Teenage maternal adjustment during the transition from hospital to home with a pre-term or low birth weight infant: The role of community services

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Executive Summary

This study was conducted by Dr Liz Jones, a psychologist, Dr Jennifer Rowe, a social scientist/nurse academic, and Nicola Sheeran, a Clinical Psychology PhD Candidate, from Griffith University. Assistance was also provided by Ms Lisa Farnell who worked as a research assistant on the project. This study was made possible by the collaboration and assistance of the Nurse Unit Managers for each facility and staff from all of the agencies and government departments documented. The research was supported by funding from the Department of Communities Priority Research Program Grant.

This report integrates data collected in 3 phases during the project entitled "Teenage maternal adjustment during the transition from hospital to home with a pre-term or low birth weight infant: The role of community services". The initial phase of the project gathered information about the support services (government and non-government organisations (NGO's)) available to young mothers of preterm or low-birth-weight (LBW) infants in Metropolitan and Regional areas. This information was reported to the Department of Communities in September 2008 and allowed researchers to generate site-specific measures to ascertain whether young mothers are aware of the formal support services available to them and whether they used the services (Jones, Rowe, & Sheeran, 2008). Phase two of the project involved interviewing young mothers of both term and preterm infants prior to discharge from the hospital about their experiences during their pregnancy and at the hospital (Jones, Rowe, & Sheeran, 2009). Factors such as stress, coping and psychological adjustment, as well as their expectations of parenting and current sense of self-efficacy regarding parenting were assessed both during the interview and via questionnaires. Mothers also provided in-depth information about their support networks and knowledge and/or use of formal support services in their areas. Phase 3 involved re-interviewing the young mothers at between 3 and 4 months post discharge of their infant. At this time, mothers provided information on their experiences of parenting, psychological adjustment, current sense of parental self-efficacy, and methods of coping. In addition, mothers provided information on the amount of social support available to them, satisfaction with this support, use of formal support services, and reasons for and against accessing support services.

A final sample of 40 young mothers (aged 15-19, M= 17.35) were recruited into the research program. Of this number, 20 gave birth to preterm or LBW babies and 20 gave birth to full term babies. Young mothers were recruited from the special care nurseries (SCN) of four hospitals:

Logan, Royal Brisbane Women's Hospital (RBWH), Ipswich, and Caboolture and via antenatal appointments at Ipswich and Caboolture hospital. Young mothers recruited at the Ipswich and Caboolture sites were tracked regardless of birth outcome, with the young mothers of full term babies serving as key informants or information-rich cases whose study illuminates the research questions (Patton, 2002). In total, 7 mothers were recruited from Logan SCN, 6 mothers from RBWH SCN, 4 from Caboolture (3 full term and 1 preterm), and 23 from Ipswich hospital (17 full term and 6 preterm).

The results of the project help us address the research questions and suggest potential areas for intervention with young mothers. In terms of the relationship between a teenage mother's psychological health, maternal adjustment, and social support provided by formal and informal supports, the current study highlighted that the father of the baby was a vital source of support for the young mother. Accordingly, the father of the baby was found to be meeting most of the support needs of the young mother, particularly when the infant was in the special care nursery. As the young mothers transitioned home, the perceived helpfulness of the father decreased for young mothers of full term infants but remained high for mothers of preterm infants. In addition, a very clear relationship was seen by researchers between partner support and the need for assistance by young mothers. Mothers who reported good partner support, had good relationships with their babies, and were managing the demands of parenting well. Those young mothers who had poor partner support or no partner support were most in need of additional support. Several mothers who had good partner support had also joined young parents groups suggesting that good partner support does not preclude service use. However, those without partner support did need more support, particularly in respite and time out.

Overall, most young mothers were not reporting high levels of distress and their interviews did not suggest that they were having difficulty transitioning to parenthood. However, at 3-4 months post-discharge, three of the young mothers (2 fullterm, 1 preterm) had developed post-natal depression and were using pharmacological treatments (though not psychological treatments) under the care of their GP's. It did appear that mothers of preterm infants experienced more distress (as measured by the GHQ) than mothers of full term infants at time of discharge from hospital. However, this had dissipated by time 2, where there were no differences between the mothers.

Mothers were using a range of coping strategies, with active (problem solving, thinking about decisions) and distraction techniques (i.e. reading mags, listening to music) being related to adjustment. In addition, the importance of considering how the mother is appraising the situation was highlighted with significant relationships found between level of psychological adjustment and perceiving the situation as stressful. Similarly, parents who reported more confidence in their parenting ability were seeing the situation as something that was controllable by themselves and others and a challenge that they could grow from. Alternatively, mothers who reported less confidence were more likely to be seeing the situation as something threatening or central to who they were.

In terms of the factors that influence whether a teenage mother will engage in community services the current project found that at time of discharge, most mothers were noncommittal about their service use. Whilst most had heard of some type of service, they did not know if they would need to use them, preferring to rely on informal supports. The interviews with young mothers at the time of discharge suggested that they were often overwhelmed with information on top of the demands associated with becoming a new mother. Several of the young mothers had been provided with flyers of services but had not read them. Similarly, young mothers did not seem to integrate information about various services i.e. who does what, what services provide what support. Data collected 3-4 months post discharge suggested that most mothers had had some contact with services but mainly thought of them as providing informational support. Rapport with the service provider was essential to young people using the service and service providers need to be perceived as non-judgemental and not rude. Other factors reported to be important were the need for services to be easy to access, providing clear information, and to have little or no cost associated with them. The provision of tangible items, such as breast pumps, clothing, and other non-essential items the mothers may not be able to afford was also needed.

Interviews at time of discharge from hospital suggested that the process of deciding whether to engage in a service was based on a) awareness that they had a need, b) awareness that services existed to meet that need, and c) all other sources of support failed to meet that need. Follow-up data supported this model but suggested additional barriers that exist.

First, mothers were most likely to be aware of needs related to informational support or the needs of the infant. They were less aware of needs related to parenting or parent-child relationship or their own needs as mothers and teenagers. Second, most people were aware of services to access

for informational support but they were less aware of services related to other needs such as skill development, tangible support, peer support, financial support, or psychological support. Finally, mothers, where all their sources of support had failed to meet their needs, were often in rural areas with limited services. They were also more likely to have no rapport with contact people in local support services and to have experienced interpersonal or trust issues. Problematically, young mothers appeared to identify with a person as opposed to a service, with several of the young mothers unable to relate contact with a person to the service that person is associated with. This prevented the young mothers accessing services or asking for a different contact person. It also meant that if they had a poor relationship with one person at the service they were likely to refuse all contact from that service. At 3-4 months post-discharge, those mothers needing help were still the least likely to engage in support service use. Poor relationships with the contact person for the service often prevented them from contacting the service. Similarly, interpersonal and trust issues prevented them from opening up and sharing how difficult they were finding the parenting experience.

Of the eleven mothers enrolled in school when they fell pregnant, 5 had been recontacted at the time of writing this report with 4 having returned to or completed school at 3-4 months post discharge. One mother had also enrolled in TAFE despite having two children. Many young mothers were employed at the time of becoming pregnant and intended to return to work, though few had managed this at 3-4 months post discharge. Mostly this was because they were still settling into a routine and the demands of parenting, though for one mother it was because of problems with childcare.

Mothers in the current study related how becoming a mother had given their life direction and meaning, served as a catalyst for change to more positive lifestyle choices, and fulfilled an existential need. However, at 3-4 months post discharge mothers were juggling many different roles and identities with many feeling that they could not ask for help. All of the young mothers in this study felt the negative judgement of young mothers in society and within their smaller communities and their drive to not be labelled as poor parents prevented many young mothers from asking for help.

