohol use were attributed to the ready availability and social acceptance of alcohol in Australia. Overall, participants felt there was minimal use of other recreational or illicit drugs.

“The more alcohol people have, the more they [are] bound to have sex...some of the kids say ‘I was drunk, I didn’t know what happened but definitely I had sex and it was possibly unprotected.’ Even if the condom is there...under the influence of alcohol it is highly possible they don’t use.”

(IDI 3, p. 13, Male)

**Theme 6: Age of arrival and time since arrival**

Age of arrival in Australia was thought to be having an effect on a young person’s knowledge, attitudes, and beliefs relating to sexual health. Participants suggested arriving at a young age provided opportunity for individuals to immerse and assimilate with the broader normative Australian beliefs. Depending on their home environment, this may lead to less awareness of and/or attachment to traditional practices and beliefs. Conversely, people arriving in Australia as adolescents or young adults may have gained some level of cultural awareness and attachment. However, participants considered this group of young people may encounter challenges gaining knowledge and understanding of Australian normative beliefs and behavioural exceptions before being faced with sexual choices. They were also perceived to be lacking the skills needed to address many of the issues they faced on arrival and while learning to live within their new bicultural community.

“I think most of those brought up here in Australia could be like...a normal child here today, but when you talk to those [who] came all away from Africa at older age, sometimes you can feel a little bit bad talking about sex stuff... Depends how old you came all the way from Africa. But after being here [Australia] for maybe 2 or 3 years you’ll understand how things work here.”

(IDI 3, pp. 2, 21, Male)
5.2.5 Construct 4: Issues of concern

The fourth construct for the young people derived from the interviews was ‘issues of concern’. Three dominant categories emerged relating to pregnancy, relationships, and family. One main theme emerged in each of these categories.

5.2.5.1 Pregnancy

Theme 1: Pregnancy occurring outside the traditional boundaries of marriage

Participants highlighted the number of pregnancies occurring outside of the traditional boundaries of marriage as the main issue of concern among both the young people and adults with this study’s target community.

“Yes, they’re more concerned about getting someone pregnant than you getting AIDS... A parent won’t say, ‘Careful about AIDS.’ But they will say... ‘Do not get anyone pregnant’.” (IDI 8-10, p. 1, Male)

The shame and perceived loss of opportunity associated with living in Australia were considered the most serious consequences of a pregnancy occurring outside of marriage.

“The whole opportunity of moving from Africa to here is gone, ended because pregnant. The girl is out of school, the boy can’t focus at school because he has done something horrible. With our parents, it doesn’t go, ‘There, there, you didn’t know.’ It’s the opposite... ‘You done really bad, we’re disappointed in you’ which causes the breakdown.” (IDI 8-10, p. 10, Male)

There was a belief that the shame was greater for the girl and her family and this contributed to some young girls being forced to leave home. Participants indicated that traditionally there is an expectation the male involved and his family should take responsibility for the young woman. If not, the community would consider this as a lack of respect for the woman and traditional beliefs. The level of shame for the woman was thought to be compounded if the partner and/or his family did not take responsibility and if the male was considered ‘unacceptable’ by woman’s family.
“If I’m a girl and I got pregnant… I’m going to give shame to my family... really bad, that’s going to influence my Mum and Dad in the community. Whereas a boy’s shame not as much as girls” (IDI 1, p. 6, Female)

Participants considered a lack of sexual health knowledge and understanding, as highlighted earlier in the level of knowledge theme, meant young Sudanese Queenslanders did not have the knowledge and skills to protect themselves, prevent unplanned pregnancies, or cope with the different norms, attitudes, and pressures they experience living within Queensland’s bicultural context.

“The main problem is like they started having sex when they’re young and they don’t use the protections. They don’t have knowledge about the sexual diseases. They need to get educated about that.” (IDI 2, p. 9, Female)

Poor condom and contraception use was considered a contributing factor to the rate of pregnancy among single women. However, some participants suggested not all such pregnancies were unwanted, with some young people seeing pregnancy as a way out of problems at home. When probed further, participants described pressures of achieving at school, parental discipline, and enforcement of traditional values as a few of the reasons young people were choosing to get pregnant.

“If they’re having problems at home they would think oh yeah [if they have a baby] then they can have their own home.” (IDI 11, p. 15, Female)

5.2.5.2 Category 2: Relationships

Theme 1: Changing patterns of relationships and sexual behaviours

The majority of participants believed young Sudanese Queenslanders were moving away from the traditional patterns of relationships and sexual behaviours and this was causing concern for parents and community leaders. The perception that sex before marriage was ‘normal’ and accepted in Australian society was thought, by the majority of participants, to be having a significant influence on sexual behaviour, including the age of sexual initiation.
“Here in Australia...there’s heaps of them [young Sudanese people] doing it...back in Africa NO...here even at 15, 16 they get pregnant. Even in primary school, they know about sex...I’m not saying they’re having it but they’re talking about it and they know it.” (IDI 1, p. 12, Female)

While some participants suggested marriage traditionally occurred as young as 13 years in some regions of Sudan, the majority of participants indicated marriage traditionally occurred around 18 to 20 years of age, suggesting this was when most people commenced having sex. Participants believed sex was initiated at a much younger age in Australia, including among young people originating from Africa.

“Here in Australia...especially kids with Africa origin...from 13 onwards definitely, I’m fairly positive ...I’ve seen many 13, 14 years of age already pregnant.” (IDI 3, p. 9, Male)

Participants attributed these changing patterns of behaviour to youth having: more freedom from family; no control over their sexual urges; and increasing peer pressure and temptation, particularly if they had friends from different backgrounds. The majority of participants also thought many young people had no fear of consequences.

“Back in Africa they would be afraid something may happen to them but here they don’t care because if something happened to them it’s like, ‘I don’t care I can just go and live by myself.’” (IDI 6/7, p. 5, Female)

Parents attempted to limit young people’s freedom and temptation by enforcing traditional boundaries. However, generally, participants considered this did not prevent young people dating or commencing sexual activity. Participants believed a lack of education and willingness of parents to talk about sexual health and safety meant young people were unprepared when they were confronted with the choice and/or pressure to have sex.

Participants agreed parents traditionally controlled friends and relationships. In Sudan, arranged marriages occurred generally within tribal groups and were thought to be still occurring post resettlement in Australia. However, participants considered increasing numbers of young people were resisting such arrangements and beginning to socialise,
date, and have relationships outside of traditional parental arrangements and tribal groupings.

“Before [in Sudan] so strict...need to get a lady from [tribal group]...if get from outside [tribal group] it’s like a crime.” (IDI 3, p. 13, Male)

“[Arranged marriages] occur but it’s not common [in Australia]...education is important and you realised it’s not really fair.” (IDI 1, p. 18, Female)

Some participants believed parental attitudes and acceptance of dating were influenced by the age of the young people involved, whom they were dating, and if the partner was known to the family or followed tradition by seeking permission and/or parental consent to date or marry. A female participant said:

“The most important thing is that the person come home, introduce himself that he’s gonna be with the daughter, he’s gonna take care of the daughter and stuff like that; and have to respect for them.” (IDI 2, p. 11, Female)

There were mixed attitudes and beliefs concerning dating and marriage outside of tribal groups. Generally, it was believed dating non-Sudanese and/or non-African background people presented greater concern to parents as this suggested a loss of cultural connectedness among the young people. For example:

“They [parents] think that the boy doesn’t represent our culture...they want somebody who understands the culture of getting married...things that you need to do before...pay [with] cows ... the dowry. If you get married to a white boy, he doesn’t know anything about this. In Australia, they don't pay these things, you know they just get married.” (IDI 1, p. 20, Female)

Participants suggested dating outside perceived traditional boundaries was associated with a desire to have sex. Both genders were reported to be dating; however, young males were thought to do so more frequently and openly.

“Some Sudanese girls don’t like to have sex with their boyfriend, so then they [boys] go have sex with other girls...that’s why most of them don’t like
dating Sudanese girl...they’re not allowed to having sex with them so go for the Australian girls.” (IDI 6/7, p. 14, Female)

The cultural complexity of this issue, especially for parents, was recognised. However, participants generally thought parents needed to understand and talk about the different social norms and beliefs here in Australia with young people so that young people could make safe informed choices.

5.2.5.3 Category 3: Family

Theme 1: Changing traditional family structures and parenting roles

Adults, in particular fathers, were presented as the traditional family head. Young people had very little autonomy and were disciplined if they behaved in a manner not considered acceptable.

“They [parents] are like the bosses, you do something wrong, bad, you get hit. In Australia you don’t hit your kids.” (IDI 11, p. 16, Female)

However, participants believed this traditional family structure and level of parental control were changing as young people gained freedom and learned to live within the broader Queensland sociocultural context. Greater access to information and a readiness to adopt new ways, compared to older community members, were thought to be contributing to young people gaining more autonomy and independence. Considered a positive by many, some participants acknowledged this resulted in intergenerational conflict and young people becoming alienated from the Sudanese community and their parents.

“They're [young people] trying to integrate... with the outside world. They spend three quarters of their life outside, only a quarter to integrate with their parents.” (IDI 3, p. 6, Male)

Generally, parents were thought to be struggling adjusting to these changes, particularly with the perceived loss of parental control, respect, and ability to discipline according to traditional beliefs and practices.
“Here in Australia parents they lost control...in Sudan they were in 100% control. This country is a free country...back in Sudan we must listen to elders, when they talk you don’t cross their talk you just keep quiet until you been asked to talk, that’s the respect.” (IDI 5, p. 4, Male)

As previously mentioned, the majority of young participants thought adults within the community blamed the Australian culture and laws for the ‘bad’ behaviour of young community members and their perceived loss of control. Interestingly, this was one of the key points of concern raised in Phase 1 community consultation that led to this research being conducted.

“Yeah [parents] can’t do anything. If you talk to a daughter, they are just going to go pack their stuff and leave. They know there is freedom here, people who can help and support them, and find a place to sleep. In Africa if you do this, there’s no one who can support you...if you go to somebody’s house, they’re going to beat you, kick you and take you back to your family’s house...here [in Australia] there’s people, social workers, ‘No worries I’ll find you a place’.” (IDI 1, p. 8, Female)

5.2.6 Overview of interview findings

The interview data present a narrative portraying the participants’ perspectives in a way that provides valuable insight into the complex nature of this topic. The general supposition was the Australian sociocultural normative sexual health related attitudes and beliefs were more open and ‘free’ compared to traditional Sudanese norms and behavioural expectations. Learning to live within this disparity, young people within the target community were embracing this freedom and demanding more autonomy, and this was thought to be changing traditional family structures, parenting roles, and intergenerational relationships within the broader community.

This freedom and autonomy was also identified as one of the dominant factors influencing young people’s sexual health knowledge, attitudes and beliefs, and patterns of behaviour. Perceptions of increasing pregnancy rates occurring among young women outside of the culturally acceptable bounds of marriage were considered an
indicator of changing patterns of sexual behaviour, including limited use of condom and contraception among young people.

Concern about STI risk was minimal. Young people were thought to be accessing a wide range of information sources; however, overall, participants demonstrated limited sexual health knowledge. There was a general awareness of HIV; however, this appeared to be based on their perception of pre-departure and arrival Australian visa medical screening requirements, leading to a strong belief and misconception that HIV was not a problem for migrant and refugee background communities in Australia.

Talking about sexual health related issues was considered culturally sensitive and, while participants considered attitudes were changing, cultural beliefs remained one of the major barriers to learning. Age of arrival and time since settlement in Australia were also thought to influence a young person’s ability to gain knowledge and to make informed choices around their sexual safety. Access to culturally and contextually appropriate information for both young people and adults early on arrival was proposed as a key strategy to address knowledge deficits, prevent negative outcomes, and increase intergeneration understanding. The community FGD findings presented in the following section of this chapter provide another level of understanding of these issues.
5.3 Strand 3: Community Focus Group Discussions

This strand explored community level sexual health knowledge, attitudes, and beliefs. Data from this strand’s transcripts provided insight into the sociocultural normative beliefs and behavioural expectations from the contextual perspective of the broader Sudanese community. The use of constructs and categories consistent with the interviews facilitated exploration of intergenerational similarities and differences during qualitative dataset convergence (See Table 5.2).

5.3.1 Sample Characteristics

There were five focus groups with a total of 19 participants. The FGD went for between 30 to 90 minutes. Focus group size varied from three to five and was dependent on availability and request. Focus groups of this size, although small in participant number, appeared to provide a group large enough to stimulate a variety of thought and discussion while allowing effective moderation of this potentially sensitive topic and management of participants with a variety of language skills (Tonkiss, 2004).

Purposive sampling using the determined quota controls age, gender, and tribal affiliation ensured a range of ages and ethnic/tribal groups. All participants (six male and 13 female) were of Christian faith, born in Sudan, and originated from a range of Southern Sudanese ethnic groups including Dinka, Bari, KuKu, and Kakwa. Participants ranged from 25 to 51 years of age ($M = 36.6$ years) and had been living in Australia between three to 13 years ($M = 7$ years), with a mean arrival age of 31 years. Seventeen of the 19 participants were parents with one to eight children ranging from one to 24 years of age, with nine children currently aged 14 years or older.

Eleven participants were living in an urban metropolitan area, with the remaining eight residing in a large rural township in southeast Queensland. Educational backgrounds varied, with 10.5% reporting the highest level of completed education was a tertiary degree, 42% a TAFE certificate, and 26.3% Year 12
<table>
<thead>
<tr>
<th>Question constructs</th>
<th>Categories</th>
<th>Themes</th>
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| Knowledge           | Level of knowledge | 1. Knowledge is limited and often inaccurate  
|                     |             | 2. Aware of HIV but believe it’s not a problem here  
|                     |             | 3. Adults’ knowledge based on pre-arrival experiences and visa entry requirements  
|                     |             | 4. Young people know less about HIV  
| Research Questions  | Sources of knowledge | 1. Traditional sources not being used by young people  
| 1, 3, 5             |             | 2. Young people are using a wide range of different sources now  
|                     |             | 3. School is the best place for young people to learn but parents need to be involved  
| Barriers to learning |             | 1. Cultural beliefs and attitudes concerning talking about sex are the main barrier  
|                     |             | 2. Confusion between generational and cultural messages  
|                     |             | 3. Parents lack skills to talk with young people and young people won’t listen  
|                     |             | 4. Access to appropriate messages via appropriate sources  
| Attitudes and beliefs | Condoms and contraception | 1. Condoms and contraception are not culturally acceptable and they promote sexual promiscuity  
| Research Question   |             | 2. Contraception is associated with infertility  
| 2                   | HIV and STI | 1. HIV is associated with fear, shame, and stigmatisation  
| Relationships       |             | 1. Dating and sex before marriage are not culturally acceptable  
|                     |             | 2. Young people losing cultural attachment and adapting faster than adults  
| Behaviour           | Factors influencing behaviour | 1. Freedom of the youth  
| Research Questions  |             | 2. Australian norms, laws, and system of social support encourage young people to do bad things and lose connection with culture and tradition  
| 4, 9                |             | 3. Age of arrival and time since arrival  
|                     |             | 4. Peers, especially those from other cultures  
|                     |             | 5. Communication technology and social media having significant influence  
| Issues of concern   | Pregnancy | 1. Pregnancy occurring outside the traditional boundaries of marriage  
| Research Question   | Relationships | 1. Changing patterns of relationships and sexual behaviours  
| 8                   | Family     | 1. Changing traditional family structures and parenting roles  

*See Table 1.1 (page 10) for research questions; FGD – Focus Group Discussion*
5.3.2 Construct 1: Knowledge

The first construct derived from the FGD was ‘knowledge’. Within this construct the categories level of knowledge, sources of knowledge, and barriers to learning are again used to present the emerging themes relating to the sexual health knowledge of the 19 broader community members.

5.3.2.1 Category 1: Level of knowledge

Within the category ‘level of knowledge’ four themes were identified.

Theme 1: Knowledge is limited and often inaccurate

The majority of participants believed sexual health knowledge was generally poor among adults in the broader Queensland Sudanese community. Participants demonstrated greater awareness of HIV compared to other STI; however, knowledge was generally limited, with many portraying inaccurate understanding and misconceptions that could place them and others at risk.

“Killer disease like HIV, people know about. You know you get syphilis from the toilet…” (FGD 3, p. 18)

Theme 2: Knowledge based on pre-arrival experiences and visa entry requirements

Knowledge level and accuracy appeared to be influenced by individual pre-arrival experiences and understanding of Australian visa testing requirements. Time since arrival in Australia, education level achieved, area of personal study (e.g., science), along with their occupation (e.g., community worker) were also perceived as influential.

“HIV I think they have knowledge… when in camps [refugee] they told about this disease… don't know of the others [STI].” (FGD 2, p. 18)

Theme 3: Aware of HIV but believe it’s not a problem in Australia

While all participants demonstrated awareness of HIV as an issue in Africa, the majority portrayed a belief that HIV was not a problem in Australia. This belief was
founded on a commonly presented perception that people living with HIV cannot gain entrance to Australia under current visa arrangements.

“Any who comes to Australia is screened... They say there is no HIV here...it's clean...anybody with HIV is not allowed come to Australia.”

(FGD 3, p. 9)

Having not seen or met any people living with HIV signs and/or symptoms as they had experienced living in Africa also led participants to believe HIV was not a problem in Australia.

“No, [in Australia] we didn’t see the people affected. In Africa you can see the person with your own eye...how skinny...see signs, the symptoms.”

(FGD 3, p. 38)

Theme 4: Young people know less about HIV

Participants generally believed young people within the Queensland Sudanese community were less aware of HIV compared to adult community members. This disparity was primarily attributed to a lack of exposure to HIV information post arrival. One participant described broad community level HIV prevention campaigns as being common strategies for giving information to people in many African countries. To participants, the nonexistence of this type of campaign in Australia showed the government also considered HIV was not a serious problem here. Some participants also felt that education at schools here placed less emphasis on educating young people about HIV compared to ‘back home’.

“Back home they're scared about HIV...there's huge campaigns about it and everyone is mindful...they protect themselves but here we are clean...all healthy...don't talk about it.” (FGD 1, p. 17)

5.3.2.2 Category 2: Sources of Knowledge

There was a general inference that adults within the community were gaining knowledge and understanding of sexual health related issues. Where they were seeking this knowledge varied according to their age, educational level, circle of friends,
interaction with the broader Queensland community, and attitude to talking about sexual health.

“HIV is deadly...they know, but the rest...no I don’t think they talk about the other ones...but I think we’re starting to learn.” (FGD 1, p. 14)

Three themes emerged concerning FGD participants’ attitudes and beliefs about the young people’s sources of sexual health knowledge. These included:

Theme 1: Traditional sources not being used by young people

Traditionally, young people learn about ‘life’ by sitting and listening to discussions at a range of community gatherings. Participants agreed that sexual health related information was not openly discussed at these gatherings nor among parents and their children due to the cultural sensitivity of this topic.

“We just don’t talk about it. It’s...Taboo...You feel ashamed... It’s very hard to say that word [sex]” (FGD 1, p. 1)

Further probing about traditional sources of sexual health knowledge highlighted young people may speak to an ‘Aunty’ or older friends within their social networks. However, this generally only happened when they needed help.

“They learn from friends, where you grow together. Girls which are bigger start to tell us, they talk to us, this thing will happen...but your parents will not tell you, no.” (FGD 3, p. 1)

The majority of FGD participants believed living in Australia had altered traditional pathways for passing on information about cultural beliefs and practices. Many young people were no longer attending community gatherings and this was resulting in a loss of community and cultural connectedness. Participants thought this was having a negative impact on the young people’s sexual behaviour.
“You request them to come...they say it’s boring. Young people brought up here...not in Africa are not thinking of the brain...it’s mangled... They don’t know anything [about tradition].” (FGD 3, p. 37)

**Theme 2: Young people are using a wide range of different sources**

There was general consensus among participants that young Sudanese Queenslanders were becoming more aware of sexual health related issues. This was attributed to the wide range of information sources they thought young people were now accessing. Sources perceived to be commonly accessed by young people included schools, friends, social media, internet, television, and movies. Concern was expressed around the cultural appropriateness and accuracy of some of these sources. This was particularly so if parents perceived they had no control over what and when young people accessed this information, such as with the internet and television.

“The TV, they kissing, they really doing the sex in the TV and young kids can see what ever what going. In our country [Sudan], TV... no kissing, no sexing, no talking but here [in Australia] you can learn a lot of things on TV.” (FGD 2, p. 14)

Participants considered many within the Queensland Sudanese community still held fast to the traditional belief that talking about sexual health was ‘taboo’ and encouraged young people to have sex. However, there was general agreement among participants that sexual health education was good as it helped their young community members stay safe and in school.

“When they [parents] talk about sex [with their children] they think they are going to do it...so, to stop them from doing it early you don't talk about it.” (FGD 1, p. 7)
Theme 3: School is the best place for young people to learn but parents need to be involved

Participants generally agreed young people needed more sexual health information to help them learn to live within their new multicultural society and the school environment was a suitable place for young people to gain information.

“Yes, as part of the school... Let them talk about that in the subject...important among part of the syllabus.” (FGD 3, p. 31)

However, the majority of participants were in agreement that parents and other key members of the broader community needed to be consulted, involved, and informed about the content and process. It was also important that their education take into consideration the cultural and traditional beliefs, along with the social context in which the young people and their families now found themselves. Participants highlighted that parents should also have the opportunity to access the same information as the young people in order to assist them to support and talk to their young people.

“Comes from friends ...school, also maybe a community centre ...from teachers.... It needs the community... parents to tell them ... this thing is good...this one’s bad.” (FGD 4, p. 15)

5.3.2.3 Category 3: Barriers to Learning

Participants identified a wide range of barriers and challenges associated with young people accessing sexual health information. These included four themes predominantly linked to the effects of cultural beliefs and intergenerational attitudinal differences.

Theme 1: Cultural beliefs and attitudes concerning talking about sex are the main barrier

Cultural beliefs and attitudes towards talking about sex were highlighted as the main barrier to learning about sexual health. Enduring traditional normative beliefs were preventing sexual health being openly broached within many family home environments.
“It hasn't changed really… [Parents] still don't talk to their children about sex, although there's a lot of pressure to change. Kids nowadays find out things on their own.” (FGD 1, p. 3)

Theme 2: Confusion between generational and cultural messages

Young people accessing information and attempting to talk about what they learn with their parents can lead to family conflict and confusion.

“When the kids are taught something in the school they bring it home, start talking in the house...the parents they shut up the children. They say ‘Stop I don’t like that topic.’ And then the kids get scared to talk about that topic.” (FGD 3, p. 2)

Young people were perceived to be more accepting of change and participants thought this had helped them to overcome a number of the barriers to learning experienced by adults within the community. This was, however, thought to be leading to confusion and conflict among the generations in the home environment.

“They [young people] pushing because they're exposed to so many new things, they have to change to adapt to the new environment but you [parent] can't necessarily do that at home.” (FGD 1, p. 23)

Participants suggested some parents’ attitudes to talking about sex were changing but they felt more needed to accept this change in order to prepare their young people to live safely within the Queensland community. For example:

“I grew as a Sudanese, in a particular culture with beliefs...my parents didn’t tell me about [sex] ever...here, children know sex... know what the privates used for and what diseases we’d get. Yes, they live here...need to be prepared for the fact.” (FGD 3, p. 28)
Theme 3: Parents lack skills to talk with young people and the young won’t listen

The majority of participants felt most parents lacked the skills and willingness to talk with young people about sexual health.

“Most parents, they don’t talk about sex, actually doesn’t know how to talk to their kids about those things. It depends in the families. The problem – is other people didn’t study at school; didn’t go to school. They don’t know.” (FGD 3, p. 14)

Participants highlighted that English proficiency and literacy varied greatly among the community, particularly for those newly arrived. This was noted as a barrier to learning that influenced their ability to speak with their children about sexual health matters. Difficulty accessing appropriate interpreters was also highlighted as a barrier to learning.

“Some of them don’t know English...very hard for them...to communicate with the people... There are no interpreters assigned.” (FGD 5, p. 29)

Participants acknowledged that some young people were embarrassed and reluctant to discuss this topic with their parents. They also suggested many young people won’t necessarily want to listen even if their parents attempted to broach the topic.

“One it is good to talk to kids about sex. In my country we never ever talk about that thing… But if you saying that thing she say ‘Ah! My mum talking to me too much, I don't like it’.” (FGD 2, p. 1)

Theme 4: Access to appropriate messages via appropriate sources

Difficulty accessing appropriate messages via appropriate sources was identified as another barrier to learning. As highlighted earlier, participants considered the lack of community targeted information about HIV and other sexual health related issues in Australia was compounding the misconception that HIV was not a problem in Australia among migrant groups.
“No open education about all this kind of stuff, it’s hidden...nothing, even in school...they don’t advertise. It’s better for public to know about it... be educated...be open...so the kids know.” (FGD 3, p. 10)

Information needed to be culturally appropriate, theoretically accurate, and delivered by appropriate people via established sources accessed by the community. Participants also suggested care was needed to ensure the messages being given did not stigmatise or victimise individuals, the Queensland Sudanese community, or the broader African communities.

“When a [man of African background] was caught, it was really bad media...giving that part of Africa bad name, make people suspicious... In order for the message to reach everyone, we suggest...a local radio...because Australian television are no longer using media on HIV because it becoming something small to them.” (FGD 5, p. 10)

As highlighted earlier, participants expressed concern over the loss of traditional communication and learning pathways since settling in Australia. While the loss of these traditional practices was highlighted as a barrier to young people learning about all manner of cultural and traditional beliefs and attitudes, participants commented that community meetings were still well attended by adult members of the community. Therefore, these meetings could be used as a source of information sharing for parents within the target community, as well as for the broader Queensland community and health service providers. Participants also expressed the need to get young community members to participate in these community meetings so that a two-way sharing of information could occur.

5.3.3 Construct 2: Attitudes and beliefs

Consistent with the interview data analysis, the second construct derived from the FGD was ‘attitudes and beliefs’. The three categories identified from the FGD data in relation to sexual health attitudes and beliefs were condoms and contraception, HIV and STI, and relationships. How the underlying themes align with Research Questions 6 and 7 is discussed here (See Table 1.1, page 10), and how they compare with those emerging from the interview narrative is discussed in Chapter 6.
5.3.3.1 Category 1: Condoms and contraception

Theme 1: Condoms and contraception are not culturally acceptable and promote sexual promiscuity

Generally, participants agreed using condoms or contraception was culturally unacceptable and encouraged people to have sex.

“Culturally you are not allowed to use condoms. You have to go open sex.”
(FGD 3, p. 7)

Participants suggested other reasons people within their community were not using condoms included low perceptions of HIV or STI risk in Australia, and a belief condoms decreased pleasure, promoted promiscuity, and were associated with prostitution. Many also thought people had misconceptions and mistrust of the effectiveness of condoms.

“A lot of them don’t believe you can get these diseases here [in Australia]...they're all healthy...no sickness, no disease. Why bother.” (FGD 1, p. 15)

“They say that it's like eating a lolly with a wrap on it. They have this belief, especially our men...they don't like them.” (FGD 1, p. 15)

It was generally thought a woman requesting her partner to use a condom implied unfaithfulness on the woman’s part. This made it difficult for women to negotiate condom use and led to a belief that condoms were the men’s responsibility.

“The girls depend on the boys, how well they use the condom. Because we don’t know how they go.” (FGD 3, p. 3)

One participant proposed a young person using a condom was better than contracting an STI or experiencing an unplanned pregnancy with the ‘wrong’ person. The majority agreed if young people were going to have sex they needed to have education and be informed about safer sex practices.
“Condom is good to protect yourself...if you are going to do sex you can protect yourself with this one, can’t get disease.” (FGD 2, p. 16)

**Theme 2: Contraception is associated with infertility**

A number of participants believed contraception was associated with negative side effects, such as infertility.

“It's not okay...if you use a lot maybe you cannot get baby again, nobody marry you because you don't know how it can affect you. Maybe ...if you married, have two, three children then use.” (FGD 2, p. 17)

“By culture, we don’t want contraceptives... Sudanese believe sex is not for fun, not for money or business. Sex is for making children...contraception is bad.” (FGD 3, p. 6)

**5.3.3.2 Category 2: HIV and STI**

**Theme 1: HIV is associated with fear, shame, and stigmatisation**

The majority of participants believed many within the Queensland Sudanese community associated HIV with fear and shame and this often led to stigmatisation and social isolation of people known to be living with HIV.

“They're [people living with HIV] treated like an outcast. People are scared of sharing a house... getting infected. You come, you're greeted and they go and wash their hands, they are so scared...feel really isolated.” (FGD 1, p. 19)

This attitude was also thought to impact on people’s willingness to access HIV testing. Concern about the lack of confidentiality within the community was also noted as a barrier to individuals screening for HIV.

“Yeah, I think they really don’t want to know if they have it. They don’t want to go for test... as then they know they have got life sentence.” (FGD 1, p. 20)
Some participants thought HIV testing was done routinely in Australia without discussion, whenever blood tests were performed. This belief led to a perception among many participants that people were HIV negative when in fact their HIV status was unknown. This may reflect HIV testing processes in Africa; however, it highlights the need to educate people about Australian HIV testing processes.

Some FGD participants were aware the incidence of HIV was increasing within the refugee and migrant populations in Australia including among the Australian Sudanese community. Participants expressed the need for all people to be informed and/or reminded of the potential HIV risk associated with returning to Sudan as community members travelling home to Sudan and then returning to Australia without the requirement for further HIV testing were thought to be contributing to the increasing HIV rates.

“Last year a report about HIV in Queensland...mentioned 10% of the population among the migrant and Sudanese [are HIV positive]. We are worried, because the number is increasing... We were not allowed to come to Australia [if HIV positive]. But some goes back to Africa visiting relatives... when you come back to Australia you are not tested again because you are already a citizen.” (FGD 5, p. 13)

5.3.3.3 Category 3: Relationships

Theme 1: Dating and sex before marriage are not culturally acceptable

The majority of participants agreed dating and sex before marriage was not practised within their culture and having a boy/girlfriend was considered culturally unacceptable.

“No way... Doesn't even exist the word boyfriend or girlfriend. You can't do it. If you do your brothers will go and beat the boy up.” (FGD 1, p. 6)

“No sex before marriage. You know - - - No sex.” (FGD 4, p. 4)

Traditionally, relationships and friendships between young men and women were arranged or managed by the family.
“They [parents] ask the boy what’s the future plan? If he’s really sure he want to get married …then you go and talk to his family. If they are interested and serious, OK…the family approve.” (FGD 1, p. 8)

Theme 2: Young people are losing cultural attachment and adapting faster than adults

All participants agreed traditional patterns of establishing and controlling relationships had changed since coming to Australia and, while young people appeared accepting, this was of concern to parents.

“In the Sudanese community [relationships] are organised at the family level. But something random today, have a boyfriend, tomorrow you leave with the other person…and the other person afterwards. That thing is forbidden.” (FGD 5, p. 1)

Participants believed the traditional parental and family control of relationships was protective. Young people dating and independently choosing partners were making parents feel as if they were no longer able to protect their children. This was particularly so for the young women and for those young people dating outside the traditionally accepted tribal and/or community networks.

“Sometimes same country, sometimes different… they mix no certain tribe, no certain country… even white people.” (FGD 2, p. 7)

Participants considered young people, in particular young men, were dating outside the community as it was less complicated.

“They are getting [dating] different people, especially boys, with white girls. Sudanese culture people don’t like the sex before marriage but lot of boys, now, using the white girls.” (FGD 4, p. 57)

While having partners from outside traditionally accepted networks seemed to create some concern, participants thought young people having sex before marriage was of greater concern to the participants and the broader Queensland Sudanese community.
“The colour is not a big issue [laughs], the big issue is not doing discussion… They keep the process, its good they marry. Not play doing sex and then leave the girl and then go look for another girlfriend… this is not good.” (FGD 2, p. 7)

5.3.4 Construct 3: Behaviour

The third construct derived from the FGD was ‘behaviour’. This construct explored participants’ attitudes and beliefs towards the sexual behaviour of young people within their community. Factors influencing behaviour, as with the interview data, emerged as the primary category. The six underlying themes provide valuable insight into the broader community’s perceptions of factors motivating behavioural intent amongst the young Sudanese Queenslanders.

5.3.4.1 Category 1: Factors influencing behaviour

Theme 1: Freedom of the youth

The majority of participants considered young Sudanese Queenslanders have gained too much freedom living in Australia and this was leading them to engage in unacceptable patterns of sexual behaviour. Traditionally, young Sudanese people have minimal autonomy and freedom from family and parental control. This was particularly noted for young women who are traditionally dependent on their families until they marry.

“At home [in Sudan] as a girl you not allowed to go anywhere, only school or home so the parents know. When your twenty, even thirty, they still control you… as long as you are not married.” (FGD 1, p. 19)

Participants felt many young people were more focused on gaining freedom from traditional sociocultural norms they perceived as controlling as opposed to protective rather than on achieving a good education and job, a basic desire all new arrival parents had for their children.

“Our children say ‘I need my freedom’ …but they stop everything, stopped school, stopped job. We aren’t happy for that, we need our children to focus at school and learn and make good job.” (FGD 2, p. 23)
While this freedom and purported changes to behaviour and parental control were causing considerable concern, the majority of participants agreed that if young people were not going to adhere to tradition they needed to be taught the skills to cope with the perceived freedom of living in Australia.

“Sometimes children do something not good... it's a problem. [In Australia] they [young people] don't want to listen to the parents, they just do anything they want.” (FGD 2, p. 27)

**Theme 2: Australian norms, laws, and system of social support encourage young people to do ‘bad’ things and lose connection with culture and tradition**

Generally, participants proposed the Australian cultural norms and social structures supported and encouraged young people to gain freedom. A perceived right to freedom was resulting in young people rebelling against parental control, leaving school and home, behaving ‘badly’, and ultimately causing a lot of confusion and conflict within families.

“We are actually worried about the culture, and too much freedom...in Australia, they [children/young people] really abused it... do whatever you want without any advice from the elders, from the fathers. This has actually contributed to the worries of the community about the new generation...it has contracted HIV and early pregnancies.” (FGD 5, p. 3)

Young people losing connection with their cultural background and community was perceived by many of the participants as a negative influence of the Australian normative beliefs and legal system. Participants were generally not opposed to young people adopting Australian cultural and social norms, as this was inevitable as they learned to live in their new country. However, they acknowledged young people might find growing up between two cultures confusing.

“In Australia, parents complain because in school...teaching in Australia law if you are 18, or maybe from 15 or 13, you have a freedom. If you have a boyfriend you can play sex, you are free. At the home, we are giving
different knowledge, so now they [young people] are confused...don’t know which one is right because two rules.” (FGD 4, p. 4)

Participants expressed concern young people were more readily adopting the ‘bad’ aspects of Australian culture and society, such as sex before marriage, and abusing their perceived right to freedom.

Theme 3: Peers, especially those from other cultures

Participants agreed friends had a significant influence on the behaviours of young people. The majority thought having Australian friends had greater influence on changing the behaviour of young Sudanese Queenslanders in a manner that was in conflict with traditional parental attitudes and beliefs.

“Like if you have Australian friends or things like that...I think some of them, they copy. My friend did it so...Why can't I?” (FGD 1, p. 4)

Theme 4: Age of arrival and time since arrival

The age people arrived in Australia and how long they had lived here were both considered to influence a young person’s sexual behaviour and their attachment to Sudanese cultural beliefs and behavioural expectations. Participants considered those who arrived in Australia as a child or an adult experienced less confusion around sexual health issues compared to those who arrived during their adolescent years. For example, a person arriving as a young adult had an established awareness and knowledge of traditional beliefs to guide their sexual decision making and choices. Arriving as a child allowed both the child and parent/s to learn to live within their bicultural context before the challenges of adolescence.

“If you brought the Sudanese here young, they grow up here, they take this culture...say okay this is the life.” (FGD 2, p. 68)

However, the group arriving as adolescents were considered to have limited knowledge of traditional Sudanese norms or time to establish understanding of the Australian social norms before being confronted with choices regarding relationships, dating, or sexual activity. The general consensus was this group may not have the knowledge or skill to
make safe and/or culturally informed decisions. This was thought to place them at greater sexual risk and conflict with their parents. Participants agreed this group and their parents both required support early on arrival.

“The worst are those who came here when they were 12 to 15. They don't have the cultural background [knowledge] how things are done... they take the streets, do bad behaviour, rather [than stay] at home...or the school.” (FGD 5, p. 21)

Theme 5: Communication technology and social media having significant influence

Participants raised concern regarding the use of mobile phones, the internet, and other forms of social media and communication technology such as Facebook by young people in Australia and how this influenced their sexual health related knowledge, attitudes, and beliefs from an early age. How television and movies portrayed reality and young people’s ability to differentiate between this and actual reality were also identified as having a negative influence on young people’s behaviour. Participants suggested parents were concerned that access to these media exposed young people to situations and information that encouraged freedom and culturally unacceptable practices such as dating and sex before marriage.

“Everyone here [in Australia] has a mobile, and communication through Facebook, social network, all these social forums. They sit at the computer with this young man and talk, have secrets, but they don’t know his behaviours. This is actually misleading our young children.” (FGD 5, p. 15)

5.3.5 Construct 4: Issues of concern

The fourth construct derived from the FGD, consistent with the interview data, was ‘issues of concern’ with pregnancy, relationships, and family, the three underlying categories being:

5.3.5.1 Category 1: Pregnancy

Theme 1: Pregnancy occurring outside the traditional boundaries of marriage
Pregnancy occurring outside the traditional boundaries of marriage emerged as the overarching theme. Participants suggested the age young women were getting pregnant was of some concern, however, the pregnancies occurring outside the traditional boundaries of marriage was the key point of concern across the Queensland Sudanese community. There was also a perception the rate of pregnancies among young unmarried Sudanese Queensland women was increasing.

“Fourteen, 15 or 16…they just too young... But it's different when you're pregnant and you're married, the problem is getting pregnant before the marriage.” (FGD 1, p. 13)

Generally, participants believed a pregnancy before marriage had long-term effects on the young women’s wellbeing, including lost opportunity of completing education. There was considerable concern expressed about the effect this experience had on future options for marriage and security.

“No marriage anymore...the boy will say, ‘No, I'm not alone maybe there is another boy sleep with you’.” (FGD 4, p. 5)

Experiencing a pregnancy before marriage was thought to bring considerable shame upon the girl and her family. Participants also suggested the consequential interfamily conflict often resulted in family breakdown and unrest within the broader community.

“What happened previously, and even today, if a young girl happens to be pregnant, parents disown their daughter, because she did something that is not good for them...it is embarrassing to the family and to the girl.” (FGD 5, p. 23)

Traditionally, the male involved and his family would be expected to take responsibility for the young woman and a marriage would be arranged. Participants suggested in the current context this was often not occurring, resulting in the girl’s family being left with the responsibility and shame and, in some instances, the girl being forced to leave home, unsupported by either family.
The influence of the freedom perceived to be associated with living in Australia was thought to be the leading cause of the increasing unplanned pregnancies among young unmarried women. Generally, participants felt parents and the broader community also felt unable to deal with the situation in the traditional way due to the financial support young people could receive.

“If he say ‘no’ [to marry] back home [in Sudan], the boy will be beaten until he will agree. But in Australia, they will be given $4,000 by Centrelink…Government pay child support…this will interfere [with traditional practices].” (FGD 5, p. 23)

A number of participants commented that some young women were intentionally getting pregnant in order to gain freedom from parental boundaries and conflict in the home. Participants again thought the system of social and financial supports available in Australia enabled young people to make this choice.

“If I can’t do this in my parents’ house, this means I can do it in my own house… She can get angry, she can get pregnant, she can get some money… get out from the house.” (FGD 3, p. 13)

One group acknowledged that some parents within the target community were finding it difficult coping with the pressures of resettlement and the impact this change was having on the relationship with their children. Such pressures may result in increased intergenerational conflict, breakdown of the family unit, and, in some instances, lack of parental support for young people.

Participants within this group highlighted that parents needed more support and access to information to assist them to adjust, or to develop parenting skills necessary to support their children’s development in the context in which they now found themselves living.
5.3.5.2 Category 2: Relationships

Theme 1: Changing patterns of relationships and sexual behaviours

As highlighted earlier, dating and sex before marriage were considered culturally unacceptable practices within the traditional Sudanese community norms and beliefs. With further probing, participants suggested any form of touching between a man and a woman in a public domain was culturally unacceptable, and the perceived Australian social acceptance of public displays of affection had caused some difficulty between the generations within the community.

“When we come here we find it is really very different ... here you can go to train station, you find someone get kissing someone... in my country never ever to do that.” (FGD 2, p. 6)

The majority of participants thought this disparity in accepted normative behaviours was contributing to the changing attitudes and patterns of relationships and sexual behaviour among young community members. Changed behaviours such as dating and having relationships without parents’ approval of partners/friends were considered a key issue in concern to the broader Queensland Sudanese community.

“In my own country, boys meet girl, he come in the girl’s house and they talk ... In Australia, the park, the movies... they’re difficult.” (FGD 4, p. 2)

Participants thought the ability of parents to monitor and/or control friendships, relationships, and behaviours of young people within traditional culturally acceptable norms and practices was being influenced by the perceived freedom of young people, particularly their access to technology and social media.

“See, there are many ways of dating each other or contacting each other. There are mobile phones, Facebook... they can talk to whoever they want to talk to. It is a bit hard for parents to know which way they were using to contact each other. So there are many ways of contacting each other here.” (FGD 5, p. 25)
5.3.5.3 Category 3: Family

Theme 1: Changing traditional family structures: Loss of culture and parental control

With increasing freedom of youth came loss of parental control, along with a loss of cultural connectedness. Participants considered these factors were causing traditional family structures to change.

“Sudanese culture family is very important...when you bring your children [to Australia]...they change automatically. Really hard to accept this thing happen in front of you...can broke heart.” (FGD 2, p. 6)

Participants suggested that within families parents often felt as if they were no longer the dominant voice or seat of discipline as was their traditional role and perceived right. This was attributed to young people demanding autonomy. Participants also suggested parents often felt lost within the Australian legal system of child protection and noted how this conflicted with their traditional systems of discipline and dealing with the consequences of young people’s behaviour.

“According to the law, the government law, the parent is not allowed to impose by force, you do that the child report you, you’re in prison. Now, the parents say, ‘You went out and got pregnant... Go take care of yourselves’.” (FGD 3, p. 32)

Participants acknowledged resettlement and time change attitudes and beliefs and that young people were adapting faster than their parents. The majority felt young people still needed to respect their parents and not forget their culture.

“Yes, respect the parents should protect my culture, don't forget your culture ...You can take the culture of Australia but you know that's different.” (FGD 2, p. 22)

As highlighted earlier, young people were not attending community gatherings, which are the traditional place for young people to learn about a wide range of cultural and traditional attitudes and beliefs. Without an alternative pathway for gathering this
knowledge and understanding, participants were concerned young people would continue to disconnect from tradition and adopt Australian ways. This created ongoing intergenerational conflict and further disruption to traditional practices and roles.

“In the village... we listen to what people are talking. Nobody will invite you...you just go just sit down among people, you learn. In Australia now most parents don’t sit together with their kids, kids don’t sit with elders...don’t learn.” (FGD 3, p. 35)

Participants identified that parents and other adult community members experienced barriers in gaining information. Nonetheless, participants felt it was important for both parents and young people to learn how to negotiate this perceived shift away from traditional beliefs and behavioural expectations.

5.3.6 Overview of Community Focus Group Discussions findings

Findings from the community FGD provided valuable insight into community level cultural and social structures, normative beliefs, and behavioural expectations that may influence the behaviours of individuals of all ages within the target community. Generally, sexual health knowledge was thought to be low among the broader Queensland Sudanese community. Participants displayed a general awareness of HIV; however, the majority considered it was not a problem among migrant and refugee background communities in Australia. This misconception was associated with their pre-arrival experiences and misunderstanding of Australian visa entry requirements.

Poor levels of sexual health literacy and the cultural taboos associated with talking about sex impact on parents’ ability to address this issue with their children. There was a general inference that parental attitudes were beginning to change; nonetheless, differing attitudes and levels of sexual health literacy between adults and young people were thought to be leading to confusion and intergenerational conflict.

The perceived freedom of Australia and the opportunity for young people to gain an education were seen as key benefits associated with the move to Australia. However, participants considered the freedom young people have and/or demand was negatively
impacting on the sexual behaviour and wellbeing of the young target community members. The main areas of concern were: pregnancy among young unmarried women, loss of parental control, and loss of cultural connectedness. Traditional pathways of sharing information were perceived to be weakening, with many young people no longer attending community gatherings or ‘sitting’ with the adults to ‘listen and learn’. Participants considered this to be a major influence on a young person’s cultural and community connectedness.

Living in Australia exposed young people to a range of influences from an early age. Participants agreed the main message that needed to be emphasised was for young people to delay sexual activity and prevent negative sexual health outcomes, such as pregnancy, so that they could stay at school and successfully complete their education. They also considered it important to engage parents and the broader community in this education to assist in bridging the generational gap in knowledge and understanding identified by the participants.

5.4 Summary

The interview and FGD findings are summarised in sections 5.2.6 (page 176) and 5.3.6 respectively of this chapter. The interview findings outline the younger participants’ perspective on how living between traditional Sudanese normative beliefs and behavioural expectations and their perception of Australian sexual norms is influencing the sexual health knowledge, attitudes and beliefs, and behaviours of the young Queensland Sudanese community members. The FGD findings provide insight into how parents and other adults within this community are addressing the impact of living and parenting between these perceived divergent sexual cultures. The following chapter presents the findings of the convergence and triangulation of the Phase 3 interview and FGD data and the convergence of the Phase 3 survey results with the interview findings. Convergence of the findings from these three equally weighted strands (QUAN + QUAL + QUAL) presents a meta-inference of where the independent datasets converge or diverge. Identifying and exploring the similarities and disparities between the individual strand findings provides a richer contextualised multidimensional interpretation and understanding of the overall research results.
Chapter 6 Convergence and Triangulation of Findings

6.1 Introduction

The purpose of this chapter is to draw together data from the three independent parallel data strands of Phase 3 in a meaningful way. Convergence and triangulation of results from the survey \( (n = 229) \) and interview \( (n = 11) \) strands presented using descriptive narrative interlaced with representative quotes from individual interviews under the three consistent constructs knowledge, attitudes and beliefs, and behaviour add depth of meaning to the significant results in the survey. Convergence of the interview and community FGD \( (n = 19) \) findings, presented using the overarching category and four underlying themes identified, provide a deeper intergenerational understanding of the constructs explored in this study.

Comparing and contrasting findings from these separate concurrently collected and analysed datasets identified similarities and disparities of findings and provided a depth and consistency of findings that effectively answered the research questions. Presented again using the core IBM variables knowledge, attitudes and beliefs, findings from the convergence of this study’s datasets provided further understanding and awareness of underlying beliefs and other key factors that determine intention to behave. Convergence of findings from the three datasets also increased confidence in the authenticity, meaning, and trustworthiness of the overall findings and inferences (Bazeley, 2009; Creswell & Plano-Clark, 2007; Risjord et al., 2002; Spicer, 2004).

6.2 Convergence of the Survey Results with Interview Findings

This section of the chapter presents the convergence of the survey \( (n = 229) \) results with the findings from the 11 interviews with the 16-24 year old participants. Convergence of the survey and interview data occurred via a process of comparing and contrasting (without transformation) using a matrix approach (Creswell, 2009; Creswell & Plano-Clark, 2007; Polit & Beck, 2012). The consistent constructs knowledge, attitudes and beliefs, and behaviour used to guide the separate concurrent data analyses were again used to form the matrix framework and structure this chapter.
6.2.1 Construct 1: Knowledge

The interview participants’ perception of higher levels of HIV knowledge and awareness compared to STI knowledge was consistent with the survey results. The interview participants considered girls traditionally had less access to sexual health information and, therefore, lower levels of knowledge. The survey results, however, suggest this may not be the case post resettlement, with females demonstrating significantly higher mean STI and HIV knowledge levels and more frequent access to sexual health information compared to their male peers.

“In Sudan girls are not allowed to go round or take information. Parent worry about girls, boys are much freer.” (IDI 5, p. 7, Male)

The interview participants’ belief that the age someone arrived in Australia and how long they had lived here influenced the sexual health knowledge of young Sudanese Queenslanders was part way supported by the survey results, with time since arrival in Australia having a statistically significant positive effect on STI ($F(1, 191) = 14.7, p < .001$, partial eta squared ($\eta^2$) = .072) and HIV ($F(1, 191) = 12.6, p < .001$, partial eta squared ($\eta^2$) = .062) knowledge levels. However, further exploration of the effects of these two variables on knowledge, along with behaviour, is needed before further inferences can be drawn.

The majority (61.6%) of the survey participants reported they had accessed sexual health related information at some stage. Nonetheless, there was a strong message from the interview participants that young people still faced multiple barriers to accessing information and more education was needed.

Survey results indicated that doctors, friends, and school programs were three of the most used and trusted sources of sexual health information and help, and parents, while trusted, were rarely used. The interview findings supported this, with the added strong message that cultural and traditional normative beliefs and attitudes regarding talking about sex were strong deterrents to young people broaching this topic, especially with their parents.
“Definitely in most cases they get it at school because at home I’m very sure there’s no parent, or maybe few, but I’m very sure 75% or 80% of the parents never talk to their kids about sex.” (IDI 3, p. 1, 6, Male)

6.2.2 Construct 2: Attitudes and beliefs

Generally among the interview participants HIV was not considered a problem in Australia. The survey results suggested some understanding of the HIV risk in Australia; however, they also supported the feelings of fear, shame, and stigmatisation attached to HIV portrayed by the majority of interview participants. Both survey and interview data results suggest a widespread belief that only gay people were at risk of HIV in Australia and those living with HIV had only themselves to blame. This convergence suggests further education and destigmatisation of HIV are needed.

“Generally there’s stigma. I believe nobody would be friendly with person [HIV +ve], everybody would be like, ‘Hell no.’ Maybe even say no to shaking hands. I know they’re just frightened with AIDS.” (IDI 3, p. 8, Male)

Approximately 50% of the survey participants self-reported that living in Australia had affected how they think about sex and behave sexually. This was consistent with the interview findings where the freedom of living in Australia was perceived as one of the key factors influencing the young people’s behaviour and sexual decision making.

“I can see a lot of Sudanese youths; they’re getting really addicted to what the Australian population do [sexually].” (IDI 2, p. 4, Female)

From the survey data, peer pressure emerged as one of the primary behavioural determinants influencing a young person’s decision to have sex before marriage. The interview findings supported this while suggesting also that young people perceived more peer pressure associated with having Australian or ‘other’ non-Sudanese background friends.

“Well, having friends from like other backgrounds who are allowed to have sex... then yeah they might also want to do it.” (IDI 11, p. 15, Female)
Survey participants reported culture (49.3%), religion (52.4%), and their parents (52%) as having relatively equal effect on how they thought and felt about sex. The interview participants agreed these factors all influence the attitudes, beliefs, and behaviours of young people to some extent; however, they strongly implied the influence of each of these factors was reducing as young people adjusted to living in Australia. Particular emphasis was placed on the influence the perceived right to freedom young people associated with living in Australia was having on parents’ ability to ‘control’ and discipline according to traditional parenting norms.

“This very much...believe in tradition more than the religion... but parents they lost control...before in Sudan they were in 100% control.” (IDI 5, p. 4, Male)

6.2.3 Construct 3: Behaviour

Interview findings suggest an underlying concern about young people having sex from as young as 13 or 14 years of age. This is contrary to the survey results that indicated only a small percentage of participants had commenced sexual activity by 16 years of age; and the majority of survey participants self-reported they had not initiated any form of sexual activity until 18 years of age or older.

“Here in Australia I was going to say, especially kids with Africa origin, I’m looking at from 13 onwards definitely, I’m fairly positive you’ll find kids at that age because I’ve seen so many with 13, 14 years of age and they’re already pregnant.” (IDI 3, p. 9, Male)

The majority (68.2%) of survey participants self-reported always using condoms; however, the majority of interview participants believed young people were not using condoms given the increasing number of pregnancies occurring among their peers.

“I see...a lot of girls are getting pregnant. That means they didn’t use protection, if they used the protection, they wouldn’t get pregnant.” (IDI 2, p. 6, Female)
This belief is part way supported by the survey data. While 46.5% of the survey participants self-reported they used a condom at their last sexual encounter, only 12.1% reported using some other form of contraception, and 9% reported they had experienced sex leading to a pregnancy. The reported rate of sex leading to an STI was lower (3.1%); however, the similarity of the reported and perceived patterns of condom and contraception use data suggested young people were at risk of unplanned pregnancy and STI.

“Here youth are very, very high risk...” (IDI 3, pp. 8, 16, Male)

Consistent with the survey results, dislike of condoms (as they “reduced sexual pleasure”) emerged as a strong behavioural deterrent to condom use from the interview findings. The majority of interview participants identified fear of pregnancy as the strongest behavioural motivator behind condom use. The interview findings also suggested condoms and contraception use was influenced by a belief they were associated with promiscuity and infertility.

6.2.4 Overview of the survey and interview convergence

Consistency of findings across these datasets (such as the low level of sexual health knowledge reported in the survey results being supported by the interview theme ‘knowledge is limited and often inaccurate’) contributes to the response validity of the self-reported survey results and to the richness of the overall understanding (Dariotis et al., 2009; Polit & Beck, 2012). Detection of minor discrepancies, such as the survey reporting higher levels of knowledge among the female participants than the males, despite a widely held belief among the interview participants that women traditionally have less access to information and education, provided valuable information to guide future education and intervention that may have otherwise remained unknown.

Both datasets suggest knowledge, attitudes, beliefs, and patterns of sexual behaviour are changing, and support living in Australia as one of the key factors influencing these changes. The survey results report young people are generally talking about sex and protective behaviours, such as condom use, with their sexual partners and that, overall, they are engaging in low levels of sexual risk taking behaviours. Nonetheless, the interview data suggest perceptions of ‘increasing freedom of youth’ and ‘cultural
barriers to openly talking about sex’ contributing to sex occurring at a young age and ‘increasing pregnancy rates’ among young people are leading to considerable intergeneration conflict. These perceptions need addressing.

The majority of survey participants self-reported they had accessed sexual health information, a positive result. But the interview findings suggest young people need ‘more information and education’ to overcome the challenges they face making sexual decisions within the conflicting sexual norms they encounter living in Australia and that they are still experiencing considerable barriers accessing this information. The low perceptions of sexual risk and rates of sex leading to an STI or pregnancy reported in the survey data and the widely held belief, ‘HIV is not a problem in Australia’, support the need for more information and education.

Comparing and contrasting data from the survey and interview strands provided a more accurate in-depth understanding of the constructs being explored in this study (Creswell, 2014; Östlund et al., 2011). Convergence of the interview and FGD findings provided insight into the intergenerational similarities and disparities occurring within these constructs.

6.3 Convergence of the Interview and Community FGD Findings

The manner in which the findings from the interviews (with the 11 16-24 year old self-identifying members of the Queensland Sudanese community) converge with those of the community FGD (with 19 participants aged from 25 to 51 years [\(M = 36.6\) years]) is highlighted in the following section. Convergence and integration of these two equally weighted qualitative datasets resulted in the identification of a number of similarities and differences between the strands’ themes. Convergence and coding of similarities resulted in the identification of one overarching category Impact of Change and four underlying themes, namely:

- Theme 1: Young people have more freedom,
- Theme 2: Attitude to talking about sex is more open,
- Theme 3: Attitudes and beliefs towards relationships and sexual behaviour are different, and
Theme 4: Traditional family structures and parenting roles are changing.

Beginning with a brief discussion of the overarching category, the underlying similarities and differences within these four themes are presented as thick narrative interlaced with comparative quotes from each strand’s transcripts. Convergence of the qualitative strands provided a rich contextualised intergenerational understanding of the factors influencing sexual health related knowledge, attitudes, and beliefs from the participants’ perspective, along with their views on the sexual health related issues causing greatest concern to them and the broader community.

As outlined in Chapter 3 section 3.7 (page 106), the comparing and contrasting of interview data with community FGD data occurred via a twostep process. Firstly, the categories and themes identified by in-depth thematic analysis of each of these independently analysed strands were reviewed to identify any similarities and disparities. The individual transcripts and accompanying findings for each strand were then revisited to ensure the intent of the discussion was maintained, thereby ensuring the capture of subtle intergenerational and cultural nuances expressed in the participants’ responses were captured.

6.3.1 Overarching category: Impact of change

Consistency of themes highlighted between the interviews and community FGD findings pertaining to change informed the formation of the overarching category, *Impact of change*. The majority of participants from each of these strands considered sexual health related knowledge, attitudes, and beliefs, along with patterns of sexual behaviour, were changing among the young members of the Queensland Sudanese community. Participants of all ages saw this having an impact on the sexual health literacy and wellbeing of these young people. While there were subtle differences between how the interview participants perceived the significance of these changes compared to the FGD participants, a number of similarities emerged about why these changes were occurring and the impact this was having on individuals and the broader community. The following discussion provides a comprehensive intergenerational narrative of these similarities and differences.
6.3.2 Theme 1: Young people have more freedom

Participants of all ages identified freedom, safety, and opportunity as commonly desired outcomes of living in Australia. All participants also agreed the ‘freedom’ of living in Queensland was allowing young people to achieve a better education and hence employment opportunities. Freedom was highlighted as the strongest theme emerging across the two datasets, in association with changing sexual health related knowledge, attitudes and beliefs, and behaviours. The interview participants considered these changes a natural part of learning to live within their new bicultural society. Community FGD findings, however, suggest an underlying negativity within the target community towards the perceived freedom of young people and the resultant changes. Consistent across the strand cohorts was a belief many young people lacked the necessary knowledge and skills to address the impact of this freedom.

“Here it's different [in Australia], it's open, you're allowed to do whatever you want... In Africa, you're not allowed to do anything.” (IDI 4, p. 10, Female)

“Here, children are just going their own way.” (FGD 5, p. 8)

There was cross-generational consensus that the perceived sense of increased freedom young people experienced and/or demanded living within the Queensland sociocultural context compared to traditional Sudanese normative behavioural expectations was having a negative influence on the sexual behaviour of some young people. There was also agreement that this was influencing parents’ ability to cope with and/or ‘control’ what they considered culturally unacceptable changes in young people’s behaviour.

FGD participants considered this sense of freedom was strongly associated with the increasing rates of pregnancy perceived to be occurring among young single women within the community. The interview participants acknowledged this sense of freedom was exposing young people to increased peer pressure to have sex; however, they attributed the rising pregnancy rates mainly to the young people’s poor sexual health knowledge, low perceptions of sexual risk, and reluctance to use condoms and/or contraception.
The perceived freedom and social acceptance in Australia of young people’s right to choose friends and date independently of parental permission was highlighted by all participants as a major contributing factor to intergenerational and family conflict. Community FGD participants considered this freedom was also leading to a loss of cultural and community connectedness among young people, which added to the intergenerational conflict. A number of interview participants supported this belief to some extent; however, they considered adults holding fast to traditional beliefs and practices and not acknowledging the difficulty faced by young people learning to live within *the culture here in Australia* (IDI 1, p. 21, Female) was leading the young to seek freedom and socialise outside traditional networks.

“[Parents] holding very fast...they don’t want their children to...know about sex...about this Australian culture.” (IDI 1, p. 7, Female)

“We are worried about the culture and too much freedom in Australia. They [young people] really abuse it, do whatever they want without advice from elders, from fathers... Here [in Australia] children are just going their own way... we [parents] are no longer in control.” (FGD 5, pp. 3, 8, 16)

There was also consensus that Australian laws and system of social services supported young people’s freedom and influenced their behaviour. Community FGD findings suggested parents considered laws and social services that assist young people to leave home and independently access money and housing were encouraging young people to engage in ‘bad’ behaviour and were undermining their parental rights to establish boundaries, control, and/or discipline in a way they perceived as protective and culturally acceptable.

This negativity did not filter through as strongly in the interview narratives; however, it was portrayed that some young community members were abusing the ‘system’ and using it as a means to gain freedom from restrictive traditional parenting boundaries around dating and sexual relationships outside of marriage. On the other hand, interview participants considered the access to financial, health, and social support offered in Australia enabled young people experiencing difficulties, such as an unwanted pregnancy, to make different choices compared to what traditionally would
have occurred. This was particularly important if the families did not support the young person’s choices.

Interview and FGD participants concurred that community members of all ages lacked knowledge and understanding of the Australian legal and social services system and, while young people were thought to be learning faster than their parents, all agreed this gap needed to be addressed as a means of reducing intergenerational conflict.

“[Parents] say, ‘I brought my kids here, give them a new life’ but when parents say they [young people] shouldn’t have sex… girl acts surprised…call cops. Cops come and start warning the parents. But the parents were only trying …they don’t encourage kids to have sex at an early age.” (IDI 3, p. 3, Male)

“The problem here, government gives money…they [children] don’t listen…if you are saying ‘why you do that’…they say ‘mum talk too much, I don’t want to live with you, I’m going to run my own house, I have money’. In my country even 25 years no-one can give them money… But here [in Australia] you can’t control [children] because of this [government] money.” (FGD 2, p. 25)

Despite differing attitudes among the interview and community FGD participants on acceptable boundaries, there was a general consideration across the age groups that parents and other community elders needed to develop more awareness of the sociocultural context in which they and their children were now living. Community FGD participants suggested young people needed to acknowledge and respect traditional beliefs and practices and their parents. Both groups acknowledged the challenges associated with finding the balance between these two beliefs and suggested that culturally and contextually appropriate information, developed in consultation with all community members, would assist in addressing some of these challenges.

6.3.3 Theme 2: Attitude to talking about sex is more open

Resounding across the findings from both strands was the belief that sexual health was a sensitive topic not openly addressed or spoken about within traditional Sudanese social
and cultural practices. Community FGD participants suggested parental reluctance to talk about sexual health was also linked to a fear that such conversations would encourage young people to initiate sexual activity and do ‘bad’ things.

“Our families don’t talk about this kind of stuff. They [parents] don’t mention it...you aren’t allowed to mention it.” (IDI 6/7, pp. 1 – 2, Female)

“At home we can’t talk with [children]. If you talk this thing in the Sudanese community...we are making it worse...they will do it.” (FGD 3, p. 1)

The majority of participants believed openly talking about sex was the accepted Australian social norm. There was consensus among all participants that with time and access to information ‘attitudes were changing’ towards talking about sexual health related matters for both young and older Sudanese community members. All participants considered young people were adopting and adjusting to the perceived Australian social norm of sexual openness at a faster rate than older community members.

This disparity in the rate of change was leading to intergenerational tension or confusion, particularly when parents strongly adhered to traditional normative beliefs and were unwilling to communicate openly with their children. Interview participants considered openly talking about sex and other sexual health related beliefs and behavioural expectations enabled young people to develop skills and knowledge necessary for growing up in Queensland. Unfortunately, both cohorts agreed the first time many families talked about sex was when a young person was facing a potential negative sexual health related outcome, such as an unintended pregnancy.

Community FGD participants considered young people experienced few barriers to learning about sexual health due to the availability of information and their ability to adjust to change more readily than adults. In contrast, interview participants considered young people still faced considerable barriers to accessing such information. In particular, they considered traditional beliefs and attitudes held by many of the older community members continued to be the most significant barrier to learning and talking
about sex. They further suggested this attitude also prevented young people seeking cultural advice.

All participants considered ‘knowledge is important’ but acknowledged traditional attitudes and beliefs associated with talking about sexual health were creating barriers for both young people and adults to learn about how to live harmoniously between traditional beliefs and those of their new country. The majority of interview participants acknowledged the barriers and challenges to changing parental and traditional attitudes towards talking about sex. They proposed a more open attitude towards talking about sex would assist young people and their families to navigate the differing cultural and social attitudes they experience living within the Queensland community. All participants agreed a willingness and ability to talk about sexual health related issues and to discuss varying beliefs within the family unit would assist in reducing some of the intergenerational confusion and conflict associated with this sensitive topic.