Finally, the current project found that current services for teenage mothers (i.e. child health services) were providing an adequate outlet for young mothers to access information and to receive infant related support. However, the young mothers did report several areas where they

would like more support. These included an avenue for mothers to receive respite or time out. Most mothers did not want formal childcare services. Instead it appeared that they needed someone who could provide short term breaks for them to be able to attend to some of their own needs. Other areas that they needed help with were related to introducing solids, advice about (suitable) childcare, parenting programs for mothers and fathers, and financial or tangible support.

Mothers engaged in group programs specific to young mothers found the experience normalising, non-judgemental and a good opportunity to take time out from the demands of parenting. However, this type of program was not widely accessible with few mothers in Ipswich or rural areas having access to this type of service. The young parents program at Stafford received very high praise from all young mothers who had attended groups there. In addition, all mothers birthing at RBWH had heard of the program suggesting that their mechanisms for dissemination of information are adequate. Similarly, the young mothers program at Morayfield placed a follow-up call 2 months post-discharge and was able to engage a mother who was in need of peer support at that time.

Rural areas to the West of Brisbane appear to have limited access to services. There were also a number of young mothers with high needs in these regions, who were reliant on their GP for all types of support. Interpersonal problems with service providers were particularly difficult in these areas due to the limited number of services available. This means that some young mothers had reduced access to services if they did not have a rapport with the local contact.

Future directions include investigating how relationships with the father of the baby play out over time and how this impacts on the mothers' psychosocial adjustment as well as their use of support services**.** Future research should also examine the additional challenges mothers face as they return to work or higher education and whether assistance is needed in this area**.** Finally, mothers in the current study were experiencing varying degrees of financial distress suggesting that this is an area in need of further attention particularly concerning how they manage after baby bonus instalments are completed.

Background to Project

Very little research has looked at the needs of the sub-group of teenage mothers whom also experience pre-term birth despite the fact that teenage mothers are at a higher risk of pre-term birth and having a LBW infant than most older mothers (Jolly, Sebire, Harris, Robinson, & Regan, 2000) . The Australia wide figures show that 8.2% of all births are pre-term and 6.4% of babies are born with a low-birth weight. In addition, women under 20 years and Indigenous women are over represented in low-birth weight admissions to special care and intensive care nurseries. Both of these factors have been associated with poorer infant outcomes and maternal adjustment (Affleck, Tennen, & Rowe, 1991). Although teenage mothers who experience pre-term birth are a small group, they are an important and potentially vulnerable client group.

The adult literature on psychological stress and coping following a pre-term birth suggests that the experience is highly stressful with many parents reporting that it is the worst major life event they have experienced (Whitfield, 2003). The strain experienced by parents of premature or LBW infants is significantly higher than for parents who deliver full-term infants (Affleck et al., 1991; Carter, Mulder, Bartram, & Darlow, 2005; Taylor, Klein, Minich, & Hack, 2001). Parents report that the experience of birth is contrary to their expectations and that they feel unprepared for the birth (Whitfield, 2003). In addition, mothers of premature infants are at greater risk of psychological distress, depression and anxiety than mothers of full term infants (Davis, Edwards, Mohay, & Wollin, 2003; Singer et al., 1999).

Teenage parents are a vulnerable group who may be expected to need additional support during pregnancy and after childbirth (Furey, 2004; Laws, Grayson, & Sullivan, 2006). In addition, teenager mothers who experience high stress during and after pregnancy are at increased risk for difficult maternal adjustment and high postpartum emotional distress (Holub et al., 2007). Social support may reduce the negative effects of stress on parenting and plays an important role in the experience of psychological stress. Social support is viewed as a buffer to stress and affects both the way a stressful situation is appraised and how the person copes (Lazarus & Folkman, 1984). Therefore, it is important that we investigate whether preterm birth or having a LBW infant increases stress for the teenage mother and the role that formal and informal social supports play so that we can facilitate adjustment during this transition period.

Although support needs may be met through a range of formal and informal networks, research suggests that despite having good informal support networks, parents with low birth weight babies still felt they required additional support from formal networks (McCurdy & Daro, 2001). Multiple support sources (including local community services) appear to increase knowledge of child development, improve parent-child interactions, reduce depression and stress, and improve maternal confidence (Letourneau, Stewart, & Barnfather, 2004). However, the quality of the relationships, or mother's satisfaction with support, appears to be a vital factor (Letourneau et al., 2004). In addition, although relationships with the teenage mothers own mother and partner should be fostered, professionals and peers also play important roles. Letourneau et al (2004) also highlight that adolescent mothers may be more responsive to support than older mothers.

Although it is clear that social support provided by professionals is an important aspect of maternal and family adjustment it can be difficult to engage teenage mothers in programs (Armstrong, Fraser, Dadds, & Morris, 2000). In addition, it appears that those teenage mothers who most need support are least likely to accept the current types of services that are offered (Crockenberg, 1986; Hanna, 2001). Therefore, it is important to establish how teenage parents interact with services provided by health, education, human services and social services and what factors influence whether a teenage parent will accept support from these services. In addition, there are differences in service provision by region/area within Queensland thus it is important to consider whether differences exist in support provision between regional and metropolitan areas.

Framework for project

Two frameworks were used in the current project to investigate the teenage mothers' adjustment during the transition from hospital to home of their premature or low birth weight infant. Consistent with Lazarus and Folkman's (1984) model, factors such as how parents cognitively appraise the situation, coping strategies employed, and social support were looked at. Secondly, consistent with McCubbin and McCubbin's (1993) Resiliency Model of Family Stress, Adjustment, and Adaptation, changes in these factors and adaptational processes over time were investigated. Together, these models suggest that factors such as cognitive appraisal, coping, family functioning, and social support influence the families' ability to adapt to a stressful event

over time. The current project was interested in investigating how these factors influence a teenage mother of a LBW or preterm infant as she transitions from hospital to home, including consideration of whether a teenage mother will engage in community services, whether current services are able to cater to this high-need group, and the perceptions of needs and services held by group members themselves. The study will also investigated whether there were differences between regional and metropolitan areas in regard to access and uptake of services.

Purpose

The project aimed to provide a better understanding of the nature and scope of critical issues for teenage mothers of pre-term or low birth weight infants in order to better inform program development across disciplines. In addition, this project aimed to provide information on the relative contribution and importance of support provided by both informal and formal community-based services.

Queensland has a rapidly growing population across all age ranges, particularly in regional South East areas (Queensland Government, 2003). The regional growth rates in the SE are between 3.5 and 5% per annum and, along with Brisbane, are the highest nationally (Queensland Government, 2003). Baseline data on the support needs of vulnerable client groups, provided by the youth within these rapidly growing regional areas, allows for community development planning that works with and not upon those requiring the services. Understanding the issues young mothers face in regional Queensland, that affect their wellbeing and maternal adjustment, helps us to identify their needs and issues for targeted service development. In order to investigate the range of support needs and experiences, 3 smaller regional hospitals and HSD's (Ipswich, Caboolture, and Logan) and a larger Metropolitan hospital and HSD (RBWH) were invited to become study sites.