6.3.4 Theme 3: Attitudes and beliefs towards relationships and sexual behaviour are different

Consistent across the interviews and community FGD findings was a belief that attitudes and beliefs towards relationships and sexual behaviour were different in Australia compared to traditional Sudanese norms and that this was leading to changing patterns of behaviour among young people. Both cohorts were in agreement that sex before marriage and dating were considered culturally unacceptable behaviours, and portrayed similar narratives concerning traditional beliefs and practices around how relationships were initiated and the parents’ role in arranging marriages.

“Oh no, you aren’t allowed boyfriends or sex before marriage... it’s not okay.” (IDI 11, p. 3, Female)

“Back home [in Sudan] you didn't have girlfriends or boyfriends.” (FGD 2, p. 4)

The practice of arranged marriages was presented by a number of the community FGD participants as a protective cultural practice whereby families determined the suitability
of the match based on a number of factors such as family social standing within the community and the dowry or ‘bride price’. There was consensus that young people were dating and initiating relationships without parental involvement or approval within the Queensland Sudanese community.

There was some disparity among participants regarding the age when marriages traditionally took place. There was a common belief that young people were initiating sexual relations at a younger age in Australia and many lacked the knowledge and skills necessary to engage in this type of behaviour.

“The bad thing is that they’re younger and younger, really young just go and have sex ...like 14 or 15...13, that’s not good.” (IDI 6/7, p. 5, Female)

“Here, early maybe 13, 14 they begin [having sex]” (FGD 2, p. 12)

The majority of community FGD participants raised concern over the influence of social media and technology on young people’s behaviour and how these enabled them to initiate friendships and relationships without parental supervision or control. This topic did not emerge as an issue within the interview narratives; rather, these forms of communication technology were identified as a useful source of sexual health information that negated the embarrassing need to raise the topic with parents or others who might disapprove.

“They do a lot...mobile texting, Facebook, and the Internet. What are they doing, you don’t know... But when you talk, they say ‘This is Australia Mum, not Africa, there’s a freedom here.’ That’s their attitude.” (FGD 4, p. 2)

Interview and FGD participants concurred young people were beginning to date and have relationships with people from outside of traditionally accepted social and tribal networks. While some FGD participants considered this still raised some concern among families, participants of all ages posited that parents’ acceptance of such a relationship was dependent on how it was initiated and whether the young people involved demonstrated respect for traditional normative practices. For example, participants from both strands indicated parents were more accepting of such a
relationship if the young male involved and/or his family followed the traditional process of approaching the young girl’s family, particularly if this occurred prior to a relationship developing.

Concern about perceived increasing rates of pregnancy among young unmarried women arising from the changing attitudes and beliefs towards relationships and associated patterns of sexual behaviour was highlighted as a common theme across the qualitative datasets. Participants from both strands considered these changes also placed young people at risk of HIV, though their perception of HIV risk was based on pre-arrival experiences of HIV and inaccurate knowledge and understanding of visa entry and testing requirements. The theme Aware of HIV but it is not a problem emerged from both datasets, demonstrating a cross-generational misconception about HIV in Australia and a general belief that all migrant and refugee background communities are at minimal risk of HIV as they are not allowed to enter if HIV positive. There also appeared to be little knowledge or concern of other STI within either cohort.

“[HIV] really big in Africa... They wouldn’t take you in Australia...if you have this illness. I’ve never seen anyone talking about it here.” (IDI 1, p. 1, Female)

“People believed HIV is only in Africa and not here in Australia... A person who is migrating goes to medical check-up...he found himself free from disease, then he had a concept ‘We are free from diseases’...everybody has been checked up and there is no problem [in Australia].” (FGD 5, p. 12)

Both cohorts agreed the rate of pregnancies occurring among young unmarried women was an indicator of low and inconsistent condom use. Participants of all ages expressed a belief that condoms and contraception were considered culturally unacceptable practices, associated with reduced sexual pleasure, promiscuity, and, in the case of hormonal contraception, infertility. Despite these widely held beliefs, the interview participants thought young people were using condoms due to fear of cultural shame and consequences. The community FGD participants projected parents would prefer their children to be educated and informed about safer sex practices than experience a pregnancy outside of traditionally accepted norms.
Participants of all ages acknowledged that, while not of great concern to young people, changing attitudes towards relationships and associated altered patterns of behaviour, such as dating, going out without parental approval of friends, and having sex before marriage, were creating concern among the broader community. Community FGD and the interview participants shared a belief these changes were generating considerable intergenerational conflict within families. Perceived loss of parental control over the relationships and sexual behaviours of their children was causing frustration and anger among parents and elders. Young people were thought to be embracing the change as they learnt to live within their new bicultural community.

6.3.5 Theme 4: Changing traditional family structures and parenting roles

There was consistency across the data that the variance of Australian sociocultural norms from the traditional Sudanese normative beliefs and behavioural expectations was resulting in changes to traditional family structures and parenting roles. Resonating across the data of both qualitative strands was a belief that parents were experiencing a loss of control in their ability to parent and discipline according to their traditional beliefs and accepted norms. FGD participants perceived this as a negative outcome of living in Australia; however, the interview participants, while acknowledging their parents situation, generally considered it inevitable and a positive.

As discussed earlier, participants from both strands considered freedom as one of the key factors leading to changing patterns of sexual behaviour, parenting roles, and family dynamics.

All participants agreed young people were more ready and willing to change compared to adults. They also believed young people’s perceptions of pressure and/or desire to gain autonomy and independence from traditional family structures was stimulated by their more ready access to a wide variety of information and people. Young people adjusting to life in Australia, including learning English at a more rapid rate compared to their parents, was also thought to drive changing parental roles as young people were becoming less dependent on parental support.
Narratives describing scenarios of young people misusing and/or abusing the ‘freedom’ to force parents to change resulting in this sense of lost parental control were presented in both strands. This included examples of young people calling the police when parents refused to let them go out with friends or threatening to leave home as they could easily get financial support to establish their own unit. Participants of all ages described the fear and anger this created within family units. There was some disparity between how participants from each strand perceived the impact of this change on traditional parenting roles; not surprisingly, community FGD participants expressed a greater concern with and resistance to this change.

“Children are not living with [parents] anymore. In Sudan you’re not allowed to leave the house unless you’re going to your husband’s house. [Parents] don’t understand, they think [children] have to stay with them and follow the rules. Children do not like that, leave and go live by themselves. That’s the most thing [parents] hate.” (IDI 6/7, p. 8, Female)

“These young people… they don’t want to listen, be controlled by parents or any other elders in their community. They move freely.” (FGD 5, p. 1)

6.3.6 Overview of the interview and FGD convergence

Comparing and contrasting data from these two strands identified consensus across the age groups that the disparity between traditional Sudanese sexual and relationship normative beliefs and perceived Australian norms was creating intergenerational confusion, conflict, and change. Both groups highlighted the perceived freedom of youth in Australia as the issue having the most impact on changing young people’s sexual behaviour and relationship with their parents. The younger participants generally saw change, such as increased freedom and autonomy, as an inevitable positive part of acculturating to life in Australia. The older participants suggested the freedom young people have and perceive as their right in Australia had a strong negative influence on young people’s sexual behaviour. They also considered this increasing sense of freedom was responsible for the cultural disconnectedness they saw occurring among young people in their community and the loss of parental control over the behaviour and relationships of young people. Both age groups identified this perceived right to freedom and the intergenerational disparity in acceptance of the
accompanying changes as the key factors creating disharmony and conflict within families.

Both age groups acknowledged the sociocultural sensitivity associated with sexual health, and the difficulties this creates in openly talking about sex. Nonetheless, there was consensus that knowledge and open communication was important in order to prepare the young people to make safe informed sexual decisions within their new bicultural society, particularly if they were choosing to engage in sexual behaviours incongruent with traditional behavioural expectations.

Findings from the interview and FGD convergence, summarised in Table 6.1, provided an in-depth intergenerational understanding of this culturally sensitive issue grounded firmly within the participants’ perspective and context of the situation (Ager, 2000; Liamputtong, 2013). Such understanding emphasised the need for increased communication and collaboration between the young people and adults within the community about sexual health related matters as a key step in addressing family tensions and the increasing negative sexual health outcomes, such as the perceived rising pregnancy rates.
Table 6.1

Summary of the similarities and differences between the interview and FGD findings

<table>
<thead>
<tr>
<th>Overarching category</th>
<th>Impact of change</th>
<th>FGD</th>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change was having a strong negative effect on sexual health and behaviour</td>
<td>Change is creating intergenerational conflict</td>
<td>Adults were holding fast to traditional beliefs</td>
<td>Young people were acculturating and adopting change faster than adults</td>
</tr>
<tr>
<td>Overarching category</td>
<td>Freedom of youth</td>
<td>Relationships and sexual behaviour</td>
<td>Talking about sex</td>
</tr>
<tr>
<td>Themes</td>
<td>A perceived sense of increased freedom and right to autonomy was influencing young people’s sexual behaviour. Australian laws and system of social services promoted freedom and influenced behaviour.</td>
<td>Differences between Australian and traditional Sudanese norms created intergenerational confusion, conflict, and behavioural change. Condoms and contraception were associated with reduced sexual pleasure, promiscuity, and infertility.</td>
<td>Sexual health was a culturally sensitive topic; however, openly discussing sex was the perceived Australian norm. Knowledge is important and attitudes towards talking about sex are changing.</td>
</tr>
<tr>
<td>FGD</td>
<td>Freedom was having a strong negative influence on sexual behaviour. Australian laws were negatively influencing young people’s behaviour, cultural connectedness, and causing loss of parental control.</td>
<td>Behaviours were changing and this was causing increased negative outcomes.</td>
<td>Changes were inevitable and not perceived as a strong negative.</td>
</tr>
<tr>
<td>Interviews</td>
<td>Gaining freedom was a positive part of learning to live within their new bicultural society. Australian laws support young people, particularly young people in need of help.</td>
<td>Fear of consequences associated with an unplanned pregnancy influenced condom use rather than fear of STI or HIV.</td>
<td>Parents were generally reluctant to talk about sex; but they are beginning to understand the need to change.</td>
</tr>
<tr>
<td>FGD</td>
<td>Condoms and contraception are against traditional norms but there was emerging acceptance of their place in preventing negative outcomes.</td>
<td>Talking about sex promoted sexual initiation and promiscuity.</td>
<td>Perceived as a negative outcome of living in Australia.</td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
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</tbody>
</table>
6.4 Summary

Convergence of the survey and interview data enabled the personal perspectives and associated cognitive rationalisations of the interview participants to be compared and contrasted with the numerical survey findings across a number of common topics. Overall, the interview findings were found to support the survey results. The identification of these commonalities increased the validity and trustworthiness of the survey results and inferences identified (Creswell & Plano-Clark, 2007; Polit & Beck, 2012) and provided greater depth of understanding of, confidence in, and accuracy of the results. The divergent results, such as those relating to knowledge levels among young women, discussed in section 6.2.1 (page 202), while enriching the contextualised understanding of the research phenomenon (Jick, 1979; O’Cathain et al., 2010; Pluye, Grad, Levine, & Nicolau, 2009), highlighted issues for further discussion and exploration (Creswell, 2009; Creswell & Plano-Clark, 2007; Jick, 1979; Moffatt et al., 2006; Pluye et al., 2009; Polit & Beck, 2012).

The convergence of data from interviews and the community FGD provided an in-depth intergenerational understanding of the commonalities and disparities in sociocultural normative sexual health related attitudes and beliefs. It also highlighted the factors perceived to be influencing patterns of sexual behaviour and causing conflict within families from the context of the participant experiences. Understanding these intergenerational differences and perspectives provided valuable insight into the shifting dynamics occurring between the generations and how this may affect their sexual behaviour and attitudes. While there was often a disparity in the acceptance of changing sexual health attitudes, beliefs, and associated patterns of behaviours between the interview and community FGD findings, convergence of the identified themes and corroboration of similar attitudes demonstrated that participants of both strands held some awareness of the attitudes and beliefs of the other sample group.

Acknowledging the cultural sensitivity of the topic and the conflicting pressures of settlement, both groups offered similar solutions to many of the themes and associated issues of concern. For example:
1. Sexual health information and education needed to be introduced early after settlement for both young people and their parents;
2. Access to sexual health information and education was particularly important for young people arriving as adolescents (12-16 years of age);
3. The school setting was an acceptable location to deliver sexual health information and education to young people;
4. Parents and adults, particularly those with adolescent children, needed access to similar information to their children early post arrival to help reduce interfamilial confusion and conflict; and
5. Parents needed support to understand the different variables influencing the behaviour of young people living in Queensland in order to prepare them to communicate more openly about sexual health with young people.

While not necessarily reflective of the broader Queensland Sudanese community’s attitudes and beliefs, these findings provided contextualised intergenerational insight and depth of understanding of this research. They also provided insight into potential solutions considered acceptable and relevant by young people and their parents. To further explore and explain the commonalities and discrepancies identified from the convergence of the three independent equally weighted data strands discussed in this chapter, data are compared and contrasted in relation to the existing literature in the following discussion chapter.
Chapter 7 Discussion

7.1 Introduction

The purpose of this study was to explore the sexual health knowledge, attitudes, and beliefs of the Queensland Sudanese community along with the self-reported patterns of sexual behaviour of the 16-24 year old members of this predominantly refugee background community. This study draws inferences based on factors perceived by the participants to be key determinants influencing sexual health knowledge, attitudes and beliefs, and behaviours. It was not the intent to examine the relationship between identified indicators and behaviours. The use of a convergent parallel mixed methods approach led to an in-depth intergenerational understanding of the factors perceived to be influencing these variables. The Integrated Behavioural Model (IBM) informed the development of this study and provided a well-established framework to guide exploration of determinants known to influence, motivate, and predict sexual behaviour (Fishbein, 2000). For consistency, the determinants of behaviour from the IBM (knowledge, attitudes, beliefs, and confidence) that informed the consistent constructs used throughout this thesis have again been used to form the structure of this chapter.

The key findings from this study’s research questions corresponding to these consistent constructs (See Table 1.1, page 10) are discussed in relation to existing literature, with a particular focus on comparison of this study’s survey results with those of the 4th NSASSSH (2008). This comparison provided noteworthy parallels and points of difference at a similar point in time between this study’s cohort and a representative sample of Australian peers (Agius et al., 2010; Smith et al., 2009). The 5th NSASSSH results were released in April 2014 during the final stages of this study and included several new items measuring youth issues, such as the use of new technologies, social media, and sexuality education in schools consistent with themes emerging from this study’s qualitative strands (Mitchell et al., 2014). Where relevant, these 5th NSASSSH results are also discussed, thus providing further depth of understanding of this study’s findings (Creswell, 2014). This chapter concludes with this study’s limitations. The final chapter of this thesis will draw together the key points of this discussion chapter in relation to how they can inform future research, practice, and education.
7.2 Knowledge

Knowledge about STI and HIV was low among this study’s 16-24 year old participants, a finding consistent with previous Australian research with refugee background youth (McMichael, 2008) and internationally with Sudanese participants both pre- (M. M. Ali et al., 2001; Moukhyer et al., 2006) and post resettlement (B. Y. Holt et al., 2003; Lazarus et al., 2006; Tompkins et al., 2006; Willis & Nkwocha, 2006). Unique to this study, however, was the ability to directly compare young Sudanese Queenslanders’ knowledge with two other groups of young Australians surveyed using the NSASSSH instrument.

Compared to the 4th NSASSSH 2008 results, this current study’s 16-24 year old participants’ knowledge of STI and HIV was low (Agius et al., 2010; Smith et al., 2009) (See Table 7.1). Such low levels of sexual health knowledge suggest this study’s participants’ sexual health education needs to be given priority as they may lack the level of sexual health literacy necessary to adopt and to maintain protective behaviours such as condom negotiation (Agius et al., 2010; Jones & Haynes, 2006; Lim, Hellard, Aitken, & Hocking, 2007).

Table 7.1

<table>
<thead>
<tr>
<th></th>
<th>Current study</th>
<th>4th NSASSSH 2008*</th>
<th>Aboriginal &amp; Torres Strait Is. 2006*</th>
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<tbody>
<tr>
<td><strong>Mean HIV Knowledge Score</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>6.1</td>
<td>9.3</td>
<td>NR</td>
</tr>
<tr>
<td>Female</td>
<td>8.1</td>
<td>9.4</td>
<td>NR</td>
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<tr>
<td>Total</td>
<td>6.8</td>
<td>9.3</td>
<td>NR</td>
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<tr>
<td><strong>% HIV Knowledge items correct</strong></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>56%</td>
<td>85%</td>
<td>54%</td>
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<tr>
<td><strong>Mean STI Knowledge Score</strong></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>3.2</td>
<td>6.7</td>
<td>NR</td>
</tr>
<tr>
<td>Female</td>
<td>4.4</td>
<td>7.5</td>
<td>NR</td>
</tr>
<tr>
<td>Total</td>
<td>3.6</td>
<td>7.2</td>
<td>NR</td>
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<tr>
<td><strong>% STI Knowledge items correct</strong></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td>33%</td>
<td>65%</td>
<td>36%</td>
</tr>
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*NSASSSH = National Survey of Australian Secondary Students and Sexual Health (Agius et al., 2010; Smith et al., 2009); *(Fagan & McDonell, 2010); NR = Not Reported.
This is particularly so given the similarities between this study’s younger participants’ knowledge of STI and HIV and a sample ($N = 131$) of 15-19 year old remote north Queensland Aboriginal and Torres Strait Islanders (See Table 7.1) (Fagan & McDonell, 2010). While these populations have distinctly different sociocultural characteristics, the similarity in results, combined with their shared experiences of socio-economic disadvantage, social exclusion, and limited access to appropriate health care services (Colic-Peisker & Tilbury, 2008; G. C. Miller, McDermott, McCulloch, Fairley, & Muller, 2003), suggest sexual health should be considered a priority for this study’s target group as it is for Aboriginal and Torres Strait Islander communities around Australia (Fairley, 2011; Larkins et al., 2007; G. C. Miller et al., 2003; P. J. Miller, Law, Torzillo, & Kaldor, 2001).

The low levels of knowledge found among this current study’s younger participants also suggest they may lack the knowledge and skills necessary to address the conflicting sociocultural sexual norms and behavioural expectations they encounter post resettlement in Australia. Consistent with results of previous research (McMichael, 2008; McMichael & Gifford, 2009), participants of all ages in this current study believed young Sudanese Queenslanders need access to accurate sexuality information early post arrival and before sexual initiation (Macbeth, Weerakoon, & Sitharthan, 2009; Mueller, Gavin, & Kulkarni, 2008) in order to prepare them to make sexually and culturally safe decisions within the context of their new sociocultural environment. This level of community awareness is an important finding as community led interventions that respond to community perceived priorities are known to be effective in reducing risky sexual behaviours and preventing STI and HIV (Godin et al., 2008; G. R. Gupta, Parkhurst, Ogden, Aggleton, & Mahal, 2008; Rhodes et al., 2012).

For this current study’s younger participants, the significant positive relationship between knowledge and length of time in Australia ($p < .001$) suggests young Sudanese Queenslanders are accessing information and gaining knowledge over time. This is a positive finding. Higher levels knowledge do not necessarily equate to less risky patterns of sexual behaviour (Agius et al., 2010; Jones & Haynes, 2006; Lim et al., 2007), nonetheless, access to information is a well-established prerequisite to changing behaviour and reducing negative sexual health outcomes (Kang, Skinner, & Usherwood, 2010; Kirby, Laris, & Rolleri, 2007).
The majority of this study’s qualitative strand participants suggested sexual health knowledge is equally low among the adult Queensland Sudanese community members. Poor parental sexual health literacy impacts on a parent’s ability and willingness to communicate about this issue with their children (DiIorio, Pluhar, & Belcher, 2003). This suggests parents and other adults within this study’s target community also need access to sexuality education early so they can develop the knowledge and understanding of why it is important to talk openly about this issue with their children. This is important as numerous studies involving participants from a range of cultural backgrounds indicate open discussion between parents and their children about sexual health and behaviours from an early age has a positive effect on delaying sexual début and reducing risk taking behaviour (Aspy et al., 2007; DiIorio, Kelley, & Hockenberry-Eaton, 1999; DiIorio et al., 2003; Wyckoff et al., 2008). The results of this study also suggest developing open communication pathways about this culturally sensitive topic would provide opportunity for intergenerational sharing of concerns about the conflicting attitudes, beliefs, and behavioural expectations discussed in the following section.

7.3 Attitudes and Beliefs

This current study enabled the first direct comparison of sexual health related attitudes and beliefs across age groups within the Queensland Sudanese community. Sudanese society is generally considered conservative, with strong sociocultural and religious based attitudes and beliefs around sexuality, such as those surrounding marriage and patterns of sexual behaviours (Mohamed & Mahfouz, 2013). These strong cultural normative beliefs and values are learnt and handed down over generations (Brislin, 2000). Therefore, it was not surprising many of the sexual health related attitudes and beliefs identified in this study, such as the taboos associated with talking about sex, converge and are consistent with previous research involving Sudanese groups (Hatoss, 2012; Hatoss & Huijser, 2010; Hebbani & McNamara, 2010, July; Hebbani et al., 2009; Khawaja & Milner, 2012; Lazarus et al., 2006; Lejukole, 2008; R. Palmer et al., 2009; Poppitt & Frey, 2007; Westoby, 2005; Windle, 2008).

Divergent attitudes and beliefs were expected, as attitudes and beliefs do change over time as individuals and communities adapt to the different cultures and external events to which they are exposed (Berman, 2001; Ember & Ember, 2011; MacLachlan, 2006).
Nonetheless, the identification of divergent attitudes and beliefs between the age groups involved in this study, such as those relating to the acceptance of sex before marriage, provided contextual understanding of the factors perceived to be contributing to the intergenerational discordance noted in this current and previous studies (Hebbani et al., 2009; Poppitt & Frey, 2007). The attitudes and beliefs presented in the following sections of this chapter relating to perceived Australian norms, relationships, gender roles, behavioural expectations, and condom use provided understanding of the behavioural and normative beliefs influencing this study’s younger participants’ intention to adopt protective behaviours and/or engage in sexual risk taking behaviours.

7.3.1 Australian youth have too much freedom

“All young Australians have the freedom and right to date and have sex before marriage independent of parental input” and “Australians talk about sexual health more openly than traditional Sudanese people” were two of the convergent beliefs of this study’s participants. The majority of 16-24 year old participants in this study considered adopting these perceived Australian norms to be part of adjusting to life in a new country. However, consistent with previous Australian research involving Sudanese participants (Ebbeck & Dela Cerna, 2006; Hebbani et al., 2009), this study’s older participants considered the perceived norms were having a negative influence on the sexual behaviour of young people and were a precursor to much of the conflict occurring within families.

The younger participants in this current study did, however, express concern about the welfare of their peers who were ‘abusing’ this perceived freedom as a form of rebellion against traditional Sudanese parental discipline and boundaries. In line with previous research (Deng & Pienaar, 2011; Hebbani et al., 2012), traditional Sudanese parenting styles were described as authoritarian with children expected to respect and obey parents and other adults in their extended family. Rebellion against traditional parental discipline is a common finding in research with Queensland Sudanese participants (Hebbani et al., 2012; Khawaja & Milner, 2012). Nevertheless, younger participants in this current study considered disparity between traditional norms and the perceived social and sexual freedom of Australian society resulted in parents becoming even more authoritarian in an attempt to prevent their children disconnecting from traditional
normative sexual beliefs and practices. Of concern is the suggestion these stricter boundaries may lead to increased rebellion, particularly if young people are unable to openly discuss the rationale behind their decisions with their parents (Aunola, Stattin, & Nurmi, 2000; Deng & Pienaar, 2011; Wolfradt, Hempel, & Miles, 2003). Of concern also to this study’s older participants was the effect this perceived freedom was having on young people’s attitudes and beliefs towards relationships and what was considered acceptable patterns of sexual behaviour.

7.3.2 Marriage, relationships, and sexual behaviour

The majority of this current study’s participants suggested 18 to 20 years of age was the culturally acceptable age to marry. Interestingly the rate of marriage among this study’s 16-24 year old participants was very low (3.0%) in comparison with contemporary patterns in South Sudan where 45% of women are reported to be married or in a recognised union by 18 years of age (The Republic of South Sudan, 2011). Consistent with previous research (Hatoss et al., 2012; Khawaja et al., 2008), this study’s participants identified educational achievement for both genders as a common post arrival aspiration among the Australian Sudanese community. The marriage rate differences may, therefore, reflect a desire and/ or parental pressure to delay marriage and to achieve educationally in order to gain a higher quality of life. In Australia, the median age at first marriage ranges from 29.6 years for men and 27.9 years for women (Australian Bureau of Statistics, 2012), suggesting the difference in marrying ages may also be indicative of this study’s younger participants resisting familial pressure to marry in accordance with what they perceive as traditional Sudanese marriage customs.

Marriage customs and practices vary across the heterogeneous Sudanese tribal society and geographical area (McLean, 2005; Springvale Monash Legal Service, 2008; Wal, 2004). Nonetheless, in contrast to Australian customs, all participants agreed Sudanese parents and families traditionally have control over whom their children marry, with arranged marriages within customarily accepted tribal and social networks still occurring (Juuk, 2013). This study’s FGD participants expressed stronger acceptance and expectation for continued parental control over relationships compared to the younger participants. This is not surprising, as adherence to traditional practices post migration is perceived as a means of maintaining cultural cohesion of the family and
broader community in collective cultures such as the one being researched in this current study (Buunk, Pollet, & Dubbs, 2012). However, divergent attitudes towards parental control of relationships emerged in this study as a key determinant leading to family unrest.

Consistent with previous research (Hebbani et al., 2009; Zeidan, Abdu, Gadour, & Bhairy, 2011) and published literature (McLean, 2005; Wal, 2004), all participants in this current study reported that dating and sex before marriage were against traditional Sudanese beliefs and normative behaviours. Traditional sociocultural norms, religious beliefs, and parental attitudes, such as those identified among this study’s participants, regarding sex before marriage can act as regulatory norms that have a direct influence on an individual’s behavioural intent and decision to delay sexual initiation (Lammers et al., 2000; Little & Rankin, 2001; Manlove et al., 2006; Molla et al., 2008). This may be particularly so for this study’s cohort given traditional African cultural beliefs are considered to have an enduring strong influence on attitudes and behaviours (Liddell et al., 2008). However, findings from this study’s interviews suggested the younger Sudanese community members’ attitudes and beliefs towards relationships were changing with growing acceptance of dating and sex before marriage. This was confirmed by this study’s survey results, which indicated many young participants had boy/girlfriends and were having sex before marriage, often with people from outside traditional Sudanese tribal groups and social networks. This was particularly so among the young male participants. The majority of these self-reported sexual encounters with non-Sudanese partners involved people from other African nations. Participants of this study suggested that someone from another African nation would be considered less threatening for parents compared to other ethnic groups. However, this may also reflect natural gravitation to similar beliefs and past experiences or a sense of comfort within a perceived collective African social identity (Oliver, 2012).

Having Australian sexual partners occurred more frequently among this study’s male participants compared to the females. Perceptions of greater social shame and cultural risk were suggested as key reasons fewer young women had Australian partners. Young males, on the other hand, were thought to be seeking Australian girlfriends and sexual partners as a means of exploring and exploiting the perceived sexual freedom of Australian women, without the traditional responsibilities associated with relationships.
and sex. Previous research suggests increased interracial dating between Anglo-American women and African American men is linked to a myth surrounding the strong sex drive of black men (Foeman & Nance, 1999; Kreager, 2008). This myth did not arise in the current study. However, it might be of value to explore this concept from the Sudanese Australian perspective as recent research has also linked perceptions of hyper masculinity and increased sexual ability with increased dating among New Zealand women and Black African migrants (Birukila, 2012; Birukila et al., 2013). Birukila (2012) also raised the concept of Black African migrants seeking out non-African New Zealand women, as they perceived white women were sexually promiscuous. This suggests misconceptions held by both parties in the relationship need further exploration. Consideration also needs to be given to how these myths and misconceptions may influence behavioural motivators and intent within these relationships.

Younger participants were more accepting of dating people from another cultural background compared to the older participants. This may reflect age related differences in the level of acceptance and tolerance of ethnic diversity (Forrest & Dunn, 2011; Paradies, Forrest, Dunn, Pedersen, & Webster, 2009; Uskul et al., 2011). It may also suggest younger participants were experiencing and/or perceiving greater pressure to adopt Australian normative beliefs and practices in order to belong or to fit in with their contemporary Australian peers (Kreager, 2008).

This study’s results suggest interracial dating is causing some conflict within families. Previous research has also linked it with discrimination, increased adolescents’ peer problems at school, and increased risk taking (Kreager, 2008). Therefore, despite this study’s younger participants and the general Queensland population being largely accepting of interracial relationships (Forrest & Dunn, 2011), further exploration of factors influencing interracial dating and its potential outcomes is warranted. The gender disparity in rates of interracial dating and perceived cultural risk also warrants further consideration, particularly given the effects living in Australia is perceived to be having on gender roles and behavioural expectation among the young women.
7.3.3 Gender roles and behavioural expectations

Sexual freedom for young men before marriage appeared to have some social acceptance among this current study’s participants. However, consistent with previous research (Lyons, Giordano, Manning, & Longmore, 2011; Omorodion, Gbadebo, & Ishak, 2004), women who engaged in such practices were negatively judged and considered to bring shame on their family, in particular if the young women were pregnant. Women and men are governed by different gender norms and codes of sexual behaviour in most cultures (DiCenso, Guyatt, Willan, & Griffith, 2002; Rosenthal & Browning, 2005). Culturally entrenched gender roles and beliefs leading to double standards in accepted patterns of sexual behaviour for men and women, as expressed by the younger participants in this study, is not a unique finding (Cubbins & Tanfer, 2000; Lyons et al., 2011). However, participants considered traditional gender roles, responsibilities, and behavioural expectations were changing as a result of living within Australia’s perceived egalitarian societal norms. Consistent with previous research involving Sudanese Australians (Hatoss & Huijser, 2010; Milner & Khawaja, 2010; Muchoki, 2013), this study’s participants suggested changing gender roles and associated sexual behaviour expectations were of particular concern as they were creating conflict within marriages and families.

Of particular concern for the older participants were the changing behaviours of the young women, who were perceived to be expecting greater freedom and equality than traditionally condoned. Previous research (Poppitt & Frey, 2007) suggests young female Sudanese Queenslanders are expressing frustration and anger that they are being denied the freedom they perceive their brothers and contemporary female Australian peers experience. This current study’s interviewees go one step further, suggesting some young Sudanese women were intentionally getting pregnant as a way of gaining freedom from parental boundaries and traditional engendered behavioural expectations. Fear of the consequences associated with behaving in a manner discordant with traditional expectations has been shown to have strong regulatory influence on the sexual behaviours of young African background women (Weiss, Whelan, & Gupta, 2000). However, the majority of participants in this study suggested this was negated by Australia’s perceived gender equality, legal system, and social support for young people experiencing ‘difficulties’ at home. Older participants perceived these social support systems enabled, if not encouraged, young people, in particular young single
mothers, to live independently of family and this was adding to cultural disengagement of youth and intergenerational conflict. This cultural disengagement was considered a contributing factor to the sexual risk of young people.

7.3.4 Perceptions of risk

The majority of this study’s participants perceived young Sudanese Queenslanders to be at high risk and fearful of pregnancy due to their patterns of condom and contraception use; however, importantly, they expressed little concern about STI or HIV risk. This is consistent with previous research (McMichael, 2013), where premarital pregnancies are associated with cultural shame, intergenerational family conflict, disruption of education, poor marriage possibilities, and lost opportunity to fully experience the benefits of resettlement in Australia. Consistent with the cultural theory of risk (Kahan, 2012; Oltedal et al., 2004; Tansey & O’Riordan, 1999), fear of these negative sociocultural outcomes may deter the young people from engaging in sexual behaviours that place them at risk of pregnancy. Cultural shame was also linked to STI; however, participants expressed a general lack of fear regarding their STI risk.

Participants considered a lack of STI knowledge meant young people within the Queensland Sudanese community were fearless of STI. The asymptomatic nature of most STI may also be contributing to the low perceptions of STI risk (Abel & Brunton, 2005) as, unlike pregnancy, STI remain predominantly hidden unless a young person has an STI screen and/or chooses to disclose a diagnosis. Perceptions of being safe by having sex with a known and/or trusted ‘regular’ partner may also play a role in this study’s participants reporting low perceptions of STI risk (Giordano, Manning, & Longmore, 2010; Senior et al., 2014).