Method

Participants

Twenty young mothers (aged 15 to 19) who had given birth to a pre-term (<37 weeks completed gestation) or LBW (<2500g) infants were recruited from the special care nurseries at the RBWH, Caboolture, Logan and Ipswich hospitals. In addition, 20 key informants, or information-rich cases whose study illuminates the research questions (Patton, 2002), were

recruited from young mothers (aged 15-19) who have given birth to full-term infants (37=/+ weeks completed gestation) at Ipswich and Caboolture. This purposeful theoretical sampling strategy allowed the researchers to gather data regarding a range of young mothers' experiences, which will help to highlight the current assumptions about the primary group of participants. Young mothers from Logan hospital and RBWH were recruited directly from the special care nurseries while participants from Ipswich and Caboolture were recruited antenatally and followed up regardless of birth outcome. Participants with ongoing maternal health issues or child alert notifications regarding cognitive impairment were not recruited into the study

Design

A longitudinal design was employed in the current project. This design allowed the researcher to make comparisons over time within and across individuals and group and was necessary to achieve the aim of exploring the process of adjustment for the teenage mothers over time. Data was collected at two time points;

Time 1: 1 week prior to the infant being discharged from the SCN (preterm/LBW group) or within a window of 2 days post birth to 1-week post discharge (full-term group).

Time 2: 3-4 months post discharge.

Measures

The survey incorporated the following measures that have been used in previous research in the area.

Cognitive Appraisal was measured using the Stress Appraisal Measure (Peacock & Wong, 1990). The Stress Appraisal Measure is a 24 item measure that has seven sub-scales: stress, threat, centrality, challenge, which measure primary appraisal, and controllable by self, controllable by others and uncontrollable, which measure secondary appraisal processes. Each sub-scale is comprised of 4 items, which participants respond to using a 5-point likert scale (1 = strongly disagree to 5 = strongly agree). The scale has good internal reliability (alphas ranging from .65 to .90 across three studies), and convergent validity (Peacock & Wong, 1990; Roesch & Rowley, 2005). This measure has also been validated for use with adolescents (Rowley, Roesch,

Jurica, & Vaughn, 2005). Consistent with the research, factor analysis indicated that a 7-factor structure was most valid for use with the current population.

Coping was measured using the Children's Coping Strategies Checklist (Ayers, Sandler, West, & Roosa, 1996). This 45-item measure provides four subscales: active strategies, distraction strategies, avoidance strategies, and support seeking strategies and can be used with both children and teenagers. The measure has good internal reliability (alphas ranging from .89 to .73 across two studies) and the factor structure was invariant across sex, age, sample and stressor. Participants responded to each item on a 4-point scale according to how often they used the strategy ranging from never to most of the time. Construct validity had also been demonstrated by superior fit to the hypothesised model than either problem versus emotion coping or active versus passive coping.

Perceived helpfulness of specific social supports was measured using the Family Support Scale (Dunst, Trivette, & Hamby, 1994). Participants indicated the helpfulness of various sources of social support on a 5-point likert scale, from zero (not helpful at all) to five (extremely helpful). Participants indicated "not available" if the source was not available to them. The 20 items form five subscales: 'informal kinship', 'spouse/partner support', 'social organizations, 'formal kinship', and 'professional services'. This measure has good reliability, with an alpha of .79, and test-retest correlation of .91 for the total score and .75 for individual items (Dunst et al., 1994). The measure also has demonstrable content, convergent, discriminant, and criterion validity. The Family Support Scale was designed specifically for use with families with young children experiencing difficulties (Dunst et al., 1994) and has been used with mothers of infants currently hospitalized in neonatal intensive care units (Feldman-Reichman et al., 2000). One item had been added 'My family or child's nurses' as no other item accurately captured this source of social support, which had been shown to be one of the most the most helpful sources of support during the child's hospitalisation (Jones, Rowe, & Becker, in press). However, consistent with previous research (Jones et al., in press), most sources of support were not available to young mothers at time 1 or 2 data collection. As such, 4 subscales were computed: family, partner/spouse, informal support (peers, other parents etc), and formal support (doctors, nurses, professional helpers, professional agencies).

Maternal self-efficacy was measured using the Parent Expectations Survey (Reece, 1992). The scale asked parents how much they agree that they can perform a range of parenting tasks

e.g., feeding of the baby, dealing with baby crying, meeting demands placed on me now baby is here. Participants responded to each item using a 4-point scale 1 = strongly disagree to 4 = strongly agree. The scale also included a not applicable response, as parents may not have been undertaking some tasks while their infant was still hospitalised. The 20-item scale has good internal reliability (alpha .86-.91) and good concurrent and predictive validity.

Psychological distress was measured using the 12 item General Health Questionnaire (GHQ, Goldberg & Williams, 1988). This measure is used extensively in research on stress and coping and has been validated with Australian teenagers with previous research finding it to be a valid measure of general distress (Tait, French, & Hulse, 2003). Participants are asked to describe how often they experience 12 different psychological health symptoms on a 4-point scale (e.g., "Felt constantly under strain" 1 = not at all to 4 = much more than usual) giving a possible total score range of 0-36. The measure has good internal reliability (alpha .80-.91), construct validity, and discriminant validity (Tait et al., 2003). Higher scores on the GHQ indicate greater levels of distress with cut-off scores of 18/19 being indicative of high psychological distress.

Use of local formal support services was measured using a district specific questionnaire that was generated during phase 1 of the project, which involved mapping services available to young mothers across Brisbane, Ipswich, Logan, and Caboolture. Mothers were asked whether they had heard of and/or had contact with a list of local services. If they said yes, they were asked what type of support the service had provided, their satisfaction with support on a 4 point likert scale (1= very satisfied, 4 = very dissatisfied), and the reasons for their satisfaction/dissatisfaction.

The extent of the mother's *social support network* was measured by asking mothers to place stickers that bore the names of individuals, family, friends, neighbours, professionals etc that had supported them since they had given birth, on the rungs of a circle target that had the mother and baby located in the centre (Crockenberg, 1986). Frequency of help (very frequently, frequently, occasionally, rarely, and never) were determined by the placement of the dots in relation to the mother and child. The more distant the placement, the less frequent the help. This procedure yielded several measures of social contact and social support, including the total number of network members, the total number of network members who provided help frequently or very frequently, and the number of family members (including the baby's father) who provided help frequently or very frequently. Type of help provided by these supports was also verbally

assessed by asking about specific helpful behaviours that the person did. Mothers were also asked about their satisfaction with their current support network and wether they perceived that they needed more or less support in various areas.

Procedure

Two recruitment strategies were run concurrently, dependent on the hospital, in order to minimise the demands placed on Queensland Health staff and maximise recruitment for the project. At Logan hospital and the RBWH, nursing staff notified researchers of any teenage mothers on the ward who met study criteria after they had given potential participants a flyer and received verbal consent for researchers to contact them directly. From there, researchers followed up with the mother to see if they would like to participate and to organise an interview time close to discharge. At Ipswich and Caboolture hospitals, researchers worked with Social workers and midwives to recruit mothers at their antenatal appointments or directly from the SCN or maternity wards. A member of the research team attended the specific session at the hospital for teenage mothers and provided all young mothers with the recruitment flyer. Those indicating they may like to be involved in the project were provided with the participant information sheet to read over and an initial consent form was signed by the young mother. This consent form stated that the young mother consented to being contacted after birth to see if she was still interested in participating in the project and consented to having a form placed on her file which alerted staff to notify researchers when she had birthed. From there, researchers followed up with the mother to see if they would like to participate and to organise an interview time close to discharge. Interviewers were clinically trained (with minimum qualifications of a 3 year psychology degree and who had undertaken courses in counseling and interpersonal skills) and were enrolled in either a psychology honours or a clinical masters degree at Griffith University. Time 1 interviews occurred in the hospital, either on the ward or in an interview room or at the participant's home if they had already been discharged. Time 2 interviews occurred at the participant's home.

Participants participated in an interview and completed a survey. Total data collection time lasted from 45mins to 1.5 hours dependant on the length of the interview. In all cases,

Mothers participated in the interview, then completed the social support exercise (s) followed by the questionnaires.