Low perceptions of risk among youth are not unique to this study (Abel & Brunton, 2005; Fagan & McDonell, 2010; Mitchell et al., 2014; Smith et al., 2009). However, interestingly, despite having lower knowledge levels, this study’s 16-24 year old survey participants self-reported considerably higher perceived individual STI risk (18.3%) compared to the 4th NSASSSH participants (7.3%) (Smith et al., 2009). Also worth noting, in reverse to the 4th NSASSSH results (4.9% vs 8.6%) (Smith et al., 2009) and another study involving 16 to 18 year old New Zealand school-going participants
(17.9% vs 27.4%) (Abel & Brunton, 2005), this study’s male participants self-reported higher perceptions of individual STI risk compared to the female participants (21% vs 11%). This heightened perception of risk may part way explain why male participants self-reported higher rates of condom use compared to the female participants, despite expressed concerns about the impact condoms had on their sexual performance and masculinity. However, this reversed gender disparity in perceived STI risk remains largely unexplained and requires further exploration.

Among participants in this current study, the fear of acquiring HIV was slightly stronger than that associated with acquiring an STI. Heightened fear of acquiring HIV was explained by pre-arrival exposure to HIV information and fear of HIV related stigma. However, the majority of participants considered themselves to be at low HIV risk post settlement as they believed HIV was not a problem in Australia, especially among refugee and migrant communities. Previous Australian research involving Sudanese arrivals (Biggs, Hellard, Street, & Lemoh, 2006; R. Palmer et al., 2009) and international studies exploring HIV attitudes among migrant and refugee background families in Canada (Omorodion et al., 2004) and the UK (Barrett & Mulugeta, 2010) found similar low perceptions of HIV risk linked to misconceptions about host country pre-migration screening and visa entry requirements. This current study and others (Barrett & Mulugeta, 2010; Biggs et al., 2006) suggest a lack of obvious broad community level HIV prevention education in Australia compounds HIV risk misconceptions. Cultural normative beliefs may have greater impact on attitudes toward HIV than immigration processes (R. Palmer et al., 2009); however, previous research suggests these myths and misconceptions about HIV risk can have significant risk-enhancing effects on attitudes and behaviours, such as intent to use condoms (Liddell et al., 2008). With African born Australians already over represented in new and late HIV diagnoses in Australia (Lemoh et al., 2010; The Kirby Institute, 2013a), risk behaviours such as inconsistent condom use and delays in accessing HIV testing could have long-term effects on the sexual health and wellbeing of this study’s target population and the broader Australian community.

It is possible perceptions of individual risk and vulnerability may increase over time, as it did with STI and HIV knowledge in this study. In the meantime, these widely held perceptions of low STI risk and HIV misconceptions are contributing to the ongoing
sexual vulnerability of this group (Fenton et al., 2002), particularly for those just arrived in Australia. Results of this study suggest access to age and culturally appropriate accurate sexual health education, including information about STI symptoms, local STI/HIV prevalence, risk factors, and immigration testing processes, needs to occur early post arrival in Australia (McMichael, 2008; McMichael & Gifford, 2009) and, ideally, before sexual initiation (Macbeth et al., 2009; Mueller et al., 2008). However, care needs be taken not to emphasise HIV risk to the exclusion of other more prevalent STI such as Chlamydia (Abel & Brunton, 2005; Donovan, 2000), thereby increasing the perceptions of low STI risk and potentially influencing intent to engage in protective behaviours such as the use of condoms.

### 7.3.5 Condoms and contraception

Perceptions of being at risk of acquiring an STI and/or HIV influence an individual’s decision to use condoms, particularly if they consider their partner to be ‘risky’ (M. M. Ali et al., 2001; Civic, 2000; East, Jackson, O’Brien, & Peters, 2011). However, the majority of this study’s younger participants indicated fear of pregnancy as the primary motivator for condom use. This was not surprising given their perceptions of greater cultural risk associated with experiencing a pregnancy outside of traditional customs and cultural norms. Nonetheless, with a third (32.9%) of this study’s sexually active younger participants reporting anal sex in the last 12 months, consideration needs to be given to how condom use motivated by fear of pregnancy rather than perceptions of STI and HIV risk, influences condom decision making during anal sex, a practice known to hold higher risk of HIV transmission and acquisition (Civic, 2000).

This study’s participants considered condoms and contraception were ‘taboo’ and against traditional sociocultural normative beliefs and behavioural expectations, which is consistent with previous research involving Sub-Saharan Africans (Winskell, Obyerodhyambo, & Stephenson, 2011). Also, not unique to this study was the widely expressed belief that condom use was associated with moralistic judgement, promiscuity, and prostitution (Hillier, Harrison, & Warr, 1998; Lazarus et al., 2006; MacPhail & Campbell, 2001; Winskell et al., 2011) and reduced sexual pleasure (Higgins, Hoffman, Graham, & Sanders, 2008; Higgins, Tanner, & Janssen, 2009). A belief that hormonal contraception caused infertility was also considered a deterrent to
contraception use, which is not surprising given the traditional importance of fertility and children within a marriage in many African cultures (MacPhail & Campbell, 2001). Cultural attitudes, beliefs and perceived subjective norms and taboos such as these have a noted influence on an individual’s ability to negotiate safer sex practices and their intent to use condoms and contraception (Kocken, van Dorst, & Schaalma, 2006; Liddell et al., 2008; Molla, Nordrehaug Astrom, & Brehane, 2007). In this study, the most frequently self-report reason for not using condoms at last sexual encounter by both male and female survey participants was “I didn’t like condoms”.

Similar to the 4th NSASSSH results (Smith et al., 2009), in this study more female participants (42.9%) self-reported dislike of condoms compared to male participants (28.6%). This gender disparity is unexplained within this study; however, previous research (Higgins et al., 2008; Higgins et al., 2009; Newton et al., 2013) suggests traditional gender roles may pressure women to express dislike of condoms to please their male partners. In this study, more males than females reported they didn’t like condoms as they reduced personal sexual pleasure; however, previous research also suggests a woman’s choice or insistence not to use condoms can be motivated by fear of reducing their male partners’ pleasure (Newton et al., 2013). The 5th NSASSSH results suggest a shift in these attitudes with more males reporting a dislike of condoms compared to female participants (Mitchell et al., 2014). Nonetheless, this current study’s results suggest the influence of traditional gender roles on young Sudanese Queenslander women’s patterns of condom use and sexual decision making needs consideration.

Consistent with previous research (East et al., 2011; French & Holland, 2013), participants considered these engendered norms negatively influenced the confidence and ability of young Sudanese Queensland women to negotiate safer sex practices. Condoms were perceived as a male responsibility by the majority of this study’s participants; nonetheless, empowering a woman’s confidence and skills in condom negotiation has the capacity to increase overall rates of condom use and reduce sexual risk (French & Holland, 2013). Empowering women may conflict with traditional Sudanese normative beliefs and behavioural expectations. Therefore, this needs to be done carefully so that women are not placed at risk of other harms such as a loss of
reputation, relationship stress, and physical violence (Hillier et al., 1998; Khawaja & Milner, 2012; Marlowe, 2012).

Despite these attitudes against condoms and contraception, participants generally suggested using condoms and contraception was better than experiencing an unwanted pregnancy or acquiring an STI or HIV. Therefore, if the young people were going to adopt different patterns of sexual behaviour, such as sex before marriage, there appeared to be cross-generational agreement that they needed to be informed about safer sex practices. Some participants expressed fear of negative cultural consequences if they were seen to be promoting condom and contraception use. Therefore, in order for condoms and contraception to be accepted and used, normative beliefs need to change so there is social and cultural support across the generations and broader community (Newton et al., 2013).

Traditional African attitudes, beliefs, and myths are thought to have a strong enduring influence on one’s intent to behave (Liddell et al., 2008). Normative sexual beliefs and behavioural expectations that place a person at risk, such as those influencing condom and contraception use, need to be challenged (MacPhail & Campbell, 2001). Acculturation inevitably changes attitudes and beliefs (Berry, 1997); however, how this is facilitated by directed safer sex education needs consideration so that it does not inadvertently add to the existing level of intergenerational and intercultural conflict and disharmony noted by this study’s participants and previous research (Hebbani et al., 2009; Hebbani et al., 2010, 2012; Poppitt & Frey, 2007).

7.4 Confidence and Self-Efficacy

The majority of 16-24 year old survey participants considered themselves confident talking to their boy/girlfriend about sexual health related matters, which is consistent with the 4th NSASSSH results (Smith et al., 2009). This result can be considered a positive outcome of this study as confidence or self-efficacy, a key variable in predicting intent to perform a particular behaviour within the IBM (Fishbein, 2000; Montaño & Kasprzyk, 2008), has been recognised in previous research as a protective factor in reducing sexual risk behaviours (Gloppen et al., 2010; Lou et al., 2010; Rosenthal et al., 1991). Also worth noting was the apparent lack of gender difference in
confidence levels in this study, particularly given the traditional gender role norms. However, confidence talking about sex with partners cannot be considered in isolation, as it does not always transfer to actual behaviour owing to the complex interplay of variables influencing a person’s behaviour (Fishbein, 2000; Montaño & Kasprzyk, 2008). Other factors, such as a young person’s confidence communicating about sex with their parents and their parents, willingness and ability to discuss this topic, also need to be considered.

For example, in this current study, the survey participants were far less confident talking about sex with their parents (27.9%) than with their boy/girlfriends (72.1%). Their level of confidence talking about sex with their parents was also low (27.9%) in comparison to the 4th NSASSSH participants (47%) (Smith et al., 2009). This may, in part, be explained by differing intercultural and intergenerational attitudes and beliefs discussed previously in this chapter. However, the younger participants considered parental lack of knowledge and willingness to discuss sexual health along with their fear of parental disapproval and/or discipline, as key factors influencing their confidence discussing sex with their parents or other community adults. It is interesting to note that the level of confidence young people have in talking to parents about sex, STI, HIV and contraception has fallen among 5th SASSSH participants (Mitchell et al., 2014), suggesting building self-efficacy continues to be a matter of priority for all young Australians.

Parent-child communication about sex is a complex sociocultural issue (McMichael & Gifford, 2009). The majority of participants in this study believed their parents’ unwillingness to discuss sex was predominantly related to the belief “talking about sex encourages young people to have sex”. This is a common belief among parents of all cultures; however, multiple studies have found no link between talking about sex and sexuality education with increased sexual activity in young people (Barbagallo & Boon, 2012; Fortenberry, 2002; Kraft, Kulkarni, Hsia, Jamieson, & Warner, 2012; Lindberg & Maddow-Zimet, 2012; Mueller et al., 2008; Wellings et al., 1995). It is, therefore, reasonable to suggest this misconception should be challenged and parents encouraged to talk about sex with their children as an effective means of reducing risk taking behaviours and delaying sexual initiation (Barbagallo & Boon, 2012; Kirby et al., 2007; Kraft et al., 2012).
The belief that talking about sex with young people is ‘taboo’ and encourages promiscuity is not unique to this current study (R. Palmer et al., 2009). Results of this study suggest parental attitudes to talking about sex with young people were slowly changing as some parents gained knowledge and understanding of issues being faced by their children growing up in a new sociocultural context. No significant relationship between confidence and time in Australia was found in this study; nonetheless, acculturation theory (Berry, 1997, 2005; Berry et al., 2006) supports the notion that Australian sexual norms and attitudes to talking about sex will influence confidence over time among all ages within this study’s target community. Open, accurate, and skilled parent-child communication about sexual health related issues is recognised as one of the most important influences on a young person’s confidence and socialisation to sexual beliefs and behaviours (DiIorio et al., 2003; Hutchinson & Wood, 2007). Results of this study support the need to introduce education supporting the development of these skills early within the resettlement experience of both young people and their parents.

7.5 Behaviour

The following section outlines the key points of difference in protective and risk related patterns of sexual behaviour, alcohol and drug use, information seeking and health care utilisation self-reported by this study’s 16-24 year old survey participants in comparison with their Australian peers and other similar groups.

7.5.1 Sexual behaviour

This study’s aggregated SRBS for the 16-24 year old survey participants suggests low levels of sexual risk taking behaviour, similar to previous Australian research with non-English speaking migrant youth (J. Chen et al., 2000; de Visser et al., 2006). Nevertheless, there is clear evidence of behaviours shown to increase sexual risk, such as inconsistent condom and contraception use, multiple partners, anal sex, and unwanted sex (Aral & Peterman, 2002; Basile et al., 2006; Kotchick et al., 2001; A. J. Robinson & Rogstaf, 2002). This was particularly so among the young men who reported sexual début at a younger age and increased sexual risk taking compared to the female participants. This finding is consistent with previous Australian (Agius et al., 2010; Fagan & McDonell, 2010; Larkins et al., 2007; Rissel, Richters, Grulich, de
Visser, & Smith, 2003) and international (M. M. Ali et al., 2001; Coleman & Testa, 2006; Evans et al., 2004; Frank, Esterhuizen, Jinabhai, Sullivan, & Taylor, 2008; Lema, Katapa, & Musa, 2008; Tompkins et al., 2006) research involving young people (including those of Sudanese background). The risk of transmitting and/or acquiring an STI or HIV, along with an unwanted pregnancy, differs by type and frequency of sexual behaviour (de Visser, Smith, Rissel, Richters, & Grulich, 2003b; Street, 2011). The following discussion focuses on those behaviours that potentially increase sexual risk and vulnerability.

7.5.1.1 Sexual début

As outlined previously in Chapter 1, the Queensland Sudanese community’s concern with what they described as culturally inappropriate sexual behaviour of young community members led to the undertaking of this study. Their belief that many of their children were having sex at young ages and before marriage is partially supported by this study’s results. That is, two thirds of the unmarried under 24 years of age survey participants self-reported they had experienced sex. However, contrary to the beliefs of the older participants, the majority of younger participants indicated sexual initiation had not occurred until 18 years of age or older, two years older than the average age for first experiencing vaginal intercourse in Australia (Kang, 2011; Rissel et al., 2003). This suggests a pattern of delayed sexual initiation among this study’s participants. This disparity in age of sexual initiation may, in part, be explained by the regulatory effect of the sociocultural norms that influence an individual’s decision to delay sexual initiation (Lammers et al., 2000; Little & Rankin, 2001; Manlove et al., 2006). Previous research involving Australian refugee background youth suggests family attachment and its influence on an individual’s decision making and behaviour decreases over time post settlement (McMichael et al., 2011). The majority of this study’s younger participants agreed living in Australia changed how traditional beliefs and parental attitudes influenced their sexual behaviours. How long the traditional normative beliefs remain a determinant in delaying sexual initiation for young people remains unknown and unanswered by this current study. The majority of this study’s participants agreed the young community members were acculturating at a faster rate than their parents and other adults to sexual behaviours and beliefs they perceived normative of their contemporary Australian peers. This is not an unexpected finding as it is consistent with previous Australian research (Hebbani et al., 2010; Khawaja &
Milner, 2012; Khawaja et al., 2008; Poppitt & Frey, 2007). In this study, the changing attitudes associated with acculturation were considered a major contributor to sexual initiation patterns diverging from traditional patterns.

The percentage of younger than 18 year old participants in the current study’s survey strand who self-reported they had experienced sexual intercourse (34.8%) is similar to the 4th and 5th NSASSSH results (Agius et al., 2010; Mitchell et al., 2014). This suggests young Sudanese Queenslanders, particularly those still attending school, are experiencing pressure and/or desire to conform in order to reduce feelings of being between-cultures and to be accepted by the wider school environment (Oliver, 2012; Poppitt & Frey, 2007). This study’s older participants suggested this adolescent school age group was the most culturally and sexually vulnerable group. They considered this age group (especially if recently arrived in Australia) lacked knowledge and understanding of the Sudanese cultural beliefs that would traditionally guide their sexual decision making when faced with the perceived sexual freedom of Australia. Consistent with previous studies (Hebbani et al., 2009; Milner & Khawaja, 2010), the older respondents also considered a lack of cultural awareness fostered further cultural disconnectedness and increasing intergenerational conflict. Parental attempts to maintain what they perceived as protective rather than restrictive Sudanese normative patterns of parental control and authority over young people’s relationships and sexual freedom were thought to further compound these issues.

While concern about the perceived decreasing age of sexual début was identified as an issue by the majority of this current study’s participants, it is worth noting the self-reported sexual initiation patterns are consistent with those reported in the 2010 South Sudan Household Health Survey (The Republic of South Sudan, 2011). As discussed previously, cultural beliefs and normative behavioural expectations change over time in response to life’s experiences and exposure to different cultures ( Ember & Ember, 2011; MacLachlan, 2006), such as the prolonged periods of conflict and forced migration experienced by many of this current study’s participants. Therefore, results of this study suggest the concern about the age of sexual début and other behaviours divergent from expressed accepted traditional behavioural norms are not reflective of contemporary normative Sudanese beliefs or behavioural expectations.
7.5.1.2 Rate of sexual partner change

The majority of this current study’s younger participants who self-reported being sexually active in the last 12 months experienced sex with only one partner during this period. This low rate of partner change is considered a positive protective behaviour in reducing risk of exposure to HIV and other negative sexual health outcomes (L. Chen et al., 2007; Shelton, 2009). Nonetheless, similar to the 4th and 5th NSASSSH results (Mitchell et al., 2014; Smith et al., 2009), there were 25% who self-reported three or more vaginal sex partners in the last 12 months, a pattern known to increase their risk of negative outcomes (Moilanen et al., 2010). The rate of sex with casual partners at last sexual encounter was low in this current study (12.8%) compared to the 4th and 5th NSASSSH results (21.4%, 27%) (Agius et al., 2010; Mitchell et al., 2014; Smith et al., 2009); however, this cannot be presumed to be a protective behaviour as young people are more likely to have unprotected sex with casual partners (de Visser et al., 2003b; de Visser, Smith, Rissel, Richters, & Grulich, 2003c; Ford, Sohn, & Lepkowski, 2001). Also, having a regular partner cannot be assumed to be totally protective as rates of condom use fall with partners perceived as regular, safe, and trusted (Civic, 2000; Corbett et al., 2009; Giordano et al., 2010). Young people can also have a series of regular partners, thus still amounting to multiple partners and potential risk (Keys, Rosenthal, & Pitts, 2006).

Previous research has shown a strong positive association between the number of reported sexual partnerships and risk of acquiring an STI (Fenton et al., 2005). This suggests the incidence of STI and other negative outcomes within this current study’s younger cohort should be low given the majority self-reported only one partner in the last 12 months. However, the pattern of multiple and casual sexual partners identified within this study’s data suggests a small number, in particular the young men, may be at increased risk of negative sexual consequences. This is particularly so when considered in conjunction with the pattern of inconsistent condom and contraception use self-reported by this study’s younger participants.

7.5.1.3 Condom and contraception use

The majority of this study’s participants reported “always using a condom” (68.2%), which is similar to results of the 4th NSASSSH (Smith et al., 2009) and two studies
involving young Aboriginal and Torres Strait Islander youth (Fagan & McDonell, 2010; Larkins et al., 2007). However, condom use at last sexual encounter was notably lower in this current study (46.4%) compared to results of the 4th NSASSSH (64.2%) and the study by Fagan and McDonell (2010) (66.0%). This may be explained by the low perceptions of STI risk among this current study’s younger participants (Corbett et al., 2009; East et al., 2011) and the high rate of sex occurring with their current boy/girlfriend (68.9%) whom they may perceive as trusted, safe, and low risk (Civic, 2000; Corbett et al., 2009; East et al., 2011; Giordano et al., 2010).

In this study, the two most frequently reported reasons for not using a condom were “I don’t like condoms” and “It just happened”, both common rationale (Higgins et al., 2008; Higgins et al., 2009; Mitchell et al., 2014; Newton et al., 2013; Philpott, Knerr, & Maher, 2006; Smith et al., 2009). “It just happened” implies many of the sexual encounters were spontaneous. This suggests this study’s 16-24 year old participants’ behaviour, as with their Australian secondary school peers (Mitchell et al., 2014; Smith et al., 2009), is influenced by the developing and changing sexual desires and spontaneity of youth (Fortenberry, 2013; Rosenthal & Browning, 2005). The 5th NSASSSH results indicate higher rates of condom use when a condom is available at the time a young person is faced with the choice of sex (Mitchell et al., 2014). Therefore, this current study’s results suggest condoms were not available when “It just happened” or there is a lack of confidence in negotiating condom use when faced with the opportunity to have intercourse. However, remaining unexplained by this current study’s interview data is the difference between participants who self-reported they didn’t like condoms (34.7%) and those reporting their partners don’t like condoms (4.1%), a disparity not evident in results of the 4th and 5th NSASSSH (Mitchell et al., 2014; Smith et al., 2009). In light of the participants’ concern about increasing unplanned pregnancy rates among the target community’s young women, this disparity and the expressed dislike of condoms among the young female participants particularly, needs consideration and further exploration.

Condoms were the most common form of contraception used at the last sexual encounter by this study’s younger participants and the 4th and 5th NSASSSH cohorts (Mitchell et al., 2014; Smith et al., 2009). However, the use of hormonal contraception or natural methods of birth control, while similar to previous studies conducted in South
Sudan (The Republic of South Sudan, 2011), was very low (12.1%) in comparison to the NSASSSH results (> 50%) (Mitchell et al., 2014; Smith et al., 2009). Low hormonal contraception and condom use in South Sudan may result from poor access to reproductive health services (The Republic of South Sudan, 2011); however, it may also reflect beliefs and misconceptions about the safety and efficacy of condoms and hormonal contraception, congruent with those reported by many of this current study’s participants. The widely expressed fear of the negative sociocultural consequences associated with an unplanned pregnancy, discussed earlier in this chapter, has been shown to be a strong behavioural motivator for increasing consistent contraception use in previous research (Ryan, Franzetta, & Jennifer, 2007). However, in this study the traditional engendered sociocultural normative beliefs and misconceptions about the safety and efficacy of condoms and contraception may be counter levering this fear.

Consistent correct use of condoms for all penetrative sexual encounters substantially reduces the risk of STI and HIV transmission (Warner, Stone, Macaluso, Buehler, & Austin, 2006; Weller & Davis, 2002) and unplanned pregnancy (Family Planning New South Wales, Family Planning Queensland, & Family Planning Victoria, 2012). The pattern of inconsistent condom use suggests this study’s younger cohort are at increased risk of negative sexual health outcomes compared to their contemporary Australian peers; in particular, increased risk of an unplanned pregnancy given the very low self-reported rates of hormonal contraception use.

Findings from this current study suggest factors influencing young Sudanese Queenslanders’ choices and intent to use condoms and/or contraception are consistent with a number of the well-established individual (knowledge, perceived risk) and broader social (normative beliefs, peer pressure) level variables known to influence a young person’s safer sex decision making (MacPhail & Campbell, 2001) and behavioural intent (Fishbein, 2000; Montaño & Kasprzyk, 2008). This study provides contextualised intergenerational understanding of the participants’ perception of factors influencing their choice, willingness, and ability to use condoms and contraception. Nonetheless, further research to identify significant factors unique to this group is still needed.
7.5.1.4 Sexual orientation and same sex behaviours

Consistent with previous Australian research, the majority of younger participants in this study self-reported being attracted to the opposite sex (Mitchell et al., 2014; Smith et al., 2009; Smith, Rissel, Richters, & Grulich, 2003). In-depth analysis of same sex behaviours was not conducted due to the small number (8.6%) of the sexually active participants who reported same sex partners at their last sexual encounter. Nonetheless, there was disparity between this study’s reported same sex encounters and the 4th NSASSSH results that remained unexplained by the qualitative data. There was a similar percentage of same sex partners at last sexual encounter among this study’s younger male participants (7.4%) and the 4th NSASSSH results (7.7%) (Smith et al., 2009). However, 11.1% of this study’s female survey respondents reported female-to-female encounters compared to just 3.7% of the 4th NSASSSH female cohort (Smith et al., 2009). Women reporting higher rates of same sex experiences is not uncommon in Australian studies (Smith, Rissel, et al., 2003) or previous NZ research involving African migrants (Birukila, 2012; Birukila et al., 2013). However, the lack of research in this area makes it difficult to draw inferences about the higher rates of female-to-female encounters reported in this study.

Historically both male and female same sex relationships were evident in many African societies. Today, the widespread sensitivity and normative beliefs among African communities against such practices make research difficult in this area (Amory, 1997; Brody & Potterat, 2003). The rates of self-reported same sex behaviours had risen in the 5th NSASSSH results for both male (11.9%) and female (5.3%) respondents (Mitchell et al., 2014), suggesting young people’s attitudes to disclosing same sex attraction are changing over time (Rosario, Schrimshaw, Hunter, & Braun, 2006). This study’s results indicate young Sudanese Queenslanders are confident talking about sex; however, given the sensitivity and taboo of homosexuality within African cultures, including the Sudanese (Abu-Raddad et al., 2010; Brody & Potterat, 2003), it remains unknown if a similar increase in acceptance of disclosing same-sex relationships will occur among this study’s target community. Nonetheless, this study’s results suggest sexual health education for this study’s target community needs to address the cultural variances in same sex attraction attitudes, behaviours, and safer sex practices (Maguen, Floyd, Bakeman, & Armistead, 2002). The disproportionate burden of HIV among
culturally diverse men who have sex with men in Australia, including those of African background (Reeders, 2010), also supports this as an area that needs further research.

### 7.5.1.5 Sexual practices

The frequency of vaginal and oral sex reported in this current study is consistent with the 4th and 5th NSASSSH (Mitchell et al., 2014; Smith et al., 2009) and other previous national and international data (de Visser et al., 2003b). A notable difference was the frequency of anal sex (32.9%) among this study’s predominantly self-identifying heterosexual cohort compared to the 5th NSASSSH results (8.7%) (Mitchell et al., 2014) and previous research with adult heterosexual participants (10%) (Heywood & Smith, 2012; Leichliter, Chandra, Liddon, Fenton, & Aral, 2007; McBride & Fortenberry, 2010; Voeller, 1991), including a study conducted in Sudan (Zeidan et al., 2011). Anal sex was not measured in the 4th NSASSSH (Smith et al., 2009). International studies suggest anal sex practices are increasing among young opposite sex couples (25 to 30%) (Heywood & Smith, 2012; Leichliter et al., 2007) and the inclusion of an item measuring this specific sexual practice in the 5th NSASSSH for the first time suggests this is an emerging issue of interest in Australia (Mitchell et al., 2014).

The disparity noted in this study may reflect normative African beliefs, sexual practices, and true prevalence (Brody & Potterat, 2003; Duby, Colvin, & Kitungulu, 2011). Anal sex is thought to be underreported in most African nations, including Sudan, as a result of it being considered a culturally sensitive topic and taboo practice, particularly in the context of male-to-male sex (Baggaley, White, & Boily, 2010; Brody & Potterat, 2003; Ndinda, Chimbwete, McGrath, & Pool, 2008). Acceptance of the practice as a means of maintaining virginity, faithfulness, and preventing pregnancy (Duby, 2008, 2009; Duby et al., 2011; Keys et al., 2006; Weiss et al., 2000) suggest it may be more prevalent than previously reported, with some considering anal intercourse among heterosexual couples a key factor in the formation and spread of Africa’s HIV epidemic (Baggaley et al., 2010; Brody & Potterat, 2003; Duby et al., 2011).

Regardless of the sociocultural and behavioural motivators influencing sexual practices, the increased risk of HIV transmission and acquisition associated with anal sex needs consideration (Street, 2011). Safe anal sex prevention strategies have not historically
targeted heterosexual relationships (Baldwin & Baldwin, 2000; Cherie & Berhane, 2012; Khawcharoenporn, Kendrick, & Smith, 2012; Leichliter et al., 2007; Livak, Prachand, & Benbow, 2012) and the 5th NSASSSH results suggest young Australians consider this an important aspect missing from current sexuality education (Mitchell et al., 2014). Therefore, with African born Australians over represented in new HIV diagnosis data (Lemoh et al., 2010), the results of this study support the need for further research into anal sex practices and their potential link to HIV transmission risk among this cohort of young Australians. The results also support the need for inclusion of safer anal sex messages in future interventions and prevention strategies for both opposite and same sex attracted Sudanese Queenslanders.

7.5.1.6 Pregnancy and STI

The Queensland Sudanese community’s concern about increasing pregnancies among young members of their community was a contributing factor to the undertaking of this study. The numbers of pregnancies reported in this study are small; however, the results of this study in part validate the community’s concerns. For example, the frequency of self-reported pregnancies among this representative sample of predominantly unmarried participants (9.0%) was double that of the 4th NSASSSH cohort (4.6%) (Smith et al., 2009), which remained relatively stable at 5% in the six year period between 2008-2013 when the 5th NSASSSH results were released (Mitchell et al., 2014). However, remaining unexplained from this study’s results is whether pregnancy rates are increasing in the broader community; thereby, suggesting the need for more research to determine if the disparity between this study’s results and the NSASSSH is significant and, if so, why this may be happening, and the implications for the health and social wellbeing of this study’s young people.

Concern about the elevating rates of pregnancy occurring among refugee background youth living in Australia is not unique to this study (Gifford, Correa-Velez, & Sampson, 2009; McMichael, 2013). The longitudinal Good Starts study involving 120 refugee background youths in Melbourne (51.7% of Sudanese origin) also reported 9% of the 12-18 year old participants experienced a pregnancy (Gifford et al., 2009). However, it is reasonable to question if the rate of pregnancy within this current study cohort reflect traditional Sudanese norms and a culturally driven desire to start a family and move to
adulthood (Blair, Zubrick, & Cox, 2005; MacPhail & Campbell, 2001; Wal, 2004). Proof of fertility is an important marker of adulthood in African cultures including the Sudanese (MacPhail & Campbell, 2001), making pregnancy common and culturally desirable at a young age within many tribal groups (Adam, Adam, Elhassan, & Ahmed, 2009; A. A. A. Ali, Mohammed, & Sulaiman, 2011; Carolan, 2010; N. Gupta & Mahy, 2003; Kurth et al., 2010). For example, a recent South Sudan health report found 31% of the 15-19 year old women had begun childbearing (The Republic of South Sudan, 2011). However, in contrast to this current study, the majority of these births occurred within recognised unions/marriages (The Republic of South Sudan, 2011), thus again raising the question, is it the age and rate at which pregnancy is occurring or the occurrence of pregnancy outside of traditionally accepted unions/marriages that is causing concern to the community?

Pregnancy and parenthood occurring outside of the perceived traditional normative sociocultural patterns can have long-term consequences for the psychosocial and socioeconomic wellbeing, as well as the educational aspirations, of this group (McMichael & Gifford, 2009, 2010). Teenage pregnancy and childbirth are also linked to poorer medical and birth outcomes (Kang, 2011; Shaw, Lawlor, & Najman, 2006). These experiences are thought to be compounded for refugee youth, such as those participating in this study, by the added challenges of resettlement (McMichael, 2013), with increased rates of infant mortality and morbidity (Carolan, 2010), experiences of homelessness, alcohol intake, social isolation, and loss of family support (McMichael, 2008, 2013) reported post resettlement. Given the existing community concerns, this potential for poorer psychosocial and physical outcomes suggests pregnancy and appropriate antenatal care are issues needing attention for this study’s target community.

This study’s participants, consistent with previous research (McMichael, 2013), associated premarital pregnancies with cultural shame and lost opportunity. The majority of female participants experiencing a pregnancy were over 18 years of age and self-reported their last sexual encounter was with a male of Sudanese background. With eight of the 10 young women single, it is not surprising the majority of these pregnancies were unplanned and caused considerable challenges and family unrest. The Good Start study for refugee youth by Gifford, Correa-Velez, and Sampson(2009)
reported ‘unplanned’ pregnancies among their cohort initially caused anxiety and family disruption; however, the majority of these unplanned pregnancies were ultimately not unwanted (Gifford et al., 2009; McMichael, 2013). The majority of young mothers in this current study reported they had maintained some form of relationship with their family, suggesting families were beginning to work through the challenges and sociocultural consequences presented by the unplanned pregnancies occurring among young Sudanese Queensland women.