Time 1 interview: The semi-structured interview gathered information about their response to the birth, their experiences in hospital, the progress of the baby, and their expectations associated parenting and the baby's discharge home, and any current or anticipated challenges. Specifically, interviewers were assessing thoughts, feelings, and behaviours associated with becoming a mother. Background information such as intendedness of the pregnancy, family reactions, antenatal care, and impact on school, work, and life was also gathered. Although an interview schedule was employed, the interviewer followed the participant's lead and used prompts to gather information important to the participant's story.

Time 2 interview: The time 2 semi-structured interview gathered information about the infants current development and progress, what the experience of parenting had been like over the following 4 months, continued impact on the mother's life in terms of school, work, social life, friendships, most challenging aspects of parenting, and most enjoyable aspects of parenting. Mothers were also asked whether there was any advice they would tell another young mother that they hadn't been told or felt was important and whether they felt there were additional challenges associated with being a young mother. Interviewers had read time 1 interviews and also asked specific questions related to areas that needed to be followed up for specific mothers.

Results

Survey Data and demographics

40 participants participated and were used for the current analyses. Table 1 displays the demographic information for the participants used in the current analysis. No significant differences were found between preterm and full term participants on any of the demographic variables.

Table 1: Descriptive information

	Preterm	Fullterm	Total
N	20	20	40
Single	7	4	11
Defacto (living together)	13	16	29
Mean Age (years)	17.05	17.65	17.35 (1.23)
Mean Schooling (years)	10.2	10.36	10.28 (.90)
Mean number in support network	6.00	5.75	5.88 [2-15]

*Range in [ ]
*Standard Deviation in ( )

Table 2 demonstrates the number of mothers who dropped out of the study from initial recruitment, to time 1 to time 2. 19 mothers who agreed to participate while they were pregnant were unable to be interviewed at time 1. Most often this was due to them being unable to schedule an appointment time within the time frame following discharge. Time 2 data collection is currently on-going. The previous interim report (April, 2009) provided time 1 information about 22 young mothers. 16 (8 preterm/8 fullterm) of these 22 mothers had been followed up and are included in the qualitative and qualitative analyses. In general, retention of the mothers in study to date has been very good. Of the 6 mothers who were not interviewed at time 2, 3 declined, 1 had moved house with her family and phone numbers had been disconnected, 1 had

left her mother's house and she had not made contact with any friends or family, and 1 mother had moved away from Brisbane to live with other family.

Table 2: Number of mothers agreeing to participate in the project at the various data collection points.

Initially recruited (antenatally or SCN)	Interviewed at Time 1	Interviewed to date at Time 2
59	40	16/22

Analyses

Two data sets were generated for use in Analysis. The first consisted of the 22 mothers from time 1 (reported in the Interim report April 2009) and their follow-up time 2 data (3-4 months post discharge). The second data set consisted of the final time 1 data from 40 mothers (20 full term and 20 preterm). ANOVA's were used to assess differences between the mothers over time while t-tests were used to assess differences between the mothers of full term and preterm infants at time 1 only. Means and standard deviations for all variables in both data sets are provided as an appendix (See appendix A and B).

Psychological adjustment to parenting:

General Health Questionnaire (GHQ): T-tests were used to test for differences in psychological adjustment between mothers of full term and preterm infants. A marginally significant trend ($t(36)= -0.99 = .055$) was found on the GHQ at time 1 indicating that mothers of preterm infants were reporting slightly more psychological distress than mothers of full term infants at the time of their infants' birth. Both mean scores were below the Australian cut-offs indicating distress (19/20). However, 2 mothers from the preterm group were on the cut-off (range = 2-20). This difference is presented in figure 1.

A mixed between-within ANOVA suggested no difference between the mothers over time ($F(1,15) = .007$, *ns)* and regardless of infant birth status ($F91,15) = .342$ = *ns).* This suggests that differences that may exist between mothers of full-term and preterm infants at time of discharge

resolve themselves by 3-4 months post discharge. Interestingly, 2 of the mothers at time 2 were above the Australian cutoffs indicating increased distress and neither of these mothers had elevated scores at time 1.

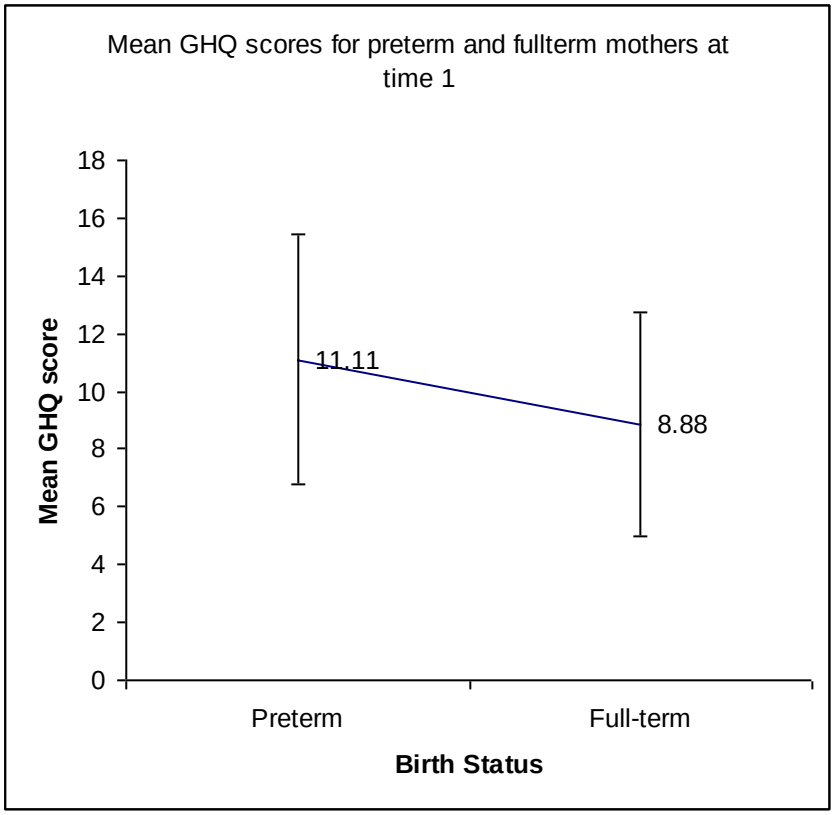

Figure 1: Mean GHQ scores for preterm and full term mothers at time 1.
NB: Error bars represent +/- 1 standard deviation

Parental self-efficacy: A mixed between-within measures ANOVA was used to assess whether there were differences in parental self efficacy over time between mothers of preterm and fullterm infants. A main effect of time was significant demonstrating that the young mothers' sense of self-efficacy increased over time ($F(1,15) = 8.30 = .011$) and is presented in Figure 2. There were no significant differences between mothers of full term or preterm infants at either time 1 or time 2 ($F(1,15) = .148 = ns$).

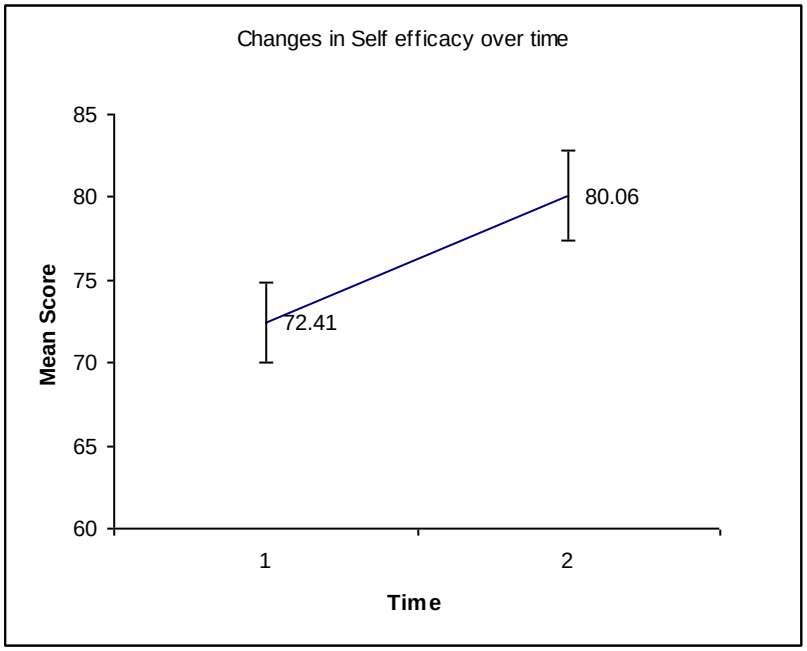

Figure 2: Changes in self-efficacy for mothers over time.
NB: Error bars represent +/- 1 standard deviation

Social support

Social support networks: A mixed between-within ANOVA was used to establish whether there were differences between mothers over time in the number of people in their support networks. Results suggested there were no differences in the number of supports between mothers of preterm or full term infants at time 1 or 2 ($F(1,15) = 2.21$, *ns)*.

A t-test was used to establish whether there were differences between mothers of full term and preterm infants in terms of the number of people in their support networks. Results suggested that there were no differences between mothers at time 1 ($t(28) = .330$, *ns)*.

Family Support Scale: Consistent with previous findings, most sources of support were not available to young mothers at time 1 or 2. Four sub scales were generated including family support, formal support, informal support (i.e. friends and other parents), and partner/spouse.

A mixed ANOVA revealed a significant interaction between mothers of preterm and full term infants and the perceived helpfulness of their spouses/partners over time ($F(1,12) = 4.922$ $<.05$). Figure 3 displays this relationship and demonstrates that while both groups of mothers

initially rate their partners as helpful, this decreased for mothers of full term infants and increased for mothers of preterm infants once they were home.

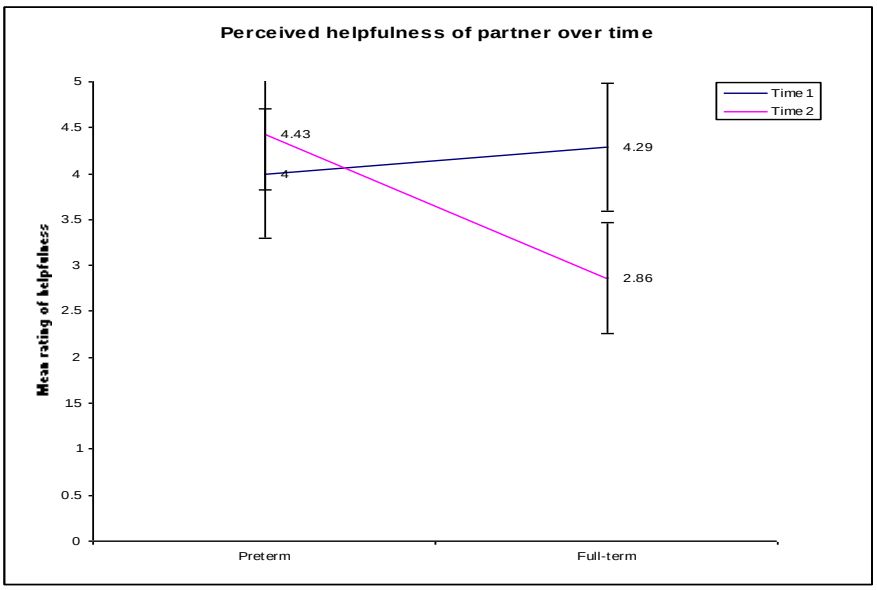

Figure 3: Perceived helpfulness of partner over time.
NB: Error bars represent +/- 1 standard deviation

No other significant differences were found in terms of perceived helpfulness of support over time or for mothers of preterm versus full term infants.

Significant correlations were found between total scores on the GHQ at time 2 and perceived formal (r= .-.609, <.01), informal (r= -.632, <.01), partner (-.648, <.01) and family support (-.655, <.01) at this time. This suggests a relationship between social support and psychological adjustment whereby as perceived helpfulness of support decreases degree of distress increases.

No significant correlations were found between perceived self-efficacy and support.

Coping

Mixed between-within AVOVA's were used to assess differences in coping styles between mothers of full-term and preterm infants from time 1 to time 2. No differences between use of active, avoidance, or seeking social support coping styles were found. However, a significant main effect for time was found for coping via distraction suggesting that mothers in

general were more likely to employ distraction techniques to cope 3-4 months post discharge than they were at time 1 ($F(1,10) = 12.628, = .005$). This effect is shown in figure 4.

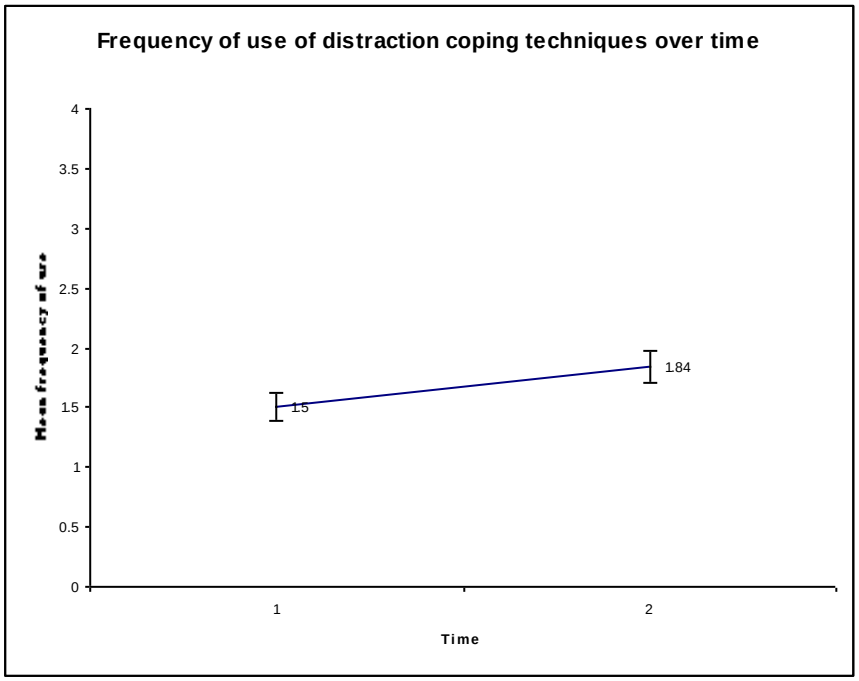

Figure 4: Frequency of use of distraction coping techniques over time.
NB: Error bars represent +/- 1 standard deviation

T-tests were used to compare differences between mothers of preterm and full term infants in the way they coped with the birth of the baby at time 1. Consistent with results reported in the interim report (April 2009), there were no differences between mothers on their use of active, avoidance, or distraction coping styles. However, there was a trend for mothers of preterm infants to seek social support as a way of coping more often than mothers of full-term infants ($t(31) = 3.121, =.087$). This trend is displayed in figure 5.