The number of reported abortions in this study, though small, was high in comparison to the Good Starts study results (Gifford et al., 2009) suggesting a number of these unplanned pregnancies remained unwanted. Comparable to the proportion of adolescent pregnancies ending in abortion among mainstream Australians of this age group (Kang, 2011; Skinner et al., 2009; van der Klis, Westenberg, Chan, Dekker, & Keane, 2002), this study’s results suggest young Sudanese Queensland women in this situation are accessing termination services despite expressed cultural attitudes against abortions. However, largely unexplained are the factors influencing the decision making process associated with choosing termination as an option for unplanned/unwanted pregnancy. What is also unexplained is whether this group of young women is accessing adequate follow-up post abortion care, or antenatal care if they choose to progress with their pregnancy.

The inconsistent patterns of condom and low contraception use, along with lower levels of sexual health knowledge among younger participants within this current study, may contribute to the almost double frequency of pregnancy. Younger participants agreed the lack of knowledge and poor access to sexuality education were contributing factors. Older participants strongly believed that the freedom of living in Australia was the strongest influencing factor. These divergent perspectives warrant further investigation to determine their significance. Also requiring further exploration are the beliefs expressed by participants of all ages within this current study that young single women within this community are planning pregnancies as a way out of conflict at home, parental discipline, traditional cultural boundaries, and pressure to achieve at school. This belief was not identified in other Australian research involving young refugee background people (Gifford, 2010, June; Gifford et al., 2009; McMichael & Gifford, 2009, 2010). Nonetheless, this finding supports the need for further research into the
complex interplay of sociocultural, economic, and educational factors influencing the sexual choices and pregnancy outcome experiences of these young people, their partners, and families.

Interesting, while pregnancy resounded as a major issue of concern among the majority of participants in this study, no similar unease was noted about STI or HIV. The rate of self-reported STI diagnosis among young male participants in this current study (1.1%) is not dissimilar to the 4th and 5th NSASSSH results (2.4%, 2.2%) (Mitchell et al., 2014; Smith et al., 2009). However, young female participants self-reported more than double (7.1%) the rate compared to their NSASSSH counterparts (3.1%, 2.7%) (Mitchell et al., 2014; Smith et al., 2009). This may not be considered a surprising finding given the gender disparity in patterns of condoms use; however, these higher rates may reflect a higher rate of STI screening among female participants as refugee background women, like their Australian peers, are more likely than males to access health services for routine issues (such as cervical and antenatal screening for women) (Neale et al., 2007; The Kirby Institute, 2013b). Given the low knowledge among this study’s participants, this disparity may also reflect female participants mistakenly self-reporting other non-sexual related vaginal discharges, such as Candidiasis albicans and Bacterial Vaginosis as an STI. It is, therefore, reasonable to suggest this study’s gender disparity in STI diagnosis may reflect testing and reporting bias rather than a true gender variance in STI prevalence. While the dearth of STI prevalence data specific to ethnic subgroups living in Australia makes it difficult to determine if this study’s self-reported rates of STI diagnosis are a true reflection of STI risk or prevalence within this cohort, they do support the need for further research and collection of STI prevalence data from this group.

The over representation of African background refugees and migrants in new and late HIV diagnoses in Australia (Lemoh et al., 2010; The Kirby Institute, 2013a), combined with the low STI/HIV knowledge and perceptions of risk identified in this study’s results, suggest STI and HIV should be considered a priority for the Queensland Sudanese community. This is further supported by previous research showing a well-established association between migration and increased risk of exposure to STI and HIV (Kramer et al., 2008; McGinn, 2000; McMahon et al., 2010; Memish & Osoba, 2006; Muchoki, 2012; F. Thomas et al., 2010). Further research, including triangulation
of STI surveillance data with results of social research, is needed in order to fully understand the gender difference arising in this study’s results and the specific sexual health related needs of this study’s target community (Aral, 2002; O. Davidson et al., 2002; Wellings & Cleland, 2001).

7.5.1.7 Unwanted sex

The frequency of self-reported unwanted sexual encounters in this current study (33.1%) was similar to the 4th NSASSSH results (32%) (Smith et al., 2009) but was greater that the results reported in the 5th NSASSSH (25%) (Mitchell et al., 2014). Participants in this study and both NSASSSH editions identified pressure from partners as the most common reason for their unwanted sexual experiences (Mitchell et al., 2014; Smith et al., 2009). The influence of alcohol (7.7%), on the other hand, was considerably lower in this study compared to the 4th NSASSSH results (17%) (Smith et al., 2009). Participants in this study did express concern about changing patterns of alcohol use. Therefore, despite this positive disparity, the influence of alcohol on consensual and unwanted sexual behaviour may need consideration in future research. This is particularly so given the noticeable increase in students in the 5th NSASSSH reporting unwanted sex as a result of being too drunk (48.9%) compared to the 4th NSASSSH (17.0%) (Mitchell et al., 2014; Smith et al., 2009).

Being high on drugs as the reported reason for experiencing unwanted sex was slightly higher in this study (5.1%) compared to the 4th NSASSSH results (3.8%); however, reports of being high had also risen considerably in the 5th NSASSSH results (19.7%), suggesting patterns of drug use also need consideration in future research. Another notable difference was the higher rates of unwanted sex resulting from perceived peer pressure in this study (33.3%) compared to both the 4th (2.9%) and 5th (12.9%) NSASSSH results, suggesting this study’s young participants are perceiving greater peer pressure to engage in sex compared to their secondary school peers.

One may have expected many of the unwanted encounters reported in this study to have occurred prior to arrival in Australia given that 44.5% of the young participants reported time in refugee camps, an environment where sexual violence, especially against women, is a widespread problem (Allimant & Ostapiej-Piatkowski, 2011; Beswick,
2001; Pittaway & Bartolomei, 2001; Pittaway & Rees, 2006; Stark & Ager, 2011; Tankink, 2013; Ward & Vann, 2002). Increased vulnerability to sexual violence associated with resettlement in a new sociocultural context (Allimant & Ostapiej-Piatkowski, 2011; Pittaway & Bartolomei, 2001; N. Taylor & Putt, 2007) may explain why the majority of these encounters (77.3%) were reported to have occurred post arrival.

Unwanted sexual encounters (34.4%) were higher among this study’s male participants compared to the female (28.9%), which is in contrast to the 4th and 5th NSASSSH results (Mitchell et al., 2014; Smith et al., 2009), other Australian research (de Visser, Smith, Rissel, Richters, & Grulich, 2003a; Fagan & McDonell, 2010; Smith et al., 2009) and international studies exploring refugee gender violence (Pittaway & Bartolomei, 2001; Scott et al., 2013; Stark & Ager, 2011; Ward & Vann, 2002). This disparity remains largely unexplained by this study. Traditional normative engendered beliefs, fear of moral judgement and stigmatisation, and past experiences of gender violence may have led to underreporting of unwanted sex by female participants (Jok, 1999; Scott et al., 2013; Tankink, 2013). Alternatively, male participants experiencing pressure to have sex, to prove the myth discussed earlier surrounding the strong sex drive and prowess of black males, may warrant further research (Birukila, 2012; Foeman & Nance, 1999; Kreager, 2008). Previous research has suggested confusion associated with living within divergent sexual norms and behavioural expectations can lead to young male African migrants being perceived as sexually aggressive (Heus, 2010). This is unsupported by the results of this study. However, fear of adverse community responses (Allimant & Ostapiej-Piatkowski, 2011; N. Taylor & Putt, 2007) arising from ongoing media representation and stereotyping of African youth as violent (Marjoribanks et al., 2010, July; R. White, 2009) may have resulted in reluctance to raise the gender violence issue. Nonetheless, the gender disparities in unwanted sexual experiences warrant further investigation as any experience of forced or unwanted sex can lead to serious long-term health consequences, including increased incidence of substance abuse and sexual risk taking behaviours (Basile et al., 2006; Monroe et al., 2005).
7.5.1.8 Talking about sex

The percentage of participants in this study who discussed using condoms, avoiding pregnancy, and how to get sexual pleasure without intercourse with their partner was similar to that reported in the 4th and 5th NSASSSH (Mitchell et al., 2014; Smith et al., 2009). This is a worthwhile finding as it suggests partner communication and sexual negotiation, a strong motivator for increasing protective sexual behaviours such as condoms and contraception use (Ogle, Glasier, & Riley, 2008; Ryan, Franzetta, Manlove, & Holcombe, 2007; Whitaker, Miller, May, & Levin, 1999), is occurring among this study’s participants despite traditional beliefs and taboos associated with talking about sex. Interestingly, despite African cultures generally discouraging women from talking about sex with partners (Omorodion et al., 2004), a higher percentage of young women in this current study reported discussing sex related topics with their last sexual partner compared to the male cohort. This may be explained by the higher levels of knowledge found among this study’s female participants compared to the male participants, making them more aware and prepared to discuss these matters. However, this gender disparity was also found in the 4th and 5th NSASSSH results (Mitchell et al., 2014; Smith et al., 2009), suggesting young Sudanese Queensland women are adopting relationship behaviours congruent with what they perceive as norms with the Australian gender equal society.

7.5.2 Alcohol and drugs use

The number of younger participants in this study who self-reported they had drunk alcohol (27.1%) was very low compared to the 4th NSASSSH results (80%) (Smith et al., 2009). Therefore, it was not surprising there was also a lower respondents rate self-reporting being drunk or high on drugs the last time they had sex (7.8%) compared to the 4th NSASSSH results (24.2%). Alcohol and drug use (especially commencing at a young age) is associated with increased sexual risk (Agius, Taft, Hemphill, Toumbourou, & McMorris, 2013; Rashad & Kaestner, 2004; Stueve & O'Donnell, 2005). Therefore, this pattern of alcohol consumption is a positive result from a sexual risk perspective. However, given the influence of peer pressure and perceptions of Australia as having a drinking culture expressed by many of this study’s participants and others within the Queensland African community (Kahsay, 2011), it needs to be
considered how this may contribute to changing alcohol related attitudes and sexual risk behaviours in the future.

Culturally and linguistically diverse people generally have low rates of drug use compared to the Australian general population (Loxley et al., 2004). This was certainly the case with marijuana use for this study’s younger cohort (4.8%) compared to the 5th NSASSSH results (18%) (Mitchell et al., 2014) and National figures (10.3%) (Australian Institute of Health and Welfare, 2011). However, an important result from this study for further consideration is the percentage of 16-24 year old participants self-reporting they had injected drugs (3.5%) compared to the 4th NSASSSH results (1.7%) (Smith et al., 2009). Information about injecting drug use was not contained in the 5th NSASSSH 2013 report (Mitchell et al., 2014), so it is difficult to determine if injecting drug use among young school attending Australians has changed. Nonetheless, this disparity warrants future exploration.

Some African cultures include the use of cannabis within traditional practices, although the use of other illicit drugs and the injection of substances remain low in Africa (Acuda, Othieno, Obondo, & Crome, 2011). Nonetheless, refugee background people, in particular those with a history of trauma, have long been considered vulnerable in relation to illicit substance use (Sowey, 2005; Stewart, 1996). Substance use is emerging as an issue of concern among many new settlement communities in Australia, including those originating from African nations (Gifford et al., 2009; Horyniak et al., 2012). Therefore, despite the low use of alcohol self-reported by this current study’s cohort, further exploration of the behavioural motivators influencing alcohol and illicit substance use and the associated potential STI, HIV, and other blood borne viruses’ risk is needed for this group. This is particularly so given over a third of this study’s younger participants with a history of injecting drugs self-reported sharing injecting equipment.

7.5.3 Sexual health information

The percentage of 16-24 year old participants in this study who self-reported they had sought sexual health information was a positive finding despite the percentage being low (61.6%) in comparison to the 4th NSASSSH results (88%) (Smith et al., 2009). The
participants’ low perceptions of risk and poor awareness of STI related consequences may be contributing to this disparity (Brannon & Feist, 2007; Champion & Skinner, 2008; Facente, 2001). However, it may also reflect a general reluctance and/or fear to access information given the normative beliefs and taboos associated with talking about sex discussed earlier in this chapter. The majority of young people participating in this current study, as with previous Australian research involving refugee background youth, identified perceptions of shame, embarrassment, and stigma as key barriers to accessing sexual health information (McMichael, 2008; McMichael & Gifford, 2009). A perceived lack of culturally appropriate sexuality information and education was also thought to be creating barriers. Interestingly, the percentage of young people accessing information in this current study was similar to that reported in a study by Fagan and McDonell (2010) involving Australian Aboriginal and Torres Strait Islander youth; a population known to have limited access to appropriate health services (G. C. Miller et al., 2003) and similar low levels of STI and HIV knowledge and perceptions of risk (Fagan & McDonell, 2010). This supports the need for this study’s target population to be considered a priority population in regards to sexual health initiatives.

Where participants in this study accessed information varied from the 4th NSASSSH results (Smith et al., 2009), suggesting these groups of young people may experience different barriers and/or motivators to accessing such information. In this study, doctors were the most commonly used (46.3%) and most highly trusted source of sexual health information. In the 4th NSASSSH, doctors were less frequently used (39%) and mothers were the most frequently used source (56%) (Smith et al., 2009). This is in contrast to this study’s results where mothers (21.4%) and fathers (16.6%) were among the least used sources. The disparity in parental involvement is not surprising given the traditional beliefs against talking about sex related issues with parents. The disparity in access to doctors remains unexplained. Consistent with the 4th NSASSSH results, school programs were among the top sources of sexual health information used by this study’s younger participants. Consistent with results of the qualitative research by McMichael (2008) involving Victorian refugee background youth, the majority of this study’s participants considered schools to be the best place for sexuality education to occur. Young people’s reluctance to involve parents in sexuality education is not unique to this study (Keys et al., 2008). Nonetheless, the majority of this study’s participants thought involving parents and other adults such as elders and community
leaders would foster constructive intergenerational relationships and help both young
people and their parents to develop the knowledge and skill necessary to make safe
sexual decisions and parenting choices. This concept is supported by previous research
that shows parental involvement in sexuality education also reduces sexual risk taking
among young people (Hutchinson & Wood, 2007; K. S. Miller et al., 2009; Ogle et al.,
2008; Whitaker et al., 1999).

The frequency of internet use in this study (25.8%) was low in comparison to the 4th
NSASSSH results (35.8%) (Smith et al., 2009); however, there was considerable
concern expressed by this study’s older participants about the negative influence of the
internet and other social media. Interestingly, the 5th NSASSSH included a set of new
items measuring internet, technology, and social media use (Mitchell et al., 2014). The
results indicate a considerable increase in the use of internet websites for sexual health
information (43.6%). The results also show that the majority of this representative
sample accessed some form of digital technology such as Facebook at least once a day
and participated in the sending and/or receiving of sexually explicit text messages,
photos, or videos of themselves or others (Mitchell et al., 2014). These findings support
other research findings indicating young people, including newly arrived refugee
background youth (McMichael, 2008), are increasingly using social media and other
forms of online and digital technology as a means of accessing sexual health
information (Ahern & Mechling, 2013; Byron, Albury, & Evers, 2013; Chapin, 2000;
Evers, Albury, Byron, & Crawford, 2013; Mitchell et al., 2014). The majority of this
study’s older participants expressed concern about the lack of parental ability to censor
or control information accessed from the internet, along with other forms of electronic
communication and digital technology. The use of these new technologies did not arise
as a point of discussion or concern among this study’s younger participants;
nonetheless, it is reasonable to expect the use of these new technologies to increase with
time for this study’s cohort. These media can be a source of positive sexuality
messages, but the potential for exposure to harm and intergeneration conflict needs
consideration in future sexual health initiatives (Ahern & Mechling, 2013; J. D. Brown,
Keller, & Stern, 2009).
7.5.4 Sexual health care and HIV testing

Consistent with previous Australian research involving refugee background youth (McMichael, 2008), the majority of this current study’s 16-24 years olds survey participants reported that the local doctor was the service of choice for sexual health and contraception care. Previous research, suggests refugee and migrant groups generally have limited knowledge of available services and lacked confidence to access western style health systems on resettlement in host countries (Commonwealth of Australia, 2007; N. Davidson, Skull, Burgner, et al., 2004; N. Davidson, Skull, Chaney, et al., 2004; Kizito, 2001; Sheikh-Mohammed et al., 2006). Therefore, despite the majority of this current study’s younger participants indicating they would attend a doctor or specialist sexual health clinic if needed, it is reasonable to posit they may lack the knowledge and skill to do so.

The perceptions of shame and stigma associated with HIV and sexual health related issues expressed by the majority of this study’s participants may serve as a further deterrent to their willingness to access specialist sexual health services (Cunningham, Kerrigan, Jennings, & Ellen, 2009; Fakoya, Reynolds, Caswell, & Shiripinda, 2008). Culturally and linguistically diverse populations, including those of refugee and African background, experience substantial challenges accessing health care, including language, financial constraints, and concern about the cultural competence of the health care provider (Guirgis, Nusair, Bu, Yan, & Zekry, 2012; Henderson & Kendall, 2011; Sheikh-Mohammed et al., 2006). Further research is needed to elicit possible strategies to overcome the added challenges associated with sexual health and HIV related normative beliefs and perceptions of shame specific to this study’s target population. This is particularly important given the emerging issue of late HIV diagnosis among African Australians (Lemoh et al., 2009; McMahon & Ward, 2012).

The percentage of 16-24 year old participants in this current study who self-reported they had been tested for HIV was very high (31.0%) in comparison to the 4th NSASSSH results (3.4%) (Smith et al., 2009). This disparity may be attributed to Australian refugee and migrant visa health assessment requirements. However, with 13 years the mean age of arrival for this current study’s survey participants, it is important to note many would not have been tested as part of visa testing requirements. HIV testing is
not mandatory, pre- or post arrival, for under 15 year old refugees or migrants unless they are being adopted, have a history of blood transfusion, or are clinically symptomatic (Australian Federation of AIDS Organisations Inc, 2011; Commonwealth of Australia, 2013c, 2013d). Therefore, patterns of HIV testing reported by this study’s participants may reflect an assumption of prior HIV testing owing to the poor understanding of visa entry requirements discussed earlier in this chapter. Alternatively, it may also indicate increased HIV testing being offered by health care professionals based on epidemiological evidence and awareness of this population’s increased HIV risk (Lemoh et al., 2010; The Kirby Institute, 2013a). Despite the perceived lack of HIV risk reported earlier in this chapter, more young Sudanese Queenslanders are seeking HIV testing compared to their contemporary secondary school peers.

HIV testing rates in Australia are high in comparison to many other countries (Bell, Waddell, & Chynoweth, 2013; Commonwealth of Australia, 2010). However, a lack of evidence in relation to specific Sudanese ethnicity data in national HIV testing trends and undiagnosed HIV infections (The Kirby Institute, 2013b) makes it difficult to draw any conclusion regarding this disparity or to make a comparison with national figures. Results of this study suggest HIV testing among the Queensland Sudanese community is moving towards the rates among gay men (60%) and people with a history of injecting drugs living in Australia (50%) (The Kirby Institute, 2013b). With African Australian communities already over represented in new and late HIV diagnoses in Australia (Lemoh et al., 2010; The Kirby Institute, 2013a), increased access to testing should be a priority for this group, particularly as early detection of HIV reduces onward HIV transmission and improves the long term prognosis and quality of life of those living with HIV (Bell et al., 2013).

Participants in this current study considered people in their community were unwilling to seek HIV testing or medical care due to fear of social isolation, shame, discrimination, and visa rejection. Sudanese men who have sex with men may also resist testing due to the added fear of the sociocultural consequences associated with same sex behaviours (Abu-Raddad et al., 2010). Previous research also suggests African background migrants resist HIV testing as they fear reinforcing beliefs of HIV as a ‘black’ person’s disease, thereby further categorising or labelling them in a manner
that increases risk of discrimination (Heus, 2010). Fear may also contribute to a failure to disclose risk related behaviours and HIV status when it is important to do so (Barrett & Mulugeta, 2010; Fakoya et al., 2008; Persson, 2012; Persson & Richards, 2008), such as with new partners and pregnancy.

The strong link between HIV and cultural and religious doctrines of sin, fear, shame, blame, promiscuity, and behaviours considered immoral, sinful, taboo, or wrong expressed by this study’s participants is not uncommon among mainstream Australians (Persson & Richards, 2008) or Sudanese and other Sub-Saharan communities in a range of other countries (Barrett & Mulugeta, 2010; Fakoya et al., 2008; Foley, 2005; B. Y. Holt et al., 2003; Mbonu, van den Borne, & De Vries, 2009; R. Palmer et al., 2009; Worth, Denholm, & Bannister, 2003). Nonetheless, these beliefs and associated fears need to be understood in relation to potential barriers to HIV testing (Heus, 2010) and the specific sociocultural context of Sudanese Queenslanders. Visibly different individuals and communities (such as this current study’s target community) already experience discrimination and negative stereotyping in Australia based purely on their appearance (Colic-Peisker, 2009). Delays in HIV testing and accessing sexual health care need to be addressed, but this needs to be accomplished in a manner that does not expose this community to further discrimination and negative stereotyping.

7.6 Influencing Factors

Factors perceived by this study’s participants to be influencing sexual health related knowledge, attitudes, and behaviour included traditional Sudanese sociocultural normative beliefs and behavioural expectations, perceived Australian norms including freedom, gender equity, and sexual openness, access to information and education, confidence, and peer pressure, particularly from Australian friends. Many of these factors are consistent with previous Australian (Hebbani et al., 2009; McMichael & Gifford, 2009, 2010; Poppitt & Frey, 2007) and international research involving Sudanese background refugee and migrant communities (Birukila et al., 2013) and determinants of behaviour within the well-established theoretical framework underpinning this study (Fishbein, 2000). The aim of this study was to allow the researcher to draw inference with some degree of validity, reliability, and generalisability about the factors participants perceived to be influencing their sexual health knowledge, attitudes, and behaviours (Creswell, 2014; Creswell & Plano-Clark,
Understanding and incorporating factors perceived as important to the individual and the broader community into future sexual health education and prevention strategies fosters community engagement and cultural appropriateness (Fishbein, 2000; Godin et al., 2008). The effectiveness of these sexual health initiatives is enhanced further if they are supported by theory and evidence such as the results of this study.

### 7.6.1 Length of time in Australia and age of arrival

Time since arrival in Australia was the only independent variable found to have a statistically significant effect on any of the dependent variables explored in this study ($p < .001$). Higher levels of STI and HIV knowledge associated with increased time living in Australia are not surprising given length of time exposed and integrated to a new community’s social, cultural, and environmental norms and beliefs is a well-established determinant influencing change within the acculturation theory (Berry, 1997, 2005; Berry et al., 2006). Nonetheless, this is a positive result of this study as access to information is a prerequisite to changing behaviour and reducing negative sexual health outcomes (Kang et al., 2010; Kirby et al., 2007). Previous longitudinal research, of which 52% of participants were born in Sudan, found a statistically significant increase over time in risk behaviours such as drinking alcohol, gambling, and smoking among refugee background youth settling in Australia (Gifford et al., 2009). This was not supported by this study’s statistical analysis; however, it is consistent with what the majority of this study’s interview and FGD participants perceived to be happening. The majority of younger participants perceived change as a normal transition to life in Queensland; however, older participants considered many of the changes were causing cultural disconnectedness and were having a negative effect on the sexual behaviours of young community members.

Age of arrival, while not statistically significant, was also thought by the majority of participants to be having a strong influence on how young people adjusted and/or behaved sexually within their new sociocultural and environmental context. Older participants considered those arriving to Australia during their adolescent years were the most vulnerable as they lacked embedded traditional cultural competence and maturity to make culturally appropriate choices. In contrast, younger participants thought this
group’s vulnerability related to their lack of sexual health knowledge. Regardless of these divergent beliefs, all participants agreed sexuality interventions needed to commence early on arrival regardless of age, rather than wait for young people to seek out information independently, often when too late.

7.6.2 Culture and religion

The majority of 16-24 year old participants in this study agreed culture and religion affected their sexual health related knowledge, attitudes, and behaviours, which is consistent with previous research (de Visser et al., 2006; R. Palmer et al., 2009). Older participants considered these traditional sociocultural beliefs and behavioural expectations to be protective, as they were perceived to have a regulatory effect on behaviour (Lammers et al., 2000; Little & Rankin, 2001; Manlove et al., 2006). However, younger participants considered traditional sociocultural normative beliefs did not prepare them or their parents to address the realities of their life in Queensland. Parents and families have a strong positive influence on developing attitudes and beliefs (Tinsley, Lees, & Sumartojo, 2004). Nonetheless, younger participants considered that their parents, in trying to enforce traditional attitudes and beliefs, were potentially increasing the younger people’s sexual vulnerability as their parents were largely unaware of the challenges they, the young, faced within their new sociocultural context and environment. For example, the majority of younger participants in this study identified the belief “If you talk [sex]... they will do it.” (FGD 3, p. 1) held by parents was a barrier to learning about sexual health and safety. As discussed previously, early open factual parent-child communication about sex and the factors influencing young people’s behavioural intent can have a positive effect on sexual health outcomes (Hutchinson & Wood, 2007; Ogle et al., 2008). This study’s participants suggest both parents and young people need early access to information about traditional Sudanese and Australian normative beliefs and behavioural expectations as a means of decreasing intergenerational conflict and cultural confusion. They also suggest these initiatives need to include opportunity for open mutually respectful intergenerational discussion about divergent sociocultural attitudes and beliefs, along with the realities and challenges faced by each generation learning to live in the Queensland context.
7.6.3 Freedom of living in Australia

The majority of participants in this study identified freedom, safety, and opportunity as important desired outcomes of living in Australia. Similar to previous Australian research (Hebbani et al., 2009; McMichael & Gifford, 2009, 2010; Poppitt & Frey, 2007), the freedom of youth in Australia was considered one of the foremost factors having a negative influence on the sexual behaviour of the younger community members. Perceptions of young people acculturating at a faster rate compared to their parents and other adults within the broader Sudanese community are not unique to this study (R. Palmer et al., 2009; Poppitt & Frey, 2007). Nonetheless, the majority of participants considered this disparity a key contributing factor to the intergenerational confusion and conflict arising from the young people’s desire and/or expectation of more freedom and their changing patterns of sexual behaviours. While acculturation to a new social context does not necessarily result in behavioural change or a cultural disconnect from traditional ways (Poppitt & Frey, 2007), the majority of this study’s participants considered the freedom of youth was the key factor contributing to the perceived increasing rates of pregnancy, changing patterns of relationships and sexual behaviour, and changing traditional family structures and parenting roles.

Previous Australian (Ebbeck & Dela Cerna, 2006; Hebbani et al., 2009) and international (Este & Tachble, 2009) research involving Sudanese participants provides credence to the concern and anger expressed by this study’s older participants towards the influence this perceived freedom and rights for youth were having on their parent-child relationship and authority. They considered the Australian legal and social support systems promoted this freedom and limited their ability to parent and discipline their children according to their normative beliefs. Of particular concern was the perceived right of young people to live independently with Government social and financial support “government give them [children] money ....they don't listen to [parents] ....don't want to live with you...we can’t control” (FGD 2, p. 25). Many of this study’s older participants considered this system was contributing to young people disconnecting from traditional norms and behaving in a manner not considered acceptable.
The majority of this study’s participants considered disparities between traditional Sudanese parenting norms and those considered normative by Australian society and law were creating parental confusion, frustration, and intergenerational distress, a finding not unique to this study (Ebbeck & Dela Cerna, 2006; Hebbani et al., 2009). Older participants suggested the perceived loss of parental control over relationships, dating, and the sexual behaviours of their children was a particular point of concern that needed to be addressed. All participants agreed parents needed support and guidance on how to address behaviours that deviate from their expected norms within these new parenting paradigms and sociocultural and legal contexts. This was particularly important if the parents had no access to the traditional extended family networks post resettlement and were solo parenting rather than being one of an adult collective sharing the responsibility and challenges of disciplining and protecting (Ebbeck & Dela Cerna, 2006; Savic et al., 2013).

7.6.4 Peer pressure

Statistical analysis found friends had the least perceived effect on how this study’s 16-24 year old survey participants thought about sex compared to the influence of parents, culture, and religion. The majority of interview and FGD participants perceived peer pressure, particularly from Australian friends, as a key factor influencing young people’s choices to engage in sexual behaviour discordant with traditional normative behavioural expectations. New arrival communities often have misconceptions about what is normal or expected behaviour within their new society due to the influence of the media and their limited exposure to Australian family and adolescent relationships (Australian Human Rights Commission, 2010a). Misconceptions about the level of sexual freedom experienced by other young Australians may, therefore, be contributing to perceptions of peer pressure to have sex in order to fit in (Skinner, Smith, Fenwick, Fyfe, & Hendriks, 2008). Considering the poor levels of knowledge and perceptions of low risk identified among this study’s younger participants, these misconceptions may also be placing this group of young people at further sexual risk. This again supports the need for sexual health interventions to include information about Australian normative beliefs and behavioural expectations, along with accurate information about the sexual initiation and behaviour patterns of young people in Australia.
7.7 Relationship of Findings to the Theoretical Framework

As discussed earlier within Chapter 2, the Integrated Behavioural Model (IBM) by Fishbein (2000) has been used successfully in a number of previous studies exploring sexual behaviour and in the development of effective interventions such as HIV prevention and condom use from a cross-cultural context (Fishbein, 2000; Kasprzyk et al., 1998; Montaño & Kasprzyk, 2008). Developing an intervention was beyond the aim and scope of this study’s purpose; nonetheless, the IBM provided an organised, well-established framework to explore the complex interaction of intrinsic and extrinsic social, cultural, and environmental factors known to influence behavioural intent and to predict sexual behaviour (Brannon & Feist, 2007; Fishbein, 2000; Fishbein & Yzer, 2003; Montaño & Kasprzyk, 2008; Noar, 2007b; Yzer, 2012). The IBM also provided flexibility to incorporate external variables and sociocultural factors unique to the contextual perspective of this study’s target population. This included factors such as cultural identity, acculturation level, and age of arrival and length of time since resettlement, which emerged during the initial review of literature and Phase 1 community consultation. Using the IBM constructs in combination with these unique factors to guide data collection and analysis elicited an in-depth understanding of the beliefs that determine behavioural outcomes relevant to the participants being investigated (Montaño & Kasprzyk, 2008). Using a well-established theoretical model known to effectively predict behavioural intent from the sociocultural context of the target population means this study’s results are ideally placed to inform future development of effective behavioural change interventions and health messages.

The constructs knowledge, attitudes and beliefs, and confidence drawn from the IBM behavioural determinates were used consistently throughout this study from formulation of the research questions through to the development of the data collection tools and data analysis plan. Applying these constructs, used successfully to explore sexual health related behaviours in a range of previous Australian and international research involving youth and communities of Sudanese origin (Agius et al., 2010; Asante, Körner, McMahon, Sabri, & Kippax, 2009; A. D. Burgoyne & Drummond, 2008; Drummond et al., 2008; Fagan & McDonell, 2010; Grulich, de Visser, Smith, Rissel, & Richters, 2003; Larkins et al., 2007; Lazarus et al., 2006; Moukhyer et al., 2006; Tompkins et al., 2006), also enabled this study’s results to be analysed and presented in
a manner that facilitated ready comparison with results from other behavioural theory informed studies.

This current IBM supported study provides a contextualised description of sexual health related factors from the perspective of its participants. Sexual health and HIV interventions developed using results of studies grounded in behavioural theories such as the IBM are effective in changing attitudes and targeted behaviours (Albarracín et al., 2005; Albarracín et al., 2001; Fishbein & Pequegnat, 2000; St Lawrence & Fortenberry, 2007; Yzer, 2012). The objective of this exploratory descriptive study was not to develop an intervention or to change behaviours. Nonetheless, it provided invaluable results to guide the development of future behavioural theory based interventions tailored to the contextualised needs of this study’s target community.

7.8 Limitations

One of the strengths of this study was the combination and convergence of qualitative and quantitative datasets. A particular challenge of this study was conducting cross-cultural research on a sensitive topic with young people and adults from a small community in a way that captured their experience in a culturally safe and methodologically sound manner. Some of the methodological, ethical, and logistical challenges of this study and the steps taken to neutralise these issues have been outlined in the published article included in Chapter 2. However, like other research, there are limitations of this study.