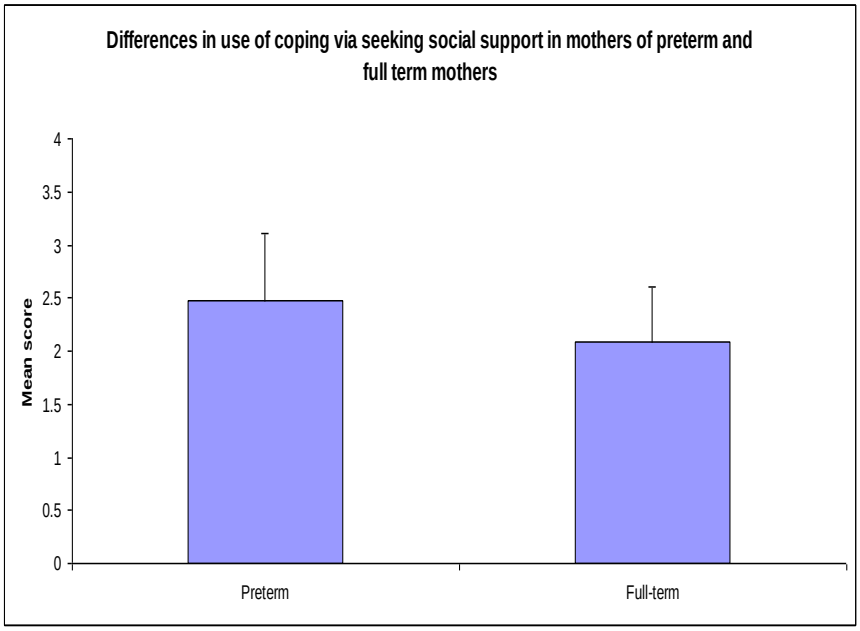

Figure 5: Differences in use of coping via seeking social support in mothers of preterm and full – term infants.
NB: Error bars represent +/- 1 standard deviation

Correlations between the various ways of coping and reported sense of parental self-efficacy were calculated. Significant correlations were found between sense of parental self-efficacy at time 2 and active coping (r= 0.609, <0.03) and coping using distraction (r= .0.774 < 0.002) at time 2. These relationships suggest that mothers using active and distraction techniques were more likely to report higher belief in their parenting ability. No significant correlations were found between coping and psychological health.

A significant correlation was also found between age and use of avoidant coping strategies (r= -0.514, <.03). This relationship suggests that younger mothers were more likely to report the use of avoidant coping strategies than older mothers and is consistent with more general literature on adolescent coping suggesting that younger people use avoidance strategies more than older people. .

Cognitive Appraisal

A mixed ANOVA was used to assess changes in how mothers of preterm and full term infants thought about the birth of their baby at time 1 and time 2. A main effect for time was marginally significant (F(1,15) = 4.380, =0.54) for appraising the situation as uncontrollable.

This suggests that mothers were more likely to report that the situation was uncontrollable at time 2 than time 1. Figure 6 depicts this trend.

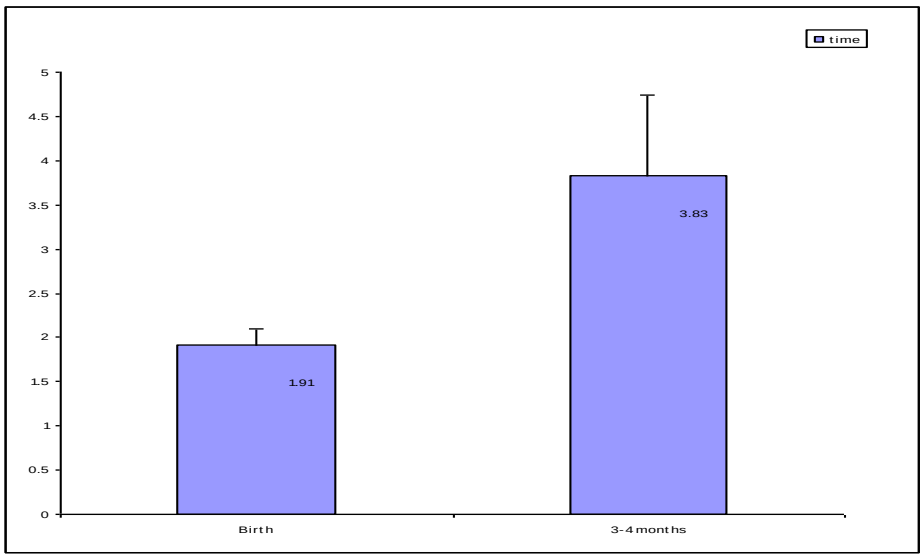

Figure 6: Changes in appraisal of the situation as uncontrollable over time.

NB: Error bars represent +/- 1 standard deviation

T-tests were used to assess the differences in cognitive appraisals between mothers of full-term and preterm infants at time 1. Consistent with results reported in the interim report (April 2009) there were no differences between mothers on their appraisal of the situation as threatening, challenging, or stressful. However, there were differences between mothers on the centrality scale ($t(33) = 7.162, <.02$) suggesting that mothers of preterm infants perceived the situation as more important to their well-being than did mother's of full term infants (see figure 7.).

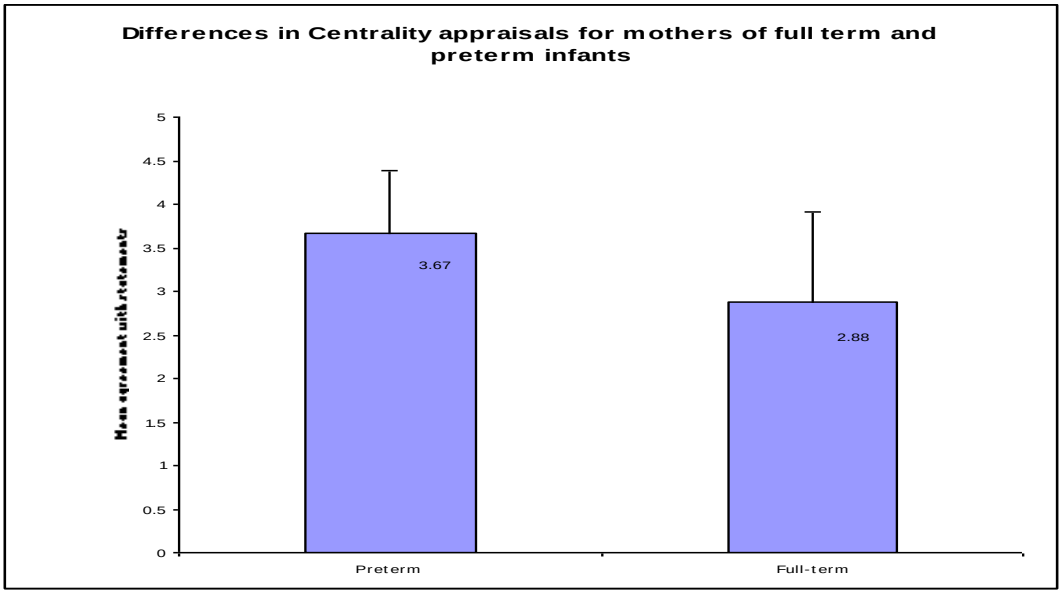

Figure 7: Differences in Centrality appraisals for mothers of full term and preterm infants.

NB: Error bars represent +/- 1 standard deviation

A mixed ANOVA revealed a significant main effect of time, which can partially be explained by a marginally significant interaction. The interaction is visually demonstrated in figure 8 and shows that while mothers of preterm and full term infants both endorsed that the situation was a challenge, or an opportunity for growth, at time 1, this decreased over time and more so for mothers of full term infants. This suggests that having a baby is seen as less of an opportunity for growth for mother's of full-term infants and over time.

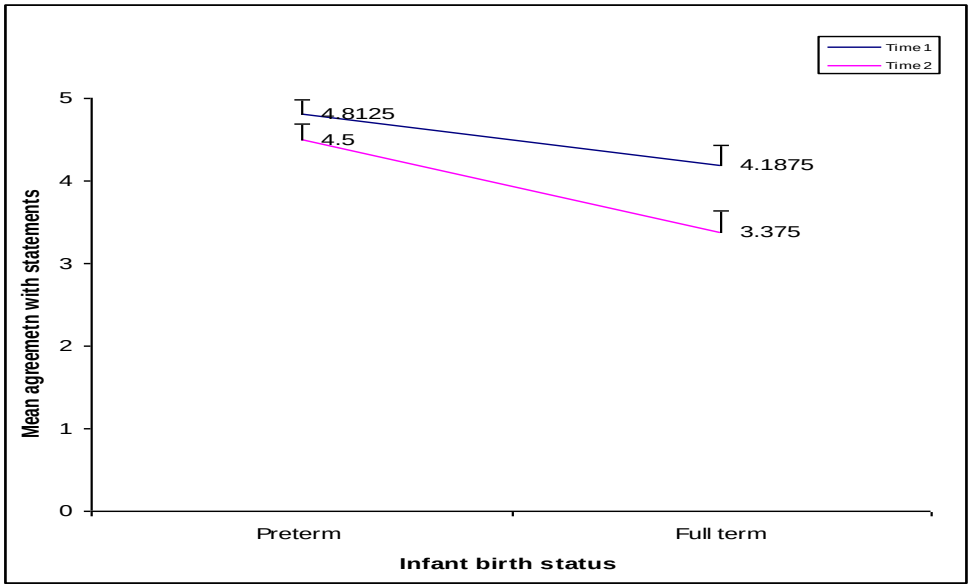

Figure 8: Differences in mothers appraisals of the situation as challenging over time.

NB: Error bars represent +/- 1 standard deviation

Correlations between the various ways of appraising the situation and scores on the GHQ were calculated. Significant correlations were found between scores on the GHQ at time 1 and appraising the situation as stressful at time 1 (r= .350, <0.05). Consistent with this, scores on the GHQ at time 2 were also strongly associated with appraising the situation as stressful at time 2 (r= .822, <0.001). Both of these correlations suggest that people experiencing more psychological distress were also more likely to view the situation as stressful.

Time 2 GHQ scores were also moderately correlated with threat appraisals (r=.545, <.05), appraising the situation as controllable by self (r=-.669, <.05), and controllable by others (r=-.538, <.05), at time 1. The direction of these correlations suggests that if at the time of having your baby, you perceived the situation as threatening, you were more likely to report poorer adjustment at time 2. Similarly, perceiving that either yourself or someone else was in control of the situation is related to lower scores on the GHQ or better psychological adjustment 3-4 months later.

Correlations between the various ways of appraising the situation and reported sense of parental self-efficacy were calculated. Significant correlations were found between sense of parental self-efficacy at time 2 and appraising the situation as challenging (r=0.669, <.02) and controllable by self (r=.656, <.02). There was a strong inverse relationship between parental self-efficacy and appraising the situation as threatening (r=-.890, <.001) and moderate inverse relationship between parental self-efficacy and appraising the situation as central to self (r=-.648, <.02). These results suggest that parents who found parenting threatening and central to themselves reported less confidence in their parenting ability. Alternatively, thinking of the situation as a challenge and controllable by self was associated with greater confidence in parenting.

Taken together, we can see that how young mothers appraise the situation changes over time with mothers perceiving the situation as more uncontrollable and less of a challenge or an opportunity for growth at time 2 than time 1. In addition, mothers of preterm infants appraised the birth of their babies as more central to who they were than mothers of full term infants. Appraisal of the situation when the baby was born was related to psychological adjustment. Perceiving the situation as stressful was related to poorer psychological adjustment at the time of having the baby and 3-4 months post-discharge.

Interview Data

Descriptive content analysis was used to ascertain the key descriptive themes in the mothers' stories at time 1 and 2 as well as changes in mothers' stories over time. NVIVO version 8 was used to manage the project data. Descriptive categories at time 1 were generated using mostly deductive procedures. Deductive categories were generated from theory (i.e. constructs from Lazarus and Folkman's transactional model of stress and coping and McCubbin and McCubbin's (1993) Resiliency Model of Family Stress, Adjustment, and Adaptation) as well as from the research questions and objectives. Inductive categories were also generated and were mainly associated with additional sources of support that were discussed by mothers that had not previously been thought of as important by the researchers or previous literature (i.e. paternal grandparents, step parents) but became subsumed by descriptive themes in later analysis. The process of forming these descriptive themes at time 1 has been previously discussed (refer to Interim report, April 2009).

Time 2 interview data was coded using a combination of inductive and deductive procedures. Deductive categories were generated based on time 2 data and interviews were coded for any information pertaining to these categories (i.e. Demographics: Work, School, Housing; Use of support services and barriers to service use;). All other descriptive categories were generated inductively and detail of this is provided in table 3.

Table 3: Descriptive themes and the descriptive categories they were generated from

Descriptive theme	**Sub themes**	**Time 1 categories informing sub theme**	**Time 2 categories informing sub theme**
Demographics	Work	Work	Work-Career, challenges
	School	School	School, future directions
	Housing	Housing	Housing moving, challenges, support
	Father of the baby	FOB, support from FOB	Support, adjusting to parenting, challenges, FOB
Use of support services	CHS and young parents programs	Demographics	Support service (SS) use
	Why would I access a service		Accessing information, SS use, adjusting to parenting
	Reasons for satisfaction		SS use
	The type of support I need		Time for self, accessing information, baby feeding, FOB, finances, getting things for baby
	Barriers to service use		Judgement, “trying to do proper”,
	Trust and interpersonal issues		Post-natal depression, violence, trying to do proper, judgement from others
	Location and transport		Transport, SS use
	Communication		SS use, finances
	Financial and practical support		challenges , Finances, FOB, grandmother, grandparents,
	Additional challenges of bring preterm	Expectations	Impact of SCN, baby temperament, positives being home

Table 3 (cont): Descriptive Themes and the Descriptive Categories they were generated from

Descriptive theme	**Sub themes**	**Time 1 categories informing sub theme**	**Time 2 categories informing sub theme**
Adjusting to parenting	Adjusting to parenting	Expectations, psychological health, coping through use of SS	Rewards of parenting, drug and alcohol, emotions, expectations, developmental milestones, baby temperament, challenges, adjusting to parenting, sleep-routine
	Lifestyle changes and loss of peers	Social lives, relationships	Drug and alcohol, babysitting, friends adjusting to parenting
	Juggling Identities	Maternal identity	FOB, Challenges, time for self, maintaining partner relationships
	Where do I learn how to be a parent	Hx of exposure to child care, parenting, informal and formal support	Adjusting to parenting, accessing information, grandmother, FOB,
	Supported parenting	FOB, informal SS	Time for self, FOB, managing stress and coping, supported parenting, grandmother
	Impact of the Special Care Nursery on the transition to Parenting.	Expectations	Challenges, impact of SCN, probs with separation, positives being home, baby temperament
	Judgement		SS use, judgement from others, challenges,

The following section provides additional demographic information about the sample followed by the descriptive themes in the mothers' interviews from time 1 and time 2.

Demographics

Work

Of the 40 young mothers interviewed at time 1, the majority were working at the time of falling pregnant. Overall, 8 mothers were unemployed and of these two had been actively trying to fall pregnant, three already had children, 2 were on unemployment benefits, and one very young mother had never worked.

3 months after birth only one of the full-term mother's who had been followed up had returned to work. She was reliant on her mother to babysit and was having great difficulty getting her child into a good quality childcare centre. Two other mothers discussed that they were about to return to work.

School

Eleven of the 40 young mothers were enrolled in school at the time of falling pregnant. Four of these mothers had dropped out of school due to the pregnancy and were not intending to return. Five mothers were still enrolled in school and had taken time off to give birth. Finally, 3 mother's had suspended studies but intended to return to school or TAFE in the future.