Firstly, non-probability convenience sampling was used for both the quantitative and qualitative strands of this research. This approach was chosen as the most culturally and methodologically appropriate for this research (Ahmed et al., 2001, November; Bloch, 2007; Schofield, 2004); however, some caution needs to be taken when interpreting the findings. The dominance of South Sudanese and Christian participants limited the ability to generalise this study’s findings to those originating from the Republic of Sudan and/or those practising Islam. Nonetheless, the combination of snowball and quota sampling with multiple active strategies of recruitment resulted in a sample reflective of the characteristics of the ethically and socially heterogeneous South Sudanese communities (Cassity & Gow, 2005) in Queensland (Queensland
Government, 2011) and Australia (Lucas et al., 2011). Care needs to be taken in generalising this study’s findings to the wider Queensland and Australian Sudanese populations. Nonetheless, the results provide a valid and reliable insight into the sexual health of this these communities.

Secondly, the use of English for both the written survey and qualitative data collection may have favoured those with good English language and literacy skills. Data collection conducted in English may not have been optimal. However, consultation with the reference group members suggested English was widely spoken in South Sudan and the majority of the target population would have English proficiency levels suitable for involvement. Access to an independent interpreter to ensure impartial, accurate, and confidential interpretation and understanding of the information (Kizito, 2001) was offered to negate this limitation but was declined by all participants during qualitative data collection. The peer recruiters were given privacy and confidentiality training prior to employment and were used as a first preference if clarification was sought in dialect during survey data collection, thus increasing the opportunity for recruitment of young people with lower English levels who might otherwise have been excluded.

The use of English may have also resulted in the loss of subtleties of meaning and limitations in the capture of the target community’s experiences (Temple, 2005; Temple & Edwards, 2006). The primary researcher was not Sudanese or bilingual and this may have also influenced the collection and interpretation of the data (Connell et al., 2004). Ongoing cultural advice and guidance from the study’s reference group and peer recruiters provided insight into the target community’s norms and nuances which assisted in negating this issue. The principal researcher’s personal experience of living in Sudan and working with the Queensland Sudanese community post settlement meant that, while an outsider, she had knowledge and understanding of traditional Sudanese sociocultural norms and the community’s pre- and post arrival experiences. This facilitated the development of an open trusting relationship and the researcher being positioned as an outsider with insider knowledge by the community, thus further negating the issue of lost meaning and context (Liamputtong, 2010; O’Connor, 2004; Ogilvie et al., 2008). This also went some way in addressing potential response biases, the third limitation of this study.
Collecting data on socioculturally sensitive attitudes and behaviours such as sexual health and behaviour can create varying degrees of willingness to participate, speak freely, and respond accurately (Fenton et al., 2001). Conducting such research can potentially result in over and/or under reporting of sex practices, unreliability of retrospectively gathered data, and discrepancy between self-reported and actual behaviour (Baum, 2008; Dariotis et al., 2009; Hassan, 2006; O’Sullivan, 2008; Polit & Beck, 2012; Stocké & Hunkler, 2007). Perceptions of sensitivity, stigmatisation, and privacy make it difficult to achieve true accuracy when collecting data on sensitive topics, no matter what methodological approach is used (Stone, Catania, & Binson, 1999; B. White, Day, & Maher, 2007). In this study’s survey strand the percentage of participants reporting they were ‘not sure’ about individual item responses (range: 13.5-34.5%) and the percentage of missing data in items pertaining to sexual behaviour (maximum 14%) may be attributed to a reluctance to answer socially or culturally sensitive questions. However, it may also be reflective of respondents’ knowledge levels, English literacy skills, and even their lack of interest or boredom in completing the questions despite voluntarily agreeing to participate (Gallagher, 2009). The range of ‘not sure’ responses was similar across all domains of the survey and analysis of non-responders and ‘not sure’ characteristics detected no discernible or coherent pattern to the missing data.

Social desirability response bias may have contributed to the under reporting of sexual behaviours, especially among the women in this study (Dalton & Ortegren, 2011; Fenton et al., 2005; Polit & Beck, 2012). However, the use of a self-administered survey instrument in this study maintained participants’ perceptions of privacy, confidentiality, and anonymity and assisted in increasing comfort to accurately self-report (Smith & Pitts, 2007; B. White et al., 2007). It is also proposed that, due to the issues of reliability around self-reporting of sensitive topics collected in the survey phase (Dariotis et al., 2009; O’Sullivan, 2008), convergence and triangulation of the three primary datasets strengthened the reliability and validity of findings and prevented over reliance on one source of information (Fenton et al., 2001; Power, 2002). Triangulation of this study’s findings with the NSASSSH results further enhanced the validation of findings (Mitchell et al., 2014; Smith et al., 2009). The development a level of mutual trust and rapport between participants and the researcher that facilitated the open candid sharing of information in a relaxed and safe environment (Dean et al.,
the use of peer recruiters, and the primary researcher’s insider knowledge also went some way to increasing the participants comfort in sharing information and addressing the issue of social desirability response bias (Elliott et al., 2002; O'Connor, 2004; Ogilvie et al., 2008).

From a methodological point of view, the significant relationship between the length of time participants had lived in Australia and knowledge levels found in this study suggests conducting a longitudinal study may provide greater understanding of how time and other variables influence the sexual health knowledge and related behaviours of the Queensland Sudanese community (Polit & Beck, 2012). Conducting STI testing to determine actual STI prevalence in conjunction with the behavioural survey and qualitative data collection methods conducted in this study might have also strengthened the understanding of the Queensland Sudanese community’s sexual health needs (Dariotis et al., 2009; Fenton et al., 2001; Wellings & Cleland, 2001). However, while collecting such data would have addressed an identified gap in state and National data and enabled assessment for potential discrepancy between self-reporting and actual clinical status (Dariotis et al., 2009), the complexity of adding a biological component was beyond the scope of this current study.

Finally, although all components of this study’s survey instrument had been used with other young people including those from culturally and linguistically diverse backgrounds living in Australia, and was reviewed for cultural and English level suitability by this study’s RG and peer recruiters, the individual survey items and scales were not developed and validated for Sudanese populations. Nonetheless, the instrument was congruent with this study’s theoretical framework, provided a comprehensive assessment of the constructs being explored within this study’s research questions, and enabled direct comparison of results with the NSASSSH results (Mitchell et al., 2014; Smith et al., 2009). Caution needs to be taken when interpreting the comparison of this study’s results with those of the NSASSSH due to disparities in age ranges and characteristics among the samples and minor item variations within the survey tools. Nevertheless, the result was an understanding of the noteworthy parallels and points of difference between the young people involved in this study and a representative sample of their contemporary Australian peers (Agius et al., 2010).
7.9 Summary

By using a combination of qualitative and quantitative approaches, this study aimed to explore sexual health knowledge, attitudes, and behaviours from an intergenerational perspective. Conducted in partnership with the target community and guided by the IBM theory, results of this study provided contextualised understanding of the key behavioural, normative, control, and efficacy beliefs, perceived by the participants to affect the sexual health and well-being of their community. The IBM theory recognises that interventions and health messages are more effective when designed from the context and perspective of the target population (Yzer, 2012). Therefore, this study has developed understanding and awareness of the key behavioural variables and salient issues to target in future interventions and research.

It is apparent there are divergent and changing sexuality related attitudes and norms across the generations. The young people acculturating at a faster rate compared to the adults explains in part the differences in attitudes and beliefs and what is perceived as acceptable behaviour. Despite the anecdotal concerns expressed by the Queensland Sudanese community about what they perceive as unacceptable ‘bad’ behaviour of young people, the young participants in this study generally reported good sexual health, a willingness to seek out information, and awareness of the intergenerational issues facing young immigrant people and their families. It is also important to acknowledge the behaviour of this current study’s participants was not so different to that of their contemporary Australian secondary school peers as to cause undue alarm or public health concern. However, there are a few notable issues for concern and further investigation, such as the low levels of knowledge and risk perception, rates of pregnancy and STI reported among young women, anal sex practices, and intergenerational differences in perception and acceptance of Australian norms and laws. In the final chapter, these issues of concern are discussed in relation to their implications for practice, sexual health initiatives, education, and future research.
Chapter 8 Conclusion and Recommendations

8.1 Introduction

The purpose of this study was to explore the sexual health knowledge, attitudes, and beliefs of the Queensland Sudanese communities along with the self-reported patterns of sexual behaviours of the 16-24 year old community members. The Integrated Behavioural Model (IBM) underpinning this study provided a well-established framework to guide exploration of these known determinants of sexual behaviour (Fishbein, 2000) and, in conjunction with the literature review, informed the development of this study’s nine research questions.

1. What is the knowledge of the 16-24 year old Sudanese background youth in Queensland regarding sexually transmissible infections (STI) and HIV?
2. What are the attitudes and beliefs of the 16-24 year old Sudanese background youth in Queensland regarding sexual health and behaviour?
3. How confident are the 16-24 year old Sudanese background youth in Queensland communicating about sex?
4. What are the self-reported patterns of sexual behaviour among the 16-24 year old Sudanese background youth in Queensland?
5. What are the services used by the 16-24 year old Sudanese background youth in Queensland for sexual health information and health care?
6. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding sexual health and behaviours?
7. What are the knowledge, attitudes, and beliefs of the Queensland Sudanese community regarding the sexual health and behaviour of the young community members?
8. What are the sexual health related issues causing concern to the 16-24 year old Sudanese background youth and the broader Queensland Sudanese community?
9. What do the 16-24 year old Sudanese background youth and broader Queensland Sudanese community perceive as factors that influence sexual health knowledge, attitudes, beliefs, and patterns of behaviours?

In order for these research questions to be addressed, this descriptive multiphase study was conducted in collaboration with the Queensland Sudanese community using a convergent parallel mixed methods approach (Creswell, 2014; Creswell & Plano-Clark, 2007; Teddlie & Tashakkori, 2009). The resultant multilevel data provided a
multidimensional intergenerational understanding of the Queensland Sudanese community’s sexual health knowledge, sociocultural normative attitudes and beliefs, and the determinants perceived as key factors influencing the younger community members’ sexual decision making and behaviours.

Calculating and achieving an adequate sample size for this study posed some challenges. Nonetheless, conducting the research in collaboration with the target community using a combination of methods and active recruitment strategies overcame these methodological and logistical challenges and allowed for the recruitment of an adequate sample \((N = 248)\). The peer recruiters were pivotal to the successful recruitment to the Phase 3 survey ensuring, at the 95% confidence level, the sample \((n = 229)\) was within +/- 0.05 accuracy of the population proportion (Reaves, 1992). At the same time, no unrealistic demands were placed on the community during the 12 month recruitment period (Dean et al., 2012).

The Integrated Behavioural Model underpinning this study has been widely used to explore health related behaviours in a variety of sociocultural context (Fishbein, 2000). The successful completion of this study supports the value of conducting research informed by this established IBM theory, which was used without the need for modification. This study is the first of its kind in Australia and provides much needed behavioural theory based evidence to inform practice, education, and prevention strategies. This chapter highlights the major findings of this study and outlines how conclusions drawn from this research contribute to the existing body of literature regarding sexual health, with suggestions for practice, education, and future research.

8.2 Outcomes of Study and Contribution to Knowledge

The Queensland Sudanese community’s concern regarding young community members engaging in culturally inappropriate sexual behaviour was a precursor to the undertaking of this study. Results of this study provide a description of the 16-24 year old participants’ patterns of sexual behaviour and suggest the sexual behaviour of some young people is divergent from what the older participants perceive as culturally appropriate and acceptable. For example, the results of this study confirm a number of young participants are having sex before marriage. However, it is important to
acknowledge that this study’s results suggest the young people participating in this study are in relatively good sexual health and have similar patterns of sexual activity to their age comparable secondary school Australian peers (Agius et al., 2010; Mitchell et al., 2014; Smith et al., 2009). The substantially older age of sexual début and lower number of sexual partners in the last 12 months among this study’s participants compared to the National Survey of Secondary Student and Sexual Health (NSASSSH) cohort is a positive protective factor that may be attributable to the regulatory effect of traditional Sudanese sociocultural normative beliefs. These traditional beliefs may also contribute to the overall low levels of sexual risk taking behaviour suggested by this study’s aggregated sexual risk behaviour score results. These patterns of low sexual risk are a positive finding; nevertheless, outcomes from this study do provide some cause for concern in regards to the sexual vulnerability and behaviours of this group.

A result of concern was the low levels of sexual health knowledge self-reported by this study’s younger participants compared to their Australian secondary school age peers. These low levels of sexual health literacy suggest the well-established sexual vulnerability of refugee youth continues post settlement for young Sudanese Queenslanders. These low levels of sexual health literacy are particularly concerning when combined with other results from this study. For example, results of this study suggest the younger participants’ have a low perception of STI risk and a negative attitude towards condoms and contraception, along with a self-reported pattern of anal sex practices, unwanted sex, and sex leading to pregnancy and/or an STI diagnosis that needs further investigation. Their belief that HIV is not a problem in Australia also raises concern regarding their perceived and actual risk of HIV exposure.

Sudan is generally considered a conservative society with strong sociocultural and religious founded attitudes and beliefs around sexuality (Mohamed & Mahfouz, 2013). Therefore, it is not surprising this study’s results identified sexual health as a culturally sensitive taboo topic and older participants are concerned about changing patterns of sexual behaviour and relationships. It is also not surprising that these sociocultural driven normative beliefs were perceived by many participants to have an ongoing influence post arrival on their sexual health knowledge, attitudes, and behaviour including their willingness to use condoms and hormonal contraception and their ability to openly discuss sex, particularly with parents. Divergent attitudes and beliefs between
young people and adults participating in this study were also not unexpected given the participants’ varying ages, stages of acculturation and exposure to multiple cultures during their migration journey. Nonetheless, results of this study suggest these differing attitudes and beliefs are a strong precursor to the intergenerational discord occurring within the Queensland Sudanese community. Results of this study suggest young people and their parents experience confusion and conflict post settlement as the young people more readily adopt and adjust to the Australian sociocultural norms. This is not a unique result (Hebbani et al., 2010; Khawaja & Milner, 2012; Khawaja et al., 2008; Poppitt & Frey, 2007); however, this study’s results suggest varying intergenerational perceptions, interpretations, and acceptance of Australian normative sexual beliefs and behavioural expectations - such as the belief all young Australians have sexual freedom and the right to act independently of parental control – is one of the leading causes of this familial discord. In this study, this perceived sense of freedom was also considered the key factor contributing to young people adopting patterns of sexual behaviour divergent from traditional normative behavioural expectations.

Participant’s self-reported a willingness to seek out sexual health related information and data analysis indicate there was a statistically significant increase in STI and HIV knowledge over time post arrival in Australia. Nonetheless, this study’s results indicate access to sexual health information, education, and care needs to be given priority. This is particularly so given the self-reported rates of sex leading to an STI or pregnancy for young females in this study are double those of the NSASSSH cohort. National data indicating African born Australians are already disproportionately represented in Australia’s new and late HIV diagnoses further support the need to recognise this community as a priority population (Lemoh et al., 2010; The Kirby Institute, 2013a). All participants in this study perceived access to sexual health information and education was important, which suggests a level of community support that would promote successful development and implementation of a community led sexual health education and prevention initiative. This community support is an important finding as community led interventions that respond to community perceived priorities are known to be effective in reducing risky sexual behaviours and preventing STI, including HIV (Godin et al., 2008; G. R. Gupta et al., 2008; Rhodes et al., 2012).
To the best of the principal researcher’s knowledge, this is the first study in Australia to collect data on sexual health knowledge, attitudes, and behaviours from a sample of refugee background youth that provides an opportunity for direct comparison of results with a representative sample of other Australian youth. Comparing this study’s results with those of the National Survey of Secondary Student and Sexual Health (NSASSSH) provides an understanding of the noteworthy parallels and points of difference between the young people involved in this study and some of their contemporary Australian peers and provides understanding of where and why sexuality education may need to vary for this study’s cohort. Caution needs to be taken when interpreting these comparisons because of disparities among the samples and minor item variations between the survey tools, nonetheless; juxtaposing these studies provides greater understanding of the sexual health of the young Sudanese Queenslanders, and how this varies from other young Australians.

There is an emerging body of knowledge about the settlement experiences and health needs of the Queensland Sudanese communities. However, few researchers have addressed the sexual health and behaviours of refugee background youth in Australia, particularly from the perspective of one specific collective cultural target community. This study, therefore, is one of the first to contribute to the contextualised intergenerational understanding of the factors perceived to be influencing the young Queensland Sudanese people’s sexual health knowledge, attitudes, and beliefs, sexual behaviour, and sexual decision making post settlement in Queensland, Australia along with the key issues in relation to their behaviour creating intergenerational discord within the community. Results of this study provide sound rationale for why young Sudanese Queenslanders need to be considered sexually vulnerable post arrival, however, they also confirm there is a community acceptance for this vulnerability to be addressed despite the traditional cultural sensitivity and changing patterns of behaviours.

The insight this study provides into the Queensland Sudanese communities sexual health literacy makes a unique contribution to this existing body of knowledge. This insight addresses the research questions that were exploratory in nature. The use of the well established IBM to guide this study ensured the findings contribute to the understanding of what influences both protective and risk related sexual health
behaviours among Sudanese Queenslanders. The following section presents how the findings from this study can be used to inform practice, sexual health education, and intervention initiatives, and to guide future research.

8.3 Recommendations

8.3.1 Recommendations for practice

The results of this study define a body of knowledge and understanding that previously have not been documented in Queensland and, as such, contribute significantly to the future development of culturally safe and competent models of sexual health practice and service delivery for the Queensland Sudanese community. The following outline the key recommendations for practice drawn from this study.

Recommendation 1: Sexual health care within a comprehensive primary health care model is the preferred model of care

Specialist sexual health and HIV services were utilised and perceived as important by participants, however, findings from this study suggest sexual health care within a comprehensive primary health care model such as a general practice is the participant preferred model of care. Specialist sexual health care services working in collaboration with Primary Health Care facilities will ensure effective referral pathways are established for those in need of more complex and specialist care. Establishing and implementing this model of care should be a priority for public and private sexual health service and primary health care providers and health policy advisors.

Recommendation 2: HIV and sexual health related stigmas and fears need to be addressed

Perceptions of fear, shame, and stigma associated with HIV and sexual health related issues are seen as a major barrier to accessing sexual health care, HIV testing, and contraception options. Findings of this study suggest this is a particular barrier to accessing specialist sexual health services. As such, strategies addressing these culturally led beliefs and judgements need to be incorporated into future models of care.
and intervention strategies. Addressing these issues in collaboration with the community will negate access barriers and potential harm associated with the stigmatisation and discrimination linked to these issues.

Recommendation 3: Cultural competence training programs incorporating sexuality awareness need to be implemented

Results suggest a perceived lack of cultural competence among Australian health care workers is a major barrier to the Queensland Sudanese community accessing much needed sexual health and HIV care. A priority would be to address this issue with existing service providers, however, including this training into entry to practice education programs need to be recognised as essential long term goals for health education and policy providers. The results of study will inform the development of such cultural competence training programs.

Recommendation 4: Active community participation is essential

A key message from this study is the importance of involving members of the community in the development and implementation of these services and training programs. Active community participation will ensure sexual health and HIV models of care are tailored to address the cultural, social, and environmental context of the community. Active participation of the community will also ensure relevant information about this populations pre- and post arrival in Australia experiences are considered and integrated.

8.3.2 Recommendations for sexual health education and interventions

This study’s results will guide the development of tailored and effective evidence-based sexual health education and prevention initiatives (Godin et al., 2008; Grigg-Saito, Och, Liang, Toof, & Silka, 2008). Several recommendations regarding the development and implementation of these initiatives can be drawn from the research findings. The services/bodies who could take responsibility for the development and implementation of these recommendations is dependent on the recommendation; however, findings from
this study support the need for community involvement from conception through to implementation and evaluation.

Recommendation 1: Implementation of sexual health education and interventions early within the resettlement experience.

This study’s results provide invaluable support for the implementation of community led sexual health education and prevention initiatives early within the resettlement experience, particularly for young people arriving during their early adolescent years. Findings from this study support the need for these programs to involve information on safer sex, contraception options, sexual decision making, and relationships within the Australian sociocultural context and from the cross cultural perspective. The principal researcher acknowledges establishing sexuality education as an arrival priority will present challenges given the vast array of competing issues arising during the initial resettlement period. Nonetheless, given the rates of pregnancies occurring within this study’s younger participants and difficulty of achieving resettlement goals when faced with an unwanted pregnancy or HIV diagnosis, these initiatives should be given priority among both settlement and sexual health services and policy makers and the community.

Recommendation 2: Community and young people need to be actively involved in the planning, development and implementation of sexual health education and interventions

Young people, along with their parents and relevant community stakeholders, need to be involved in the planning, development, and delivery of these programs. Community involvement will assist in developing culturally safe and sensitive learning environments that promote open intergenerational communication and sharing of concerns about any conflicting attitudes, beliefs, and behavioural expectations. Such environments will help to reduce intergenerational and intercultural conflict and disharmony. The widely held normative beliefs and perceptions of HIV related shame and discrimination suggest community members living with HIV also need to be involved with the planning, development, and delivery of these programs. This would assist in developing broader community and service provider understanding of the
unique needs of this group, while also providing a strong community led initiative to dispel the misbelief that HIV is not a problem in Australia.

Recommendation 3: Sexual health education and interventions need to target both young people and adults.

This study’s results suggest that the primary aim of programs targeting young people should be to develop the necessary knowledge, confidence, and skill to make informed sexual decisions within the bicultural context in which they now find themselves living, ideally before sexual initiation or experiencing a negative sexual health outcome. Providing adults with early access to sexual health education and support similar to what the young people are receiving will assist them to develop the knowledge and understanding to protect their own sexual health, while also promoting the development of willingness and skill to openly discuss sexual health issues with their children. This recommendation should be seen in equal priority to establishing early access to education for new arrival youth.

Recommendation 4: Sexual health education and interventions need to integrate aspects of both traditional Sudanese cultural beliefs and Australian sociocultural norms

Results of this study also suggest interventions need to integrate aspects of both traditional Sudanese cultural beliefs and Australian sociocultural norms, thereby enabling parents and young people to develop an understanding of both sides of the issue (Berry, 2005; Berry et al., 2006; Hebbani et al., 2009). It is difficult to generalise Australia’s normative sexual beliefs and behavioural expectations; nonetheless, awareness and understanding of how people perceive these factors in relation to traditional Sudanese normative beliefs and behavioural expectations and how those perceptions influence behaviour will reduce this group’s cultural confusion and sexual vulnerability as they learn to parent and make sexual decisions within Australia’s sexual culture.

Recommendation 5: Sexual health education and interventions needs to be implemented in venues acceptable to the community and target audience

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Findings indicated that local general practitioners are a common trusted source of health information, however, results also is suggested that information needs to be made available in a range of community acceptable venues. Schools were identified as a preferred venue for the provision of sexuality education, however, providing education and target interventions in other venues frequented by the community and young people such as youth services and sports programs are needed. There was strong support for parents and community elder involvement in development and implementation of these programs.

Recommendation 6: *Gender separation during education needs to be considered on a case-by-case basis*

Interestingly, despite the traditional gender specific sensitivity and role norms, there is no strong recommendation to separate males and females when providing sexual related education. Rather, this study’s results suggest gender separation needs to be considered on a case-by-case basis, dependent on the topic and participants’ preference, and in consultation with the community and young people.

Recommendation 7: *Develop sexual health education and interventions that incorporate information on safer anal and oral sex practices*

Results of this study strongly support the inclusion of safer anal and oral sex messages in sexual health related education and interventions for heterosexual and same sex attracted youth, including information on the full range of safer sex options and protective devices available. Findings from this study suggest this should be given priority given the increased HIV risk associated with anal sex practices (Street, 2011) and HIV rates among African background Australians (Lemoh et al., 2010).

Recommendation 8: *Develop sexual health education and interventions that acknowledges the needs of same sex attracted youth and non-gay identifying youth who engage in same sex behaviours.*
The percentage of young people in this study reporting same sex attraction and sexual activity draws attention to the need for lesbian, gay, bisexual, transgender, and intersexed (LGBTI) appropriate education that addresses the cultural variances in same sex attraction attitudes and behaviours. Findings also suggest the need to incorporate information on safer sex for heterosexual and non-gay identifying young people who engage in same sex behaviours.

*Recommendation 9: Incorporate drug and alcohol awareness into future prevention programs*

Results of this study suggest alcohol consumption and its influence on sexual behaviour is minimal within this study’s cohort. Nonetheless, the percentage of participants self-reporting injecting drug use and the rising concern about changing patterns of alcohol use suggest culturally appropriate drug and alcohol education and prevention initiatives are needed.

### 8.3.3 Recommendations for future research

Results of this study make a significant contribution to the research gaps discussed in the literature review chapter; however, the results have highlighted several areas in need of future research.

*Recommendation 1: Evaluation of current sexual health education and prevention initiatives*

Further research is needed to evaluate the effectiveness of current sexual health education and prevention initiatives in addressing the sexual health needs of this study’s target population and how best to involve the community in the development, implementation, delivery, and evaluation of these initiatives.

*Recommendation 2: Implementation of sexual health education and interventions within the early resettlement phase*
Results of this study suggest access to education and services is needed early within the arrival experience; therefore, further exploration of how this can be achieved is also needed.

*Recommendation 3: Peer Education Programs*

In this study, peer recruiters were pivotal to the successful recruitment of participants; therefore, further research and piloting of peer education programs would also be beneficial.

*Recommendation 4: Pregnancy rates and prevention*

Another area is the need for more research into understanding the rate of pregnancies occurring among young Sudanese Queenslanders. First, it needs to be determined if this rate is significantly disparate from pregnancy rates among other young Australians and, if so, research needs to explore the influencing factors and implications for the young people’s health and social wellbeing.

This study’s results suggest young Sudanese Queensland women experiencing an unwanted pregnancy are accessing termination services despite cultural attitudes expressed against abortions. However, largely unexplained are the factors influencing the decision making process associated with choosing termination as an option for unplanned/unwanted pregnancy.

Also unexplained is whether this group of young women is accessing adequate follow-up post abortion care, or antenatal care if they choose to progress with their pregnancy. Therefore, research is needed into the complex interplay of sociocultural, economic, and educational factors influencing the pregnancy outcome choices and experiences of these young people, their partners, and families. Results of this study suggest some young women are intentionally getting pregnant and seeking government support as a means of gaining freedom from traditional engendered behavioural expectations and parental boundaries. The sociocultural, environmental, and behavioural motivations behind this result remain unexplained and require further exploration.
**Recommendation 5: Exploration of anal sex practices**

Further research is also needed to develop greater understanding of the anal sex practices among this study’s cohort and their association with potential risk for HIV acquisition and transmission. This research should also the knowledge, attitude and beliefs towards anal sex practices, safer anal sex practices, and the use of anal sex as a contraceptive method.

**Recommendation 6: Drug and alcohol practices**

Another important result from this study requiring further research is the percentage of participants self-reporting injecting drug use. Results of this study indicate low rates of alcohol consumption and influence on sexual behaviour; nonetheless, the noted rising concern about changing patterns of alcohol consumption also needs consideration in future research.

**Recommendation 7: Gender roles and equality**

Adjusting to a new culture poses challenges to gender roles and this is evident in the changing attitudes towards gender equality and associated behavioural expectations of both young men and women involved in this study. These changes can also pose significant challenges to parent-child relationships. This study provides some understanding of these issues and results suggest families are slowly adjusting to these changes. However, further research is needed exploring the impact of young people gaining independence from traditional parental boundaries and expectations of gender equality on family dynamics and their sexual choices.

**Recommendation 8: Unwanted sex**

Also warranting further research is the gender disparity in unwanted sex reported in this study’s results. The potential for under reporting by females is acknowledged, but the higher frequency of young men reporting unwanted sex remains largely unexplained. Future research needs to concentrate on exploring the influence of varying interracial
beliefs, myths, and misconceptions on young Sudanese Queenslanders’ unwanted sex experiences, particularly from the young male’s perspective.

Recommendation 9: Understanding cross cultural relationship dynamics

The gender disparity in rates of interracial dating and difference in perceived cultural risk and sexual benefits highlighted by this study’s results also warrant further consideration. Further understanding is needed of the cross-cultural dynamics associated with all parties involved in these interracial relationships.

Recommendation 10: Ethnicity specific STI prevalence

Finally, future research also needs to address the dearth of ethnicity-specific STI prevalence data in Australia. Triangulation of STI surveillance data with results of social research, such as the results derived from this study, will provide further understanding of the specific sexual health related needs of this study’s target community (Aral, 2002; O. Davidson et al., 2002; Wellings & Cleland, 2001).

8.4 Summary

Emerging from a community led initiative to understand a perceived intergenerational difference in knowledge and understanding of sexual health related issues, this study, and its results contribute to the existing body of literature regarding sexual health. More importantly, they address the identified gap in the literature pertaining to the sexual health and wellbeing of the Queensland Sudanese community. One of the strengths of this study was the active participation of both the young community members and adults. The resultant multilevel data elicited intergenerational understanding of the shifting family relationship dynamics occurring within this community and how these affect sexual attitudes, beliefs, and behaviour. While unable to be generalised to a broader community, the results of this study are among the first to provide insight into the Queensland Sudanese community’s sexual health knowledge, attitudes, and behaviours.
Conducting this study in collaboration with the Queensland Sudanese community provided the community with a direct voice throughout the research process and created a culturally safe research environment and methodological approach. Active participation of the community in all stages of the research process overcame many of the ethical, methodological, and logistical challenges associated with conducting this research. The community’s active participation and collaboration were key factors in the success of this research.

Exploring cultural normative beliefs and the challenges of learning to live within different and often conflicting sexual related norms and behavioural expectations can be challenging. However, using a well-established theoretical framework, as has been done in this study, provides the researcher with a unique level of understanding of how a new sociocultural and environmental context can influence sexual decisions and practices, and how this can be used to predict behavioural intent. The successful completion of this study provides further evidence of the Integrated Behavioural Model’s value as a culturally safe and effective theoretical framework to guide sexual health related research and the development of effective behavioural theory based STI and HIV intervention programs (Fishbein, 2000).

The results from this study indicate careful planning, cultural understanding and sensitivity, and close community collaboration can overcome the methodological challenges associated with conducting sensitive research with small highly visible ethnic minority communities. The key to developing culturally appropriate and accepted sexual health services and supporting health policy is for researchers and target communities to work together to address the challenges associated with this type of research in a mutually reflective way. The methodological approach used and the lessons learned by this study’s researcher provide a useful template for future research exploring sexual health and other sensitive topics with vulnerable, culturally diverse communities.
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Appendix A: Survey Instrument

Sexual Health Survey

How do you fill in this form and answer the questions?

1. Make sure you read the questions carefully
2. Some questions you will be asked to just write your response
   For Example: How old are you? ______18______ Years old
3. Other questions will need you to tick the one (1) response you agree with or think most appropriate
   For example: What is the highest year of education you finished?
   Year 8   ☐
   Year 9   ☐
   Year 10  ☑
   Year 11  ☐
   Year 12  ☐
4. Sometimes you may be asked to tick a box that best matches your feelings
   For example:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think sexual health is important.</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. If you do not understand a question then you can ask Judith or someone else you feel safe with to explain what it means BUT remember we want to explore what you think so make sure you tick the response you think is right for you.

6. If you want to change your response then colour over the old tick and tick the new answer.

7. Remember there is no right or wrong response. We want to know what you think.

Now you are all set to start.................so turn to the next page…
Section 1
This section asks you about yourself, where you were born, and your family.

Just tick (√) the box or write your response that best describes you

1. Are you?        Male □ 1        Female □ 2
2. How old are you?             Years old
3. Were you born in Australia?   Yes □ 1 Go to Q5 No □ 0 Go to Q4
4. If you were NOT born in Australia,
   4.1. Where were you born? ___________________________
   4.2. How long have you lived in Australia? _____ years _____ months
   4.3. Did you arrive in Australia unaccompanied?                Yes □ 1 No □ 0
       (For example, without your parents or another adult)
   4.4. Did you spend time in a refugee camp?                    Yes □ 1 No □ 0
       4.4.1. If YES, where ___________________________________
5. What is your religion? (√ one box only)
   5.1. Christian □
   5.2. Muslim □
   5.3. Other_____________________
6. What is your tribal or family group? (√ one box only)
   6.1. Dinka □ 6.7 Bari □
   6.2. Nuer □ 6.8 KuKu □
   6.3. Nuba □ 6.9 Kakuwa □
   6.4. Moro □
   6.5. Kwalib □
   6.6. Other_____________________
7. What is the main language you speak at home? (√ one box only)
   7.1. Dinka □
   7.2. Nuer □
   7.3. Arabic □
   7.4. English □
   7.5. Other_____________________
8. What is the postcode of your home?         □ □ □ □
9. **Tick ✓ who you currently live with**

9.1. Mother

9.2. Father

9.3. Brother/s

9.4. Sister/s

9.5. Cousin/s

9.6. Aunt

9.7. Uncle

9.8. Wife/husband

9.9. Boy/girlfriend

9.10. Friend/s

9.11. Other: please specify _______________________________

10. **At present are you? (✓ one box only)**

10.1. Single

10.2. Have a boy/girlfriend but not living together

10.3. Living with your boy/girlfriend

10.4. Married

10.5. Widowed

10.6. Separated/Divorced

10.7. Other: please specify what __________________________

11. **I am currently (you can tick ✓ more than 1 box)**

11.1. At School

11.2. At TAFE

11.3. At University

11.4. Employed and working

11.5. Unemployed
12. **What is the highest level of education you have finished?**

12.1. Primary school  
12.2. Year 8  
12.3. Year 9  
12.4. Year 10  
12.5. Year 11  
12.6. Year 12  
12.7. TAFE certificate  
12.8. University Degree  
12.9. University Postgraduate  
12.10. Other: please specify  

(Tick one box only)

13. **If you are currently working tick ✓ the responses that best describe your working hours**

13.0. I am not currently employed  
13.1. I am employed full time  
13.2. I am employed part time  
13.3. I am a paid family carer  
13.4. Other: please specify  

__________________________
## Section 2
This section asks you about your cultural identity.
Asking these questions helps us understand how important your culture and family are to you and if these things affect how you think & feel about sex

<table>
<thead>
<tr>
<th>Please tick (✓) one box for each question</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like to wear clothes that are similar to other people with a Sudanese background</td>
<td></td>
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<tr>
<td>2. I prefer to wear clothes that are similar to people with an Australian background</td>
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<tr>
<td>3. Most of my friends are from a Sudanese background</td>
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<tr>
<td>4. I prefer to have friends that are from an Australian background</td>
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<tr>
<td>5. I prefer to have friends from both Australian and Sudanese backgrounds</td>
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<td>6. I prefer to speak English</td>
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<td>7. My culture has an important place in my life</td>
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<tr>
<td>8. My culture affects how I think or feel about sex</td>
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<tr>
<td>9. My religion has an important place in my life</td>
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<tr>
<td>10. My religion affects how I think or feel about sex?</td>
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<tr>
<td>11. My parents affect how I think or feel about sex</td>
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<tr>
<td>12. My friends affect how I think or feel about sex</td>
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</tr>
</tbody>
</table>
## Section 3.1

This section asks you what you know about sexually transmissible infections (STI)

**Please tick (√) one box for each question**

<table>
<thead>
<tr>
<th></th>
<th>Yes 1</th>
<th>Not sure 2</th>
<th>No 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You will always know when you have caught a sexually transmissible infection (STI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. All STI except HIV can be cured</td>
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<tr>
<td>3. Some STI can be passed on during oral sex</td>
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<tr>
<td>4. Using a condom will keep you safe from all STI</td>
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<tr>
<td>5. The contraceptive pill (<em>Birth control</em>) will prevent you getting an STI</td>
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<tr>
<td>6. Chlamydia is an STI that only affects women</td>
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<tr>
<td>7. Chlamydia can lead to infertility in women (<em>difficulties in getting pregnant or unable to have babies</em>)</td>
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<tr>
<td>8. Hepatitis B can be transmitted sexually</td>
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<tr>
<td>9. I can be vaccinated against hepatitis B</td>
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<tr>
<td>10. The virus called <em>Human Papilloma Virus (HPV)</em> that causes genital warts can cause cervical cancer in women</td>
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<tr>
<td>11. Women can be vaccinated against HPV</td>
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</tr>
</tbody>
</table>
This section asks you what you know about HIV/AIDS.

<table>
<thead>
<tr>
<th>Please tick (√) one box for each question</th>
<th>Yes</th>
<th>Not sure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. You can get HIV when someone with HIV coughs or sneezes on you</td>
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<tr>
<td>2. You can get HIV by hugging someone who is infected with HIV</td>
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<tr>
<td>3. You can get HIV from mosquitoes</td>
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<tr>
<td>4. You can get HIV by sharing needles and syringes when injecting drugs</td>
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<tr>
<td>5. Condoms used during sex help to protect you from getting HIV</td>
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<tr>
<td>6. A man can get HIV through having sex with a man</td>
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<tr>
<td>7. A woman can get HIV through having sex with a man</td>
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<tr>
<td>8. A pregnant woman can pass HIV to her baby</td>
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<tr>
<td>9. A man can get HIV through having sex with a woman</td>
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<tr>
<td>10. Someone who looks healthy cannot pass on HIV infection</td>
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<tr>
<td>11. HIV only infects gay men in Australia (men who have sex with other men)</td>
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<tr>
<td>12. HIV is not a problem in Australia</td>
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</tbody>
</table>
Section 3.2
This section asks you about your thoughts & feelings.
There are no right or wrong answers.
We are only interested in what you think.

Tick (√) one box to rate how much you agree or disagree with these statements

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Condoms are the responsibility of men</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>Young people mostly use condoms if they have sex</td>
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<tr>
<td>3.</td>
<td>Young people have sex too easily in Australia</td>
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<tr>
<td>4.</td>
<td>Sex before marriage is wrong</td>
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<td>5.</td>
<td>Being pregnant before being married or getting your girlfriend pregnant before being married would bring shame on our family</td>
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<td>6.</td>
<td>It is OK for young people to have an abortion (operation to stop a pregnancy)</td>
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<td>7.</td>
<td>I would be happy to have a friend who is gay (a man who has sex with another man)</td>
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<td>8.</td>
<td>I would stop being friends with someone if I found out they were gay</td>
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<td>9.</td>
<td>Young people use drugs and alcohol too much in Australia</td>
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<tr>
<td>10.</td>
<td>I would stop being friends with someone if they got HIV</td>
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<tr>
<td>11.</td>
<td>People with HIV have only themselves to blame</td>
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<tr>
<td>12.</td>
<td>People who have HIV should not be allowed to stay at school</td>
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</tbody>
</table>

13. Why do you think young people may have sex before they are married?
### Section 3.3
These next questions are about how confident you feel in the following situations. Please tick (√) one box for each question

<table>
<thead>
<tr>
<th>How confident are you to:</th>
<th>Very confident</th>
<th>Confident</th>
<th>Unsure</th>
<th>Not very confident</th>
<th>Not confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Say no when your boy/girlfriend wants sex?</td>
<td></td>
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<tr>
<td>15. Talk to your boy/girlfriend about sex?</td>
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<tr>
<td>16. Talk to your boy/girlfriend about using a condom?</td>
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<td>17. Talk to someone you just met about using a condom?</td>
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<tr>
<td>18. Talk to your parents about sex?</td>
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<tr>
<td>19. Talk to your parents about contraception?</td>
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<tr>
<td>20. Go to a doctor or nurse if you needed help for an STI?</td>
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<tr>
<td>21. Say no if your friends offered you drugs?</td>
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<tr>
<td>22. Say no if your friends offered you alcohol?</td>
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<tr>
<td>23. Stop drinking alcohol when you think you have had too much?</td>
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</tbody>
</table>
Section 3.2 continued

These next questions are about how you think and feel.

<table>
<thead>
<tr>
<th>Tick (√) one box to rate each statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. I think I am at risk of getting an STI</td>
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<tr>
<td>25. Living in Australia has affected how I think about sex</td>
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<tr>
<td>26. Living in Australia has affected how I behave sexually</td>
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<tr>
<td>27. My parents don’t understand what it is like being young in Australia</td>
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<tr>
<td>28. My parents don’t talk to me about sex</td>
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<tr>
<td>29. I am more afraid of getting pregnant or getting my girlfriend pregnant than I am of getting an STI</td>
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<tr>
<td>30. The best way to protect myself against an STI is not to have sex</td>
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<tr>
<td>31. I should always use condoms when I have sex</td>
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<tr>
<td>32. I am attracted only to people of the opposite sex</td>
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<tr>
<td>33. I am attracted to people of both sexes</td>
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<tr>
<td>34. I am attracted only to people of my own sex</td>
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</tbody>
</table>
# Section 3.4.1

This section asks you about drinking and drug taking. Please √ one box for each question.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Don’t know</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you drink alcohol?</td>
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<tr>
<td>2. How often do you drink alcohol?</td>
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<tr>
<td>e.g., daily, weekly, binge on weekends</td>
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<tr>
<td>3. How many alcoholic drinks would you have on a day when you drink?</td>
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<td>4. Have you ever injected yourself with drugs?</td>
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<tr>
<td>e.g., speed, heroin</td>
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<tr>
<td>5. How old were you when you first injected drugs</td>
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<td>6. Have you injected drugs in the last 12 months?</td>
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<tr>
<td>7. Do you share needles and syringes when you inject?</td>
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<tr>
<td>8. Do you smoke or use marijuana/cannabis?</td>
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<tr>
<td>e.g., grass, hash, dope, pot, ganga, weed, bong, joint</td>
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<tr>
<td>9. Do you use other social or recreational drugs?</td>
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<tr>
<td>e.g., take tablets, drink, snort, or sniff drugs such as ecstasy, speed, ice, cocaine</td>
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<tr>
<td>10. How often do you use drugs?</td>
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<td></td>
<td></td>
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<tr>
<td>e.g., daily, weekly, only on weekends</td>
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<tr>
<td>11. List the drugs you have used</td>
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</table>
**Section 3.4.2**
This section asks you about where you get information and how much you trust that source

1. Have you ever sought advice or information about STI, HIV, sexual health, relationships, or contraception?
   - **NO**  □ 0  *Go to Q 3 on the next page*
   - **Yes**  □ 1  *Go to Q 2 and tick (√) who or what you have used for advice or information*

2. Tick √ which sources you have used for advice or information

<table>
<thead>
<tr>
<th>Source</th>
<th>Yes₁</th>
<th>NO₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td></td>
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<tr>
<td>Health service</td>
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<tr>
<td>School nurse</td>
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<tr>
<td>School program</td>
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<tr>
<td>School counsellor</td>
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<tr>
<td>Teacher</td>
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<td>Youth worker</td>
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<td>Television</td>
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<td>Magazines</td>
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<tr>
<td>Internet websites</td>
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<tr>
<td>Mother</td>
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<tr>
<td>Father</td>
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<td>Brother or sister</td>
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<td>Other relative</td>
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<tr>
<td>Other community member</td>
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<tr>
<td>Friends</td>
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<tr>
<td>Other: Specify</td>
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</tbody>
</table>
3. If you needed advice or information about STI, HIV, sexual health, relationships, or contraception tick ✓ how much would you TRUST the information you might get from each of the listed sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Strongly trust</th>
<th>Trust</th>
<th>Not sure</th>
<th>Distrust</th>
<th>Strongly distrust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td></td>
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<tr>
<td>Health service</td>
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<td>School program</td>
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<td>School counsellor</td>
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<td>Teacher</td>
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<td>Youth worker</td>
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<td>Television</td>
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<td>Magazines</td>
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<tr>
<td>Internet websites</td>
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<tr>
<td>Mother</td>
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<tr>
<td>Father</td>
<td></td>
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</tr>
<tr>
<td>Brother or sister</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other relative</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Other community member</td>
<td></td>
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<tr>
<td>Friends</td>
<td></td>
<td></td>
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<tr>
<td>Other: Specify</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Where would you go for medical help if you were worried about your sexual health, HIV, or STI?
   4.1. A sexual health clinic
   4.2. Your local Doctor
   4.3. Family Planning Queensland
   4.4. Don’t know where I would go
   4.5. Other ________________________________

5. Where would you go for medical help if you needed contraception?
   5.1. A sexual health clinic
   5.2. Your local Doctor
   5.3. Family Planning Queensland
   5.4. Don’t know where I would go
   5.5. Other ________________________________

6. Have you ever had a HIV test? Yes 1  Don’t know 2  No 0
   □  □  □

If YES

7. When was your last HIV test? ______Years ______Months ago

8. Where did you have your last HIV test?
   8.1. Prior to coming to Australia
   8.2. After arriving in Australia
   8.3. Don’t remember
   8.4. Other: Specify ________________________________

9. Have you ever had sex? Yes 1  Don’t know 2  No 0
   □  □  □
Section 3.4.3
The next section asks you about your personal experiences of sex.
Remember this is anonymous – no one will know what you write

Circle how old you were when you first

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Had a boy/girlfriend</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>2. Deep kissed</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>3. Touched a partner's genitals with your hands</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>4. Had your genitals touched by a partner's hand</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>5. Gave oral sex</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>6. Received oral sex</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>7. Had sex without a condom</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
<tr>
<td>8. Had sex with a condom</td>
<td>13 yrs or less</td>
<td>14 yrs</td>
<td>15 yrs</td>
<td>16 yrs</td>
<td>17 yrs</td>
<td>18 yrs or older</td>
<td>Never had sex</td>
</tr>
</tbody>
</table>

In the last 12 months - circle one box for each question

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5-10 people</th>
<th>&gt; 10 people</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. How many people have you had oral sex with?</td>
<td>1 person</td>
<td>2 people</td>
<td>3 people</td>
<td>4 people</td>
<td>5-10 people</td>
<td>&gt; 10 people</td>
<td>Never had sex</td>
</tr>
<tr>
<td>10. How many people have you had vaginal sex with?</td>
<td>1 person</td>
<td>2 people</td>
<td>3 people</td>
<td>4 people</td>
<td>5-10 people</td>
<td>&gt; 10 people</td>
<td>Never had sex</td>
</tr>
<tr>
<td>11. How many people have you had anal sex with?</td>
<td>1 person</td>
<td>2 people</td>
<td>3 people</td>
<td>4 people</td>
<td>5-10 people</td>
<td>&gt; 10 people</td>
<td>Never had sex</td>
</tr>
</tbody>
</table>
12. How often do you use condoms when you have sex?
12.1. I always use condoms
12.2. I almost always use condoms
12.3. I sometimes use condoms
12.4. I never use condoms
12.5. I have never had sex

13. Have you ever had sex when you didn’t want to?  Yes □ 1  No □ 0
If Yes
13.1. How old were you when it happened? __________________
13.2. Where did it happen? ______________________________

14. If Yes I had sex when I didn’t want to because
14.1. I was too drunk at the time
14.2. I was high on drugs at the time
14.3. My partner thought I should
14.4. My friends thought I should
14.5. Other reasons __________________________

15. Have you ever been diagnosed with an STI?  Yes □ 1  No □ 0
(Sexually transmissible infection)
If Yes
15.1. What was the STI? _________________________________
15.2. Where were you diagnosed? ______________________

16. Have you ever been pregnant?  Yes 1  Don’t know 2  No 0
16.1. If Yes How many times have you been pregnant? _________

17. Have you ever had an abortion?  Yes 1  Don’t know 2  No 0
(Had an operation to stop a pregnancy)
The following questions are about the **LAST TIME** you had sex.

*Please √ one box for each question*

18. **The LAST person you had sex with was (√ one box)**
   - 18.1. Male  
   - 18.2. Female  
   - 18.3. Don’t know  
   - 18.4. I have never had sex

19. **The LAST person you had sex with was (√ one box)**
   - 19.1. My husband/wife  
   - 19.2. My current boyfriend/girlfriend  
   - 19.3. Someone you had just met for the first time  
   - 19.4. Someone you had known for a while, but had not had sex with  
   - 19.5. I have never had sex  
   - 19.6. Other: Specify ________________________________

20. **The LAST person you had sex with was from a Sudanese background**
   - Yes  
   - Don’t know  
   - No  
   - I have never had sex

   **If No or you don’t know**

   20.1. What background was the person from  
   
   E.g., Australian background, Ugandan, don’t know

<table>
<thead>
<tr>
<th>The LAST TIME you had sex</th>
<th>Yes 1</th>
<th>Don’t know 2</th>
<th>No 0</th>
<th>Never had sex 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Were you drunk?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Were you high on drugs?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Did you enjoy having sex?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Was a condom used?</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

25. **If No condom used the LAST time you had sex WHY did this happen**
   - 25.0. I have never had sex  
   - 25.1. I don’t like condoms  
   - 25.2. My partner doesn’t like condoms  
   - 25.3. It just happened  
   - 25.4. We have both had tests for HIV/STI  
   - 25.5. I was too embarrassed  
   - 25.6. I had had too much alcohol to drink  
   - 25.7. My partner had too much alcohol to drink  
   - 25.8. Other: Specify ________________________________
26. How old was the LAST person you had sex with? (√ one box)
   26.1. Less than 16 years old
   26.2. 16-17 years old
   26.3. 18-19 years old
   26.4. 20-24 years old
   26.5. 25-30 years old
   26.6. More than 30 years old
   26.7. I don’t know how old they were
   26.8. I have never had sex

27. The LAST time you had sex, where did it take place? (√ one box)
   27.1. At home
   27.2. My boy/girlfriend’s house
   27.3. At a friend’s place
   27.4. At school
   27.5. Outside (e.g., in a park)
   27.6. In a car
   27.7. I have never had sex
   27.8. Other: Specify_____________________________________

28. What type of contraception did you use the LAST time you had sex? (√ one box)
   28.0 I have never had sex
   28.1. Condom
   28.2. The Pill
   28.3. Injection
   28.4. Implanon (Rod in arm)
   28.5. Emergency Contraception
   28.6. Diaphragm
   28.7. Withdrawal
   28.8. IUD (Intrauterine device)
   28.9. No contraception was used
   28.10. Other: Specify_____________________________________
BEFORE you had sex the LAST time

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>Don’t know</th>
<th>No</th>
<th>Never had sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. Did you talk about using a condom?</td>
<td></td>
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<tr>
<td>30. Did you talk about avoiding pregnancy?</td>
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<tr>
<td>31. Did you talk about avoiding HIV infection?</td>
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<tr>
<td>32. Did you talk about avoiding other STI?</td>
<td></td>
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<tr>
<td>33. Did you talk about how to get sexual pleasure without intercourse?</td>
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</table>

34. Tick √ how you FELT the LAST TIME you had sex

<table>
<thead>
<tr>
<th>Feeling</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>34.1. I have never had sex</td>
<td></td>
</tr>
<tr>
<td>34.2. I don’t know how I felt</td>
<td></td>
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<tr>
<td>34.3. I felt Good</td>
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<tr>
<td>34.4. I felt Upset</td>
<td></td>
</tr>
<tr>
<td>34.5. I felt Guilty</td>
<td></td>
</tr>
<tr>
<td>34.6. I felt Happy</td>
<td></td>
</tr>
<tr>
<td>34.7. I felt Used</td>
<td></td>
</tr>
<tr>
<td>34.8. I felt Fantastic</td>
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<tr>
<td>34.9. I felt Worried</td>
<td></td>
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<tr>
<td>34.10. I felt Loved</td>
<td></td>
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<tr>
<td>34.11. I felt Regretful</td>
<td></td>
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<tr>
<td>34.12. Other</td>
<td></td>
</tr>
</tbody>
</table>
Congratulations you have now completed the survey.

THANK YOU😊

What now!

1. How do I get my Thank you Gift?
   
   1.1. Return the completed survey to the locked green box today and you will receive your thank you gift immediately.

   or

   1.2. Place the completed survey with your Contact Details Form in the supplied postage paid envelope and put in any Australia Post red mailbox. *(You do not need a stamp - postage is paid already)* Your thank you gift will be posted to you immediately.

   *(The Contact Details Form will be kept separate and destroyed once your thank you gift has been sent.)*

   If you DON’T get your thank you gift in 2 weeks then please contact Judith (Phone 0416 292 460, Email Judith.Dean@griffith.edu.au)

2. Are you interested in talking more about this issue?
   
   If YES – Then read the Interview Information Sheet at the back of this survey and complete the Contact Details Form

   *(This page will be kept separate and destroyed once you have completed your interview.)*

   Or

   Speak to Judith Dean today or by phone 0416 292 460 or email Judith.Dean@griffith.edu.au to arrange a time & place to meet.
## Contact Details Form

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Please send my thank you gift to the following address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Name</td>
<td></td>
</tr>
<tr>
<td>2. Address</td>
<td></td>
</tr>
<tr>
<td>3. Phone number</td>
<td>Home</td>
</tr>
<tr>
<td></td>
<td>Mobile</td>
</tr>
<tr>
<td>4. Email</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2</th>
<th>Are you interested in doing an interview to talk about this issue more?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No □</td>
</tr>
<tr>
<td></td>
<td>Yes □</td>
</tr>
</tbody>
</table>

*If YES*

1. Make sure you have **filled in your contact details** in Section 1
2. Take the attached **Interview Information Sheet** to read so you can find out more about what is involved
3. I will be in touch soon

### Your confidentiality

We guarantee all information collected on this sheet will kept separate to all other information collected during this study and remain confidential and private.

*This form will be destroyed as soon as your thank you gift has been posted and/or interview arranged.*

### For more information contact

Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Griffith University

Phone: 0416 292 460
Email: Judith.Dean@griffith.edu.au
THANK YOU 😊

One last thing….

*If you know anyone who would be interested in completing this survey then tear off the information below and tell them to contact Judith.*

(Tear off here)

<table>
<thead>
<tr>
<th>Are you between 16-24 years of age and from a Sudanese background?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Then you might be able to help us!</td>
</tr>
</tbody>
</table>

We are doing a study to find out what 16-24 year old Sudanese Queenslanders think and know about HIV, STI, and sexual health.

*It is very easy. All you need to do is:*  
1/ Complete a written survey or  
2/ Have a chat about what you think.

You will be offered a thank you gift of 2 movie ticket vouchers for volunteering.

*What you tell us is confidential  
*No one will know what you tell us*

If you are interested contact  
Judith Dean  
Mobile: 0416 292 460  
Email: Judith.Dean@griffith.edu.au

This study is part of Judith’s Doctor of Philosophy (PhD) studies at Griffith University and is supported by a Study Reference Group of QLD Sudanese community members and Ethnic Communities Council Queensland.
Appendix B: Survey Information Sheet

Sexual Health Survey - Participant Information Sheet

<table>
<thead>
<tr>
<th>Title of research project:</th>
<th>Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?</th>
</tr>
</thead>
</table>
| Who is doing the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

This study has been approved by Griffith University Human Research Ethics Committee and is being done by Judith Dean as part of her Doctor of Philosophy (PhD) studies with the cultural guidance of a Reference Group of people from your community. During this study Judith will be supervised by her Academic Supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au), Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Ph 07 3382 1487) & Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Ph 040413645)

Why is this survey being done?

The survey will collect information about what you think, feel, and know about relationships, sexually transmissible infections, and HIV. This information will help us make sure you have access to education and health services that are right for you.

Who can complete the Survey?

Anyone who is a 16-24 year old member of the Sudanese communities of Queensland.

What will you be asked to do?

All you need to do is answer the questions on the survey. It should take around 30-40 minutes. DO NOT write your name on the survey! This way the answers you give are private and no one will know what you write unless you tell them. The survey is in English so if you need help with translation please contact Judith for help.

How do I agree to do the survey?

Returning the completed survey or part completed survey is accepted as an expression of consent. This means that by returning the survey you understood everything that is written on this information sheet and have agreed to be part of the study.

Thank you for volunteering

As a thank you for giving your time to complete the survey you will be offered a gift voucher or two (2) movie tickets.

This survey is part of a larger study – Can you join the next phase?

Yes - you can also volunteer to do a 1 hour face-to-face Interview with Judith to discuss in more depth your thoughts about sexual health, STI, & HIV. If you are interested in doing an interview all you have to do is return the information form at the back of the survey in the envelope provided or contact Judith.
How do I keep what I write private and confidential?

Remember DO NOT write your name on the survey! This way the answers you give are private and confidential so no one will know what you write. The questions about your background, such as your age, language group, and length of time in Australia, will only be used to describe the types of people completing this survey. It will not and cannot be used to find out your name. You can feel safe that no names will be reported or used. Completing the survey is voluntary. This means you can choose to do it or not. Nothing bad will happen if you choose not to be involved.

Are there any risks to you?

This study does not intend to influence or harm you in any way, but you might be anxious about answering questions about something that may have happened to you in the past or you think is taboo or against the law. If this happens now or later and you want to speak to someone, then contact Judith or ring Queensland Transcultural Mental Health Centre, Queensland Program to Assist Survivors of Torture and Trauma (QPASTT) on (07) 3391 6677. You might also find it helpful to talk to an adult you trust and feel safe discussing your feelings.

If you are not happy with the study

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on (07) 3735 5585 or research-ethics@griffith.edu.au

Privacy Statement

The conduct of this research involves the collection, access, and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal, or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at www.gu.edu.au/ua/aa/vc/pp or telephone (07) 3735 5585.

Feedback to you

Information will not be given back to you personally during the study. A summary of findings will be released at completion of each phase of the study.

Do you have any questions?

Judith is happy to answer any questions you may have about the study but you can also discuss any questions or concerns with your parents or another adult you trust. They can also ring Judith at any time if they have questions. For more information contact Judith on Phone 0416 292 460 or Judith.Dean@griffith.edu.au

When finished follow the instructions at the end about how to return the survey.

Thank you for volunteering to do the survey. 😊
Appendix C: Correspondence Re RELACH Study Psychometric Data

From: Viner, Russell <r.viner@ucl.ac.uk>
Date: 13 July 2012 19:18
Subject: Re: RELACH Cultural Identity Measures
To: Judith Dean <judith.dean@griffith.edu.au>

Dear Judith,

The only information we have is in those papers I'm afraid.
best wishes,
Russell Viner

On 13 Jul 2012, at 04:46, Judith Dean wrote:

Dear Professor Viner

I am currently undertaking my Doctor of Philosophy exploring the sexual health knowledge, attitudes and beliefs of the Australian Queensland Sudanese community. This is a multiphase mixed methods study including focus groups with adult community members combined with interviews and a cross section survey with the 16 to 24 year old community members. For the survey I have included the cultural identity measures from the RELACH study and have found your papers written with Professor Blau including the one published in Social Psychiatry and Psychiatric Epidemiology, 40(4) 2005 that outlines the validation and findings from the RELACH Study very useful and relevant to my work.

However to date I have been unable to find any published literature on the reliability of these Cultural identity measures. I would greatly appreciate your help in locating any information that would help to progress my study.

I look forward to future correspondence

Kind regards

Judith

Judith Dean
Sexual Health Program Convenor
*Joint appointment
State Nurse Educator (Sexual Health) Queensland Health*
*Contact details*
School of Nursing & Midwifery
Logan Campus Griffith University
University Drive Meadowbrook
Queensland, 4131 Australia
Ph 07 3382 12 87
Mobile 0416 392 460
Email Judith.Dean@griffith.edu.au
Appendix D: Correspondence Re NSASSSH Psychometric Data

Hi Judith,

The psychometrics of the instrument have not been established so I expect you will need use exploratory rather than confirmatory analyses.

Regards,

Anthony

---

From: Judith Dean [mailto:judith.dean@griffith.edu.au]
Sent: Wednesday, 18 June 2008 6:04 PM
To: Anthony Smith
Subject: National Secondary Students and Sexual Health Survey

Hello Anthony

I emailed you late last year in regards to a seeking your consent to use the survey tool from the National Secondary Students and Sexual Health Survey as the survey tool for my PhD. Again thank-you for your willingness to share a word document of this tool

I am now in the process of writing my analytical plan in preparation for my confirmation and have been trying to source some literature on the validity and reliability analysis for the National Secondary Students and Sexual Health Survey. I have been advised to perform exploratory factor analysis as I have not been able to locate information to assist me with confirmatory factor analysis of the tool. Therefore I was wondering if you would be able to assist me with any relevant information in regards to reliability and validity for this tool.

Thank-you

Judith

Judith Dean
Sexual Health Program Convener
School of Nursing & Midwifery
Logan Campus Griffith University
University Drive Meadowbrook
Queensland, 4131 Australia

Available only Monday & Tuesday
Ph 07 3382 12 87
Mobile 0416 292 460
Email Judith.Dean@griffith.edu.au
Appendix E: FGD Discussion Guide

Focus Group Discussion Guide

<table>
<thead>
<tr>
<th>Title of research project:</th>
<th>Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?</th>
</tr>
</thead>
</table>
| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

Welcome

Thank you for agreeing to be part of this focus group; I really appreciate you giving up your valuable time to join us.

Introductions

Moderator: Judith Dean

Purpose of focus groups

The reason we are having these focus groups is to find out:

1. What the Sudanese Communities of Queensland think, feel, and know about sexual health, sexually transmissible infections, and HIV; and

2. What the Sudanese Communities of Queensland think, feel, and know about the sexual health of its 16-24 year old members.

The discussion will gather information about the community’s broader beliefs and traditions. We will not be discussing individual member’s personal history or reactions. We need your input and want you to share your honest and open thoughts with us.

1. We want you to do the talking and I would like everyone to have a chance to share their thoughts and opinions. I may direct a question to you if I haven’t heard from you in a while.

2. There are no right or wrong answers so speak up whether you agree or disagree. We want to hear a wide range of opinions.
Group rules

1. We want folks to feel comfortable sharing their opinions so we will not laugh at other people’s comments or make anyone feel threatened or fearful.

2. Everything you say here will remain anonymous.

3. What is said in this room stays here.

4. We will be tape recording the group and taking notes of the discussion as we want to capture everything you have to say but your name will not be used in anything I write or report.

5. Child safety: If you tell me information that shows that anyone under the age of 18 years is in danger or risk of being harmed or abused by someone, then, as a Registered Nurse under Queensland law (Public Health Act 2005; Child Protection Act 1999), I am legally bound to give this information to the appropriate people.

6. Signing the consent forms means that you agree to all the above statements.

Questions for discussion

Before we start I would like to acknowledge that this topic is sensitive and it may cause you to feel uncomfortable.

So please stop and let me now if you are feeling uncomfortable or if I have asked a question that makes you feel uncomfortable.

I know that for most of you English is not your first language and this might make it difficult for some of you at times. Don’t worry, it is OK to ask me to explain anything.

We can stop the discussion at any time to make sure everyone understands. It is also OK to help clarify a point in your own language with each other.

The last point to remember is to please ask if you are unsure of what we are talking about. I may also ask you to explain something in more detail.
This study is about Sexual Health. We will be talking about things like HIV, STI, pregnancy, relationships.

I know there is probably not a word for this in your language but it is important to make sure we are all talking about the same thing today.

1. What do you think when you hear sexual health?
   Is there a word that we can use to describe this issue that everyone is comfortable with?

2. Social and Cultural attitudes and beliefs
   2.1. How do you feel about talking about SH related issues such as STI, HIV?
       2.1.1. Is it difficult? Is it embarrassing?
   2.2. What affects community members talking about sexual health related issues?
       2.2.1. Explore cultural or social beliefs or taboos
   2.3. What are the cultural or social beliefs or taboos that affect how people behave or learn about sexual health related issues?
   2.4. Is there any difference for men and women?
   2.5. Has life in Australia changed the way young people think and feel about sexual issues?
       2.5.1. Why?

3. Knowledge, attitudes, and beliefs
   3.1. How would you rate your sexual health knowledge: Poor, good, or very good?
   3.2. What about in general amongst the community?
   3.3. What about the young people?
   3.4. Do you know what HIV is?
   3.5. Do you know the names of any other STI?
   3.6. Can you tell me how you can stop getting an STI including HIV?
   3.7. Do you know the most common STI affecting young people in Australia?
       3.7.1. Is this different to back home?
   3.8. How does the community feel about someone who has an STI?
   3.9. Is HIV a problem in Australia?
3.10. How does the community feel about someone who has HIV?

4. Relationships and young people’s behaviour

4.1. What are the cultural or social beliefs or taboos that affect how young people form relationships?

4.1.1. Is dating encouraged or allowed?

4.1.2. How would young people traditionally meet?

4.1.3. Where do you think young people go to meet people and form relationships?

4.1.4. Who are they dating?

4.1.5. Are they having relationships mainly with other young Sudanese people or Australians?

4.1.6. How does the community feel about a young person who has a relationship with someone not from the Sudanese background?

4.2. When is it OK for young people to start having sex?

4.2.1. What happens if a young person gets pregnant and they are not married?

4.2.2. What about an STI or HIV?

4.3. How has life in Australia affected the way relationships are formed?

4.3.1. How do parents respond to these changes?

5. Issues of concern

5.1. What are the main issues affecting young people’s SH?

5.2. What things increase the risk of young people getting an STI?

5.2.1. Why do you think young people engage in risky behaviour?

5.2.2. Has this changed because of life in Australia?

5.3. What does the community think about condoms?

5.3.1. Has this changed since coming to Australia?

5.3.2. Do you think young people are using condoms or contraception?

5.3.3. What do you think stops young people using a condom?
5.4. Is it easier for a young person to have sex here in Australia than back in the home country? Why is it easier?

5.5. Is it easier for a young person to use condoms and birth control here in Australia?

6. **Education and information**

6.1. How do young people traditionally learn about sexual health related issues in your community?

   6.1.1. How has this changed since coming to Australia?

6.2. Where do you think the young people go to find out about sexual health related issues in Australia?

   6.2.1. Is this different than traditionally?

6.3. What are the barriers to the young learning about sexual health related issues?

   6.3.1. Can the community overcome these barriers or do they contribute to them?

7. **Sexual health care**

7.1. Where do you think that young people from your community go for medical help if they are worried about STI or HIV?
Appendix F: Interview Information Sheet, Consent, and Withdrawal Forms

Interview Information Sheet

<table>
<thead>
<tr>
<th>Title of research project:</th>
<th>Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?</th>
</tr>
</thead>
</table>
| Who is conducting the research     | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

Who can do the interview?
Anyone who self-identifies as a 16-24 year old member of the Sudanese communities of Queensland

Why is the interview being done?
The interviews are part of a larger study into sexual health, sexually transmissible infections, & HIV and will help give a deeper understanding of the information collected in other parts of the study. There will be no personal gain from doing the interview but it will help us find out what you and other young people in your community are thinking and doing and what you need to stay safe.

Who is doing the study?
The study has been approved by Griffith University Human Research Ethics Committee and is being done by Judith Dean as part of her Doctor of Philosophy (PhD) studies with the cultural guidance of a Reference Group of people from your community. During this study Judith will be supervised by her Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) and Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); and her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457)

What will I be asked to do?
You will be asked to join a one-on-one interview with Judith. It will take about 1 hour to complete and can be done wherever you feel comfortable. The interview will be in English.

Your participation is voluntary
This means you can choose to do the interview or not. You are able to say no when asked and are free to leave or stop at any point. Nothing bad will happen if you choose not to be involved.
Thank you for volunteering
If you choose to do the interview you will be offered a thank you gift for your time. You will be offered a choice of either a $30 voucher or two (2) movie ticket vouchers.

Risks to you
You might be anxious about being identified by friends or family if you participate. The risk of this happening is low as all information collected during the interview is anonymous and will be kept safe by Judith. The interview will be taped but the information will not be shared or discussed with anyone and the tape will be destroyed once the study report is completed. Your name will not appear anywhere in the study information or report.

If you are not happy with the study
Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on 3735 5585 or research-ethics@griffith.edu.au.

Privacy Statement
The conduct of this research involves the collection, access, and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal, or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at www.gu.edu.au/ua/aa/vc/pp or telephone (07) 3735 5585.

Do you have any questions?
Judith is happy to answer any questions you may have about the study and can be contacted on 0416 292 460 or Judith.Dean@griffith.edu.au. It is also OK to discuss any questions or concerns with your parents or another adult you trust. They can also ring Judith at any time if they have questions.

So if you are interested in doing an interview

1. Complete the Contact Details Form

Or

2. Contact Judith Dean (Student Researcher) on 0416 292 460 or Judith.Dean@griffith.edu.au to arrange a time and place to meet.

THANK YOU☺

Please keep the Interview Information Sheet for your information.
CONSENT FORM – Interview

<table>
<thead>
<tr>
<th>Title of research project:</th>
<th>Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?</th>
</tr>
</thead>
</table>
| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

By signing below, I confirm that I have read and understood the information sheet and I understand that:

1. My involvement in this research will include a face-to-face interview with the Student Researcher about my attitudes, beliefs, and concerns about sexual health;
2. There will be no direct benefit to me from my participation;
3. My participation in this research is voluntary;
4. I am free to withdraw at any time, without comment or penalty;
5. I have been offered reimbursement of travel and parking costs related to participating in this research and understand that I will receive this reimbursement only on presentation of a receipt or travel ticket;
6. I have had the researcher’s legal and professional obligations explained to me;
7. I have had any questions answered to my satisfaction and I understand the risks involved;
8. If I have any additional questions I can contact the research team;
9. I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee if I have any concerns about the ethical conduct of the project on 3735-5585 or research-ethics@griffith.edu.au;
10. I can contact Judith’s Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) or Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); or her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457) if I have any concerns about the project; and
11. I agree to participate in the interview.

Name

Signature

Date / / 

As Student Researcher, I confirm that, to the best of my knowledge, the above signed understands the information provided and has the maturity and capacity to voluntarily consent to participation in the study.

Student Researcher

Judith Dean

Signature

Date / /
Interview Demographics

Interview Date: ________________________________

Interview Location: ________________________________

Participant No:  1   2   3   4   5   6   7   8   9   10

Participant Details:
1. Age: ____________  
2. Gender:  Male     Female  
3. Ethnic group: ____________________________________________  
4. Languages Spoken: ____________________________________________  
5. Religion: ____________________________________________  
6. Place of Birth: ____________________________________________  
7. How long have you been in Australia? ____________________
8. Employment / School Status
   At school   
   At TAFE  
   At University  
   Employed Full time  
   Employed Part time  
   Unemployed  
   Home / family carer  
   Other  

If other: please specify: ____________________________________________

If employed: Occupation ____________________________________________

9. What is the highest level of education you have finished? 
   Primary school  
   Year 8  
   Year 9  
   Year 10  
   Year 11  
   Year 12  
   TAFE certificate  
   University Degree  
   University Postgraduate Qualifications  
   Other  

If other: please specify: ____________________________________________

10. Are you married? Yes  No  
11. Are you a parent/guardian? Yes  No  

If yes: Age of Children: ____________________________________________
**WITHDRAWAL FORM – Interview**

<table>
<thead>
<tr>
<th>Title of research project:</th>
<th>Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?</th>
</tr>
</thead>
</table>
| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

By signing below, I confirm that I wish to withdraw from the interview and I understand that:
1. My withdrawal from this research is voluntary;
2. There will be no direct penalty or comment at any time due to my withdrawal;
3. I have had any questions answered to my satisfaction and I understand the risks involved;
4. If I have any additional questions I can contact the research team;
5. I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee if I have any concerns about the ethical conduct of the project on 3735 5585 or research-ethics@griffith.edu.au;
6. I can contact Judith’s Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) or Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); or her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457) if I have any concerns about the project; and
7. I have withdrawn from the study.

Name

_______________________________________________________________

Signature

_______________________________________________________________

Date

_____ / _____ / _____

As Student Researcher, I confirm that the above signed has voluntarily withdrawn their consent to participate in the study.

Student Researcher

Judith Dean

Signature

_______________________________________________________________

Date

_____ / _____ / _____
Appendix G: Interview Discussion Guide

Interview Discussion Guide

<table>
<thead>
<tr>
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| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

Welcome: Thank you for agreeing to do this interview. I appreciate that you have given up your valuable time.

Introductions: Interviewer: Judith Dean

Purpose of interview
1. Deeper understanding of the information collected in the Sexual Health Survey phase of this study.
2. There will be no personal gain to you from doing the interview.
3. However, it will help us find out more about what you and other young people in your community are thinking.

Your participation is voluntary
1. This means you can choose to do the interview or not.
2. You are able to say no when asked.
3. And are also free to leave or stop at any point.
4. Nothing bad will happen if you choose not to be involved.

Thank you for volunteering
You will be offered two (2) movie tickets as a thankyou for your time.

What you will be asked to do
1. The interview will be in English and done with me.
2. Take about 1 hour.
3. Information discussed will not be seen, shared, or discussed with anyone except myself and the research team.
4. Your name and any other identifying information will be removed and not appear anywhere or be used in any report about the study.
5. The discussion will be taped and transcribed verbatim into a transcript of your actual words. This will ensure an accurate record of our discussion is written. The tapes will be destroyed when the written record is written.
6. All information will be confidential and kept safely locked away as per University Policies.
7. The questions about your background, such as your age, language group, and
length of time in Australia, will only be used to describe the types of people who took part in the interviews.

8. It will not and cannot be used to find out your name.

If you should feel upset or afraid about anything we are discussing today or at a later time after we have finished the interview, please let me know so that I can put you in touch with someone to talk to about these feelings.

**Interview rules**

1. I want you to feel comfortable and able to talk freely.
2. There are no right or wrong answers; I want to know your opinions and thoughts as they are important.
3. What is said in this room stays here.
4. I will not laugh at your comments or make you feel threatened or fearful.
5. I will not identify you by name in the final study report, so you will remain anonymous.
6. I will be tape recording the discussion and taking notes as I want to capture everything you have to say.
7. If you tell me information that shows that anyone under the age of 18 years is in danger or risk of being harmed or abused by someone then, as a Registered Nurse under Queensland law (Public Health Act 2005; Child Protection Act 1999), I am legally bound to give this information to the appropriate people.
8. Signing the consent form means that you agree to all the above statements.

**Thank you very much for agreeing to do the interview. Any questions? 😊**

**Questions for discussion**

*Before we start I would like to acknowledge that this topic is sensitive and discussing it can cause people to feel uncomfortable due to our cultural and religious beliefs, especially between men and women.*

*It is important that you feel comfortable, so please stop and let me now if you are feeling uncomfortable or if I have asked a question that makes you feel uncomfortable.*

*I know that English is not your first language and this might make it difficult at times. But don’t worry, it is OK to ask me to explain a question and we can stop the discussion at any time to make sure you understand.*

*The last point to remember is that there are often different words or terms that we use to describe things that may make the discussion confusing, so please ask if you are unsure of what we are discussing. I may also stop the conversation at times to ask you to explain a word or what you mean.*
1. **What is Sexual Health?**

   1.1. It is important to make sure we are all talking about the same thing today. What do you think when you hear sexual health?

   1.2. Is there a word that we can use to describe this issue that everyone is comfortable with?

   1.3. What does sexual health mean to you?

   1.4. Do you know what I mean by STI and HIV?

   1.5. What does sexual health mean to the community?

2. **Social and Cultural Influences (Section B)**

   2.1. How do you feel talking about sexual health related issues such as STI, HIV?

   2.2. Is it difficult? Is it embarrassing?

   2.3. What affects how young people in your community talk about sexual health related issues?

   2.4. Does your religion affect how you think or behave?

   2.5. Does your culture affect how you think or behave?

   2.6. Do you parents affect how you think or behave?

   2.7. Is there any difference for men and women around this issue?

   2.8. How has living in Australia changed the way you think and behave?

      2.8.1.1. Please explain why?

   2.9. Do you think young Sudanese people in QLD are more attached to their Sudanese culture and way of life or to their new Australian way of life and friends?

   2.10. Can you give me some examples?

3. **KAB about STI**

   3.1. How would you rate your sexual health knowledge: Poor, good, or very good?

   3.2. What about in general amongst your friends and family?

   3.3. Do you think you are at risk of getting an STI?

   3.4. How about HIV?

   3.5. How do you think you would feel if you were diagnosed with an STI such as Chlamydia?

   3.6. Would this be different if it was HIV?

   3.7. How do you think the community feels about someone who has an STI?
3.8. How do you think the community feels about someone who has HIV?

4. Behaviour
4.1. What do you think the young people are doing in regards to sex?
4.2. At what age do they begin having sex?
4.3. What cultural or religious beliefs affect when young people start having sex?
4.4. What do you think the young people are doing in regards to protection?
4.5. Are they using condoms?
4.6. Do you think they would use birth control?
4.7. What do you think stops young people practising safer sex or saying no?
4.8. What are the main sexual health problems of the young members in your community?
4.9. Is this different to back home? In Sudan / refugee camps / transit countries
4.10. Do you think young people in your community are being pressured to have sex before they are ready?
4.11. What about alcohol and drugs? What are the young people in your community doing? How much? How often? What are they using?

5. Relationships
5.1. What are the cultural or social beliefs or taboos that affect how young people form relationships?
5.2. Is dating encouraged or allowed?
5.3. Where do you go to meet people?
5.4. Do you talk to your parents / adults about your relationship?
5.5. How does the community feel about someone who has sex when they are not married?
5.6. What about getting pregnant outside of marriage?
5.7. How does the community feel about a young person who has a relationship with someone not from the Sudanese community?
5.8. Has life in Australia pressured you into relationships that would not be acceptable in Sudan?
5.9. What do your parents think about this?
6. Prevention

6.1. What factors increase the risk of young people getting an STI?
6.2. Why do you think young people engage in risky behaviour?
6.3. How do you stop getting an STI?
6.4. What do you think the young people in your community think about condoms?
6.5. What about generally in the community?

7. Education and Information

7.1. Where do you think the young people find out about sexual health related issues?
7.2. Is this different to traditional or cultural ways?
7.3. What are the barriers to the young learning about sexual health related issues?
7.4. Did your parents or any other adult in your family or the community ever tell you about sex?
7.5. Who initiated the conversation?
7.6. Has this changed since you have come to Australia?
7.7. Would you like your parents / adults in the community to be more open about this issue?
7.8. What type of information do you think is important for young people to know in order to keep themselves safe?
7.9. Where do you think that young people from your community go for medical help if they are worried about STI or HIV? And what are the barriers?
Appendix H: FGD Information Sheet, Consent, and Withdrawal Forms

INFORMATION SHEET – Focus Group Discussions

<table>
<thead>
<tr>
<th>Title of research project:</th>
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</table>
| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

What is a Focus Group Discussion?

A Focus Group Discussions is when a group of people get together to discuss a chosen topic. An independent person or facilitator guides the discussion to answer or explore a specific question.

Why are these Focus Group Discussions being done?

This focus group discussion will explore the Sudanese cultural and social beliefs about sex, sexually transmissible infections, and HIV. The group will also discuss how the community thinks and feels about the sexual behaviour of its young members. Information gathered during this discussion will help guide the next stage of a larger study.

What is the larger study?

The larger study will explore what the 16-24 year old members of the Sudanese communities in Queensland know, believe, think, and feel about sexual health, sexually transmissible infection, and HIV. Information collected during the larger study will help develop sexual health education and health services that meet the needs of the young members of your community.

The study has been approved by Griffith University Human Research Ethics Committee and is being done by Judith Dean as part of her Doctor of Philosophy (PhD) studies with the cultural guidance of a Reference Group of people from your community. During this study Judith will be supervised by her Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) and Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); and her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457)

Who can join the Focus Group Discussions?

Anyone who self-identifies as Sudanese and lives in Queensland can join.
What you will be asked to do if you join a Focus Group Discussion?

You will be asked to discuss your community’s broader beliefs and traditions around STI, HIV, and sexual behaviour. You will not be asked to talk about your personal history, experiences, or reactions. The discussion will occur in English and take about 1-2 hours. An interpreter will be present only if requested and all members of the group agree.

Your participation is voluntary

This means you can choose to do it or not. You are able to say no when asked to join the focus group discussion and are free to leave or stop at any point. Nothing bad will happen if you choose not to be involved.

Thank you for volunteering

If you volunteer to join the group discussion you will be offered a choice between a thank you gift of two (2) adult movie tickets OR a $30 money voucher as a thankyou for your time. Any parking or travel costs experienced due to joining the discussion group will be returned to you when you present a receipt or travel ticket on the day. All attempts will be made to hold these meetings at times that do not impact on your work, school, or family time.

Your confidentiality and privacy

You might be anxious or concerned about being identified by friends or family if you join the group discussion. The risk of this occurring is minimal as all information collected is anonymous, this means your name will not appear anywhere in the study information, and will be kept confidential and safely locked away by the principal researcher. Discussions will be recorded using audio recording and manual note taking so an accurate report can be written. Recorded information will not be seen, shared, or discussed with anyone except Judith and the research team until your name and any identifying information is removed. The tapes and manual notes will be destroyed immediately the report is written.

If you choose to take part then you will be asked not to discuss what has been discussed or said by other participants with anyone outside of the discussion group. This will help make sure what is said is kept private and confidential.

Risks to you

This study guarantees the wellbeing of the Sudanese community and young people and does not intend to influence or harm you in any way. There is a small risk that some people may find discussing this topic difficult due to cultural taboos and past experiences. If this happens now or later and you want to speak to someone, then contact Judith and she will refer you to the appropriate service or person such as Queensland Transcultural Mental Health Centre, Queensland Program to Assist Survivors of Torture and Trauma (QPASTT) (Telephone: (07) 3391 6677).
Under the Public Health Act 2005 and the Child Protection Act 1999, Judith, as a Registered Nurse, is legally bound to disclose information if she feels that any person under 18 years of age is in danger or risk of being harmed, abused, or neglected.

**How to make a complaint**

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research. If potential participants have any concerns or complaints about the ethical conduct of the research project they should contact the Manager, Research Ethics on 3735 5585 or research-ethics@griffith.edu.au.

**Privacy Statement**

The conduct of this research involves the collection, access, and/or use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal, or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at www.gu.edu.au/ua/aa/vc/pp or telephone (07) 3735 5585.

**Feedback to you**

Information will not be given back to you personally during the study. The Study Reference Group will advise the researcher how to best make sure community members are kept informed about the study progress. A summary of findings will be released to interested people at completion of the study.

**Any Questions or need further information:** Contact Judith on phone 0416 292 460 or Judith.Dean@griffith.edu.au

Thank you very much for agreeing to join the discussion. ☺
CONSENT FORM – Focus Group Discussion

<table>
<thead>
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</table>
| Who is conducting the research | Student Researcher: Judith Dean  
School of Nursing & Midwifery  
Contact Phone: 0416 292 460  
Contact Email: Judith.Dean@griffith.edu.au |

By signing below, I confirm that I have read and understood the information sheet and I understand that:

1. I have agreed to join a focus group discussion about the wider community’s attitudes, beliefs, and concerns about sexual health;
2. There will be no direct benefit to me from doing this;
3. I have agreed NOT to talk about what was discussed once the group discussion is finished;
4. My participation is voluntary;
5. I am free to withdraw at any time, without comment or penalty;
6. I have been offered reimbursement of travel and parking costs related to participating in this research and understand that I will receive this reimbursement only on presentation of a receipt or travel ticket;
7. I have had any questions answered to my satisfaction and understand the risks involved;
8. If I have any additional questions I can contact the research team;
9. I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee on 3735-5585 (or research-ethics@griffith.edu.au) if I have any concerns about the ethical conduct of the project;
10. I can contact Judith’s Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) or Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); or her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457) if I have any concerns about the project; and
11. I agree to participate in the focus group discussion.

Name

Signature

Date / / 

As Student Researcher, I confirm that, to the best of my knowledge, the above signed understands the information provided and has the maturity and capacity to voluntarily consent to participation in the study.

Student Researcher

Judith Dean

Signature

Date / / 
Focus Group Demographics

Group Date: ________________________________

Group Location: ________________________________

Participant No: 1  2  3  4  5  6  7  8  9  10

Participant Details:
1. Age: _____________
2. Gender: Male       Female
3. Ethnic group: _________________________________________________
4. Languages Spoken: _____________________________________________
5. Religion: ____________________________________________________
6. Place of Birth: ________________________________________________
7. How long have you been in Australia? _____________________________
8. Employment / School Status
   At school  ☐
   At TAFE    ☐
   At University ☐
   Employed Full time ☐
   Employed Part time ☐
   Unemployed ☐
   Home / family carer ☐
   Other ☐

If other: please specify what________________________________________

If employed: Occupation ____________________________________________

9. What is the highest level of education you have finished?
   Primary school ☐
   Year 8 ☐
   Year 9 ☐
   Year 10 ☐
   Year 11 ☐
   Year 12 ☐
   TAFE certificate ☐
   University Degree ☐
   University Postgraduate Qualifications ☐
   Other ☐

If other: please specify____________________________________________

10. Are you a parent/guardian? Yes       No

If yes: Specify age of Children: ______________________________________
WITHDRAWAL FORM – Focus Group Discussions

Title of research project: Exploring the sexual health knowledge, attitudes, and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?

Who is conducting the research

Student Researcher: Judith Dean
School of Nursing & Midwifery
Contact Phone: 0416 292 460
Contact Email: Judith.Dean@griffith.edu.au

By signing below, I confirm that I wish to withdraw from the Focus Group Discussion and I understand that:

1. My withdrawal from this research is voluntary;
2. There will be no direct penalty or comment at any time due to my withdrawal;
3. I have had any questions answered to my satisfaction and I understand the risks involved;
4. If I have any additional questions I can contact the research team;
5. I can contact the Manager, Research Ethics, at Griffith University Human Research Ethics Committee if I have any concerns about the ethical conduct of the project on 3735-5585 or research-ethics@griffith.edu.au;
6. I can contact Judith’s Primary Academic supervisors: Assoc Prof Judy Wollin (Head of School Abu Dhabi SONM) (j.wollin@griffith.edu.au) or Prof Don Stewart (Head of School of Public Health) (Donald.Stewart@griffith.edu.au or Phone 07 3382 1487); or her Associate Supervisor Dr Joseph Debattista (Adjunct Assoc Prof) (Joseph_Debattista@health.qld.gov.au or Phone 0404 136 457) if I have any concerns about the project; and
7. I have withdrawn from the study.

Name ____________________________________________________________
Signature _________________________________________________________
Date _______ / _______ / ______

As Student Researcher, I confirm that the above signed has voluntarily withdrawn their consent to participate in the study.

Student Researcher Judith Dean
Signature _________________________________________________________
Date _______ / _______ / ______
Appendix I: Ethical Approval

Appendix I.1 Authorisation to commence May 2009

GRIFFITH UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE

25-May-2009

Dear Miss Dean

I write further to the additional information provided in relation to the provisional approval granted to your application for ethical clearance for your project “Exploring the sexual health knowledge, attitude and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?” (GU Ref No: NRS/02/09/HREC).

The additional information was considered by Expedited Ethical Review Panel.

This is to confirm that this response has addressed the comments and concerns of the HREC.

Consequently, you are authorised to immediately commence this research on this basis.

The standard conditions of approval attached to our previous correspondence about this protocol continue to apply.

Regards

Dr Gary Allen
Manager, Research Ethics
Office for Research
Bey Centre, Nathan Campus
Griffith University
ph: 3735 5885
fax: 3735 7994
email: g.allen@griffith.edu.au
web:

Cc:

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Appendix I.2 Amendment – Extension and change of research team, November 2011

GRIFFITH UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE

16-Nov-2011

Dear Miss Dean

I write further to your application for a variation to your approved protocol "Exploring the sexual health knowledge, attitude and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?" (GU Ref No: NRS/02/09/HREC). This request has been considered by the Office for Research.

The OR resolved to approve the requested variation:

Requested extension of ethical clearance from 1/12/2011 to 30/6/2012;

Requested amendment to named membership of research team to include the following:

Marion Mitchell as new Principle PhD Supervisor
Joseph Debattista

This decision is subject to ratification at the next meeting of the HREC. However, you are authorised to immediately commence the revised project on this basis. I will only contact you again about this matter if the HREC raises any additional questions or comments about this variation.

Regards

Dr Gary Allen
Manager, Research Ethics
Office for Research
G35 room 3.55 Gold Coast Campus
Griffith University
ph: 3735 5535
fax: 07 5552 9058
e-mail: g.allen@griffith.edu.au
web:
Appendix I.3 Pilot phase outcomes and approval to progress, November 2009

Re: GU Ref No: HRES/01/09/HREC
Gary Allen

to:
Judith Dean
17/11/2009 11:08 AM
Cc:
judy.mollin, Donald Stewart, Joseph DeBattista, Mary Wilkinson

Subject: GU Ref No: HRES/01/09/HREC

History: This message has been replied to.

Dear Judith

Many thanks for your email and for keeping us informed with regards to the conduct of the research and the experience of the research team.

We will note the information on the file for future reference. However, I am satisfied that the nature of the changes described below do not require us to process this as a formal modification to the research, as approved.

Regards

Gary

Dr Gary Allen
Manager, Research Ethics
Office for Research
Griffith University
ph: 3735 5555
fax: 3735 7994
email: g.allen@griffith.edu.au
url: www.griffith.edu.au/ce/ethics

-----Judith Dean/Staff/Griffith wrote: -----

To: Gary Allen/Staff/Griffith@Griffith
From: Judith Dean/Staff/Griffith
Date: 14/11/2009 03:05PM
cc: judy.mollin@griffith.edu.au, Donald Stewart/Staff/Griffith, Joseph DeBattista <Joseph.DeBattista@health.qld.gov.au>

Subject: GU Ref No: HRES/01/09/HREC

Hello Gary

Re GU Ref No: HRES/01/09/HREC

Project titled "Exploring the sexual health knowledge, attitude and beliefs of the Sudanese communities of Queensland: What are the young community members thinking and doing?"

I have recently completed the Pilot Phase of this project and would like to inform you of the outcomes of this process in response to feedback from participants and analysis of Pilot phase data.

1. There have been no changes to content or deletion of questions presented in the Sexual Health Survey or Discussion Guides submitted with the original HREC submission as the content addresses the main themes identified in consultation with the community and review of literature.

2. It was found that presenting the survey in English was acceptable as the language level was kept at an age, literacy and culturally appropriate level.
3. Ordering of the survey questions has been changed to ensure that all knowledge questions are grouped together and flow into more personal sensitive questions.

4. The format of responses on the survey has been streamlined. For example: Many questions required participants to write a response such as What is your religion? ___________ Participants appeared to have minimal issues with reading the questions but due to difficulties with spelling this format lead to increasing the time taken to complete the survey and the need to help individuals as they asked How to spell their responses. Therefore this style of question have been changed to allow participants to tick from a list of the most common responses based on analysis of the Pilot phase data, review of literature and other validated Health Survey formats. Questions have been changed to this format.

   1. What is your religion? (Tick one box only)
      1.1. Christian
      1.2. Muslim
      1.3. Other  

   Participants also found the Licker scale of responses (Strongly Agree - Agree - Disagree - Strongly Disagree) difficult to interpret and use for questions that were purely knowledge based such as I can be vaccinated against hepatitis B. Therefore these questions have been amended to now require participants to tick a Yes / No / Unsure response.

   These minor changes have not changed the content of the survey but have resulted in the survey being tailored specifically to the needs of the target population. Please let me know if you require further information regarding the outcomes of the Pilot phase and progress of this study.

   Kind regards

   Judith

Judith Dean  
Sexual Health Program Convener  
School of Nursing & Midwifery  
Logan Campus Griffith University  
University Drive Meadowbrook  
Queensland, 4131 Australia

Available only Monday & Tuesday  
Ph 07 3182 12 07  
Mobile 0416 292 460  
Email Judith.Dean@griffith.edu.au
Appendix J: MANOVA Tables for Assumption Testing and Results

Table Appendix J.1

Sample sizes for independent variables used for MANOVA

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<thead>
<tr>
<th>Independent Variables</th>
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</tr>
</thead>
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<td>Gender</td>
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</tr>
<tr>
<td>Male</td>
<td>149</td>
<td>65.1</td>
</tr>
<tr>
<td>Female</td>
<td>79</td>
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<tr>
<td>Missing</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Age</td>
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<td></td>
</tr>
<tr>
<td>17 years and less</td>
<td>63</td>
<td>27.5</td>
</tr>
<tr>
<td>18 years and over</td>
<td>155</td>
<td>67.7</td>
</tr>
<tr>
<td>Missing</td>
<td>11</td>
<td>4.8</td>
</tr>
<tr>
<td>Time in Australia</td>
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<td></td>
</tr>
<tr>
<td>6 years or less</td>
<td>110</td>
<td>48.0</td>
</tr>
<tr>
<td>7 years or more</td>
<td>107</td>
<td>46.7</td>
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<tr>
<td>Missing</td>
<td>12</td>
<td>5.2</td>
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<td>Age of Arrival in Australia</td>
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<td>13 years and less</td>
<td>113</td>
<td>49.3</td>
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<td>14 years and over</td>
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<td>41.5</td>
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<td>Total</td>
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Table Appendix J.2

Tests of Normality

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<th>Shapiro-Wilk</th>
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<td>Statistic</td>
<td>df</td>
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<tr>
<td>Total HIV Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence communicating about</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Risk</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total STI Knowledge</td>
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</tr>
<tr>
<td>Total HIV Knowledge</td>
<td>.094</td>
<td>227</td>
</tr>
<tr>
<td>Confidence communicating about</td>
<td>.078</td>
<td>227</td>
</tr>
<tr>
<td>sex</td>
<td></td>
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<tr>
<td>Sexual Risk</td>
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<td>229</td>
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</table>

*a. Lilliefors Significance Correction*
Table Appendix J.3

*Box's Test of Equality of Covariance Matrices*  

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<td></td>
<td>F</td>
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<td></td>
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Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + A.Gender + Agegp2 + TimeinAust2grp + Ageofarrivalyrs2gp + A.Gender * Agegp2 + A.Gender * TimeinAust2grp + A.Gender * Ageofarrivalyrs2gp + Agegp2 * TimeinAust2grp + Agegp2 * Ageofarrivalyrs2gp + TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp

Table Appendix J.4

*Levene's Test of Equality of Error Variances*  

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<th>df2</th>
<th>Sig.</th>
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<tr>
<td>Total HIV Knowledge</td>
<td>1.508</td>
<td>13</td>
<td>191</td>
<td>.117</td>
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<tr>
<td>Confidence communicating about sex</td>
<td>1.853</td>
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<td>191</td>
<td>.038</td>
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<td>Sexual Risk</td>
<td>1.652</td>
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<td>.074</td>
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Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + A.Gender + Agegp2 + TimeinAust2grp + Ageofarrivalyrs2gp + A.Gender * Agegp2 + A.Gender * TimeinAust2grp + A.Gender * Ageofarrivalyrs2gp + Agegp2 * TimeinAust2grp + Agegp2 * Ageofarrivalyrs2gp + TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp
### Table Appendix J.5

*Multivariate tests*

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<th>Value</th>
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Table Appendix 1.5 Continued

Multivariate tests

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Table Appendix J.5 Continued

**Multivariate tests**

a. Design: Intercept + A.Gender + Agegp2 + TimeinAust2grp + Ageofarrivalyrs2gp + A.Gender * Agegp2 + A.Gender * TimeinAust2grp + A.Gender * Ageofarrivalyrs2gp + Agegp2 * TimeinAust2grp + Agegp2 * Ageofarrivalyrs2gp + TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Ageofarrivalyrs2gp + TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * TimeinAust2grp * Ageofarrivalyrs2gp + Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Agegp2 * TimeinAust2grp + A.Gender * Agegp2 * Ageofarrivalyrs2gp + TimeinAust2grp * Ageofarrivalyrs2gp + A.Gender * Agegp2 * TimeinAust2grp * Ageofarrivalyrs2gp

b. Exact statistic

---

**Estimated Marginal Mean**

Table Appendix J.6

*Estimated Marginal Mean Time in Australia (2 equal groups)*

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a. Based on modified population marginal mean.
Table Appendix J.7

Tests of Between-Subjects Effects using Bonferroni adjustment = .01

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*Tests of Between-Subjects Effects using Bonferroni adjustment = .01*

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### Table Appendix J.7 Continued

*Tests of Between-Subjects Effects using Bonferroni adjustment = .01*

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a. R Squared = .150 (Adjusted R Squared = .092)
b. R Squared = .218 (Adjusted R Squared = .164)
c. R Squared = .072 (Adjusted R Squared = .008)
d. R Squared = .133 (Adjusted R Squared = .074)
# Using Bonferroni adjustment = .01
Effect sizes   Small .01 / Medium .06 / Large .138