At time 2, 5 of these mother's had been recontacted. One had completed grade 12 three months after giving birth while her infant was in the SCN. The second mother returned to school part-time 1 month after her preterm baby was discharged from hospital with support from the father of the baby, pregnant and parent program, and the school. Two of the mothers of preterm infants could not be followed up at 3 months post discharge due to limited time following their return to school and the final mother did not intend to return to school at any time.

Many of the mothers had highlighted the desire to participate in further education via TAFE in the future during time 1 interviews. At time 2 only 1 mother was undertaking a TAFE course and she had commenced the course externally prior to giving birth. She was enrolling her children in childcare to give herself more time to complete the study requirements.

Housing

At time 1, many of the mothers were living at home with their parents and had stable housing arrangements. However, one mother had been living with her mother in a rented house from which they were being evicted. This mother did not know where she was going to be living when she took her baby home from the special care nursery. Three of the mothers in the sample lived with their partners who owned their own homes. Table 4 presents the living situations of the mothers in the study at time 1.

Table 4: Living situation

	1 or 2 parents	Father of baby (FOB)	Parents and FOB	New Boyfriend	Alone	With Family
Preterm	6	6	5	0	0	3
Fullterm	3	10	5	1	1	0
Total	9	16	10	1	1	3

At time 2, several of the mothers had had some type of change in housing arrangement. These changes are outlined in table 5 and highlight that most often the move was between grandparents houses.

Table 5: Movement in living situation from time 1 to time 2

Moved from	**Moved to**	**Reason**
Maternal Grandfather	Paternal Grandparents	Additional support and company for mother
New Boyfriend	Sisters	Relationship breakdown
Own place	Maternal Grandmother	Financial
Own place	Maternal Grandfather	Partner Work – relocation to Brisbane
Maternal Grandmother	New Boyfriend	Conflict with maternal grandmother
Maternal Grandfather	Friend	Domestic Violence (DV), relationship breakdown with FOB
Maternal Grandfather	Paternal Grandmother	More stable environment
Maternal Grandparents	Paternal Grandfather	Unknown
Own place	Foster family	Dept of child safety intervention

Several of the mothers were in unstable housing arrangements. The mother mentioned above who had not known where she would live was still in unstable housing 3-months post discharge. She had moved between friends and relatives several times over the preceding 3 months and was currently living with a friend she had met a couple of weeks earlier. One other mother was in unstable housing at time 2 following a breakdown in relationships with the father

of the baby and the maternal grandfather, who had been her main sources of support. She was currently living with a friend.

Father of the baby

At time 1, five of the mothers were not currently in a relationship with the father of the baby. There was no change to this at time 2 though one mother had engaged in a relationship post discharge, which had ended prior to follow-up interviews. Many mothers mentioned that having the baby had affected their relationship with the father of the baby with several reporting less confidence that they would be able to maintain these relationships. Most mothers who were struggling to maintain these relationships were trying desperately to keep the relationships going so that their babies would know their fathers.

The most common pattern that appeared in the time 2 interview data was the relationship between partner support and use or need for support services. This is one area of research that is less well investigated in the literature. However, the current study suggests that partner support may be pivotal to the parenting experience for young mothers. This is discussed more in relation to supported parenting below. However, mothers with partners were less likely to report the need for support service use. In addition, the mothers with the poorest transition to parenthood did not have good partner support.

Use of support services

Most mothers had not heard of most of the support services in their area. The main 2 services they had had contact with were child health services and a young parents program. Table 2 provides an overview of the services that young mothers had heard of or had used throughout Brisbane and their satisfaction with the service.

Table 6. Service use by young mothers and their satisfaction with support use.

Service name	Heard of but not used	Number of mothers used	Number of mothers not used	Average satisfaction (range 1-4; 1 = very satisfied)
Preterm Infant Parenting Association (PIPA)	1	2	7	2.5
Young Parents Program (YPP; Stafford)	1	3	4	1
Child Health Services	0	11	4	1.80
Ellen Barron	2	0	5	-
Ipswich YPP	0	8	4	2.25
Pregnant and Parenting Program (PPP_	0	1	9	1
Mission Australia	0	1	7	2
YPP (Morayfield)	0	1	0	1
St Mary's	1	0	10	-
Pine Rivers Community centre	1	0	3	-
Picabeen Community centre	1	0	3	-
Inala Community Health Centre	0	1	0	1

Child Health Services: Most young mothers had received support from child health services in the form of home visits. One mother had not received this type of support, despite having a preterm infant, and believed there had been some mistake at the hospital. Most mothers saw this type of service as being purely about the infant and used it for weight checks and for information about breastfeeding, bottle-feeding, or any health questions. In general, mothers were satisfied with the type of support this service offered.

Young parents programs (offering groups): Mothers living on the Northside of Brisbane and Caboolture areas reported access to a young mothers group (Stafford and Morayfield). Mothers accessing these two programs were very satisfied with the type of support provided. Some of these mothers had had contact antenatally and continued their involvement. Other mothers received well timed calls 2-3 months post discharge, when they were struggling, and were asked if they would like to join.

> *"I joined the mums group and that's been fun. We just do like craft and stuff and talk about, they have a social worker come in and they do all that kind of stuff, like teach you how to get a baby to sleep a little bit better, if you need help and it's really good. You make heaps of friends there. Not that you really think about it until you sit in a room with them and we're all going through the same thing. It's amazing how, like I thought I was just having a rough time with him, but a lot of the mums say, especially the premmie bubbies they just seem to, in, in this area they just seem to have the same thing so…They have like talkers come all the time about different things like how to, they did budgets one week, they've done how to teach a baby to sleep or get them into some form of routine. How to cope with things, how to have your own time, like just to find your own time in between all that stuff and they do lots of stuff like that and craft and stuff for the baby toys"*

Those mothers involved in these types of groups highlight important features such as the normalising experience of difficulties associated with parenting, the non-judgemental attitude of those running the group, and the opportunity to take time out from the demands of parenting.

Only one mother of a preterm infant in Ipswich had access to a young mother's group through a support service focussed on reengaging mothers in school. This mother also reported that she was very satisfied with the group, which had helped with tangible support (i.e. clothing) as well as peer/emotional support through luncheons.

One interesting point to note is that mothers who did not have access to this type of group program specific to young mothers (because it did not exist in their area) were most likely to say that they would not use it.

Young parents programs not offering groups: Several mothers had contact with young mothers programs that provided individual support. Most mothers stated that they would mainly access this type of service for information. Additionally, mothers expressed that they liked knowing there was someone there if they needed help.

"Because I had someone to actually rely on, like if I did need help."

However, few mothers were able to articulate when they would actually contact such a service. In general, there was a lack of knowledge about what the service would actually do combined with the feeling that they would not be able to help with what was really needed.

"Waste of time"
"Um... no. Not really. Like they don't... they offer support and stuff like that but other than that there's not a great deal that, like they do have."

Why would I access a service?

The majority of young mothers stated they would only contact a service if a) they needed information or b) things had hit rock bottom.

Information: Most services were seen only in terms of providing information. However, before mothers accessed a service they would first try anything they themselves had learnt or heard about. They usually then accessed their own support networks, particularly people who have had children (within the last couple of years). There was an acknowledgement that information is out of date quickly and often there was confusion of who and what to trust. Young mothers also turned to books/internet if they had access to them and some reported contacting the 13HEALTH health advice line for advice.

"Maybe if I didn't know something, like if something was wrong with her and I didn't know."

At the time of the second interviews many of the mothers expressed that they either had or were about to contact various services for advice about incorporating solids into the baby's diet. This may be reflective of the time that interviews were conducted but this may also suggest that this is a prime opportunity to engage young mothers into more extensive support services.

Hitting rock bottom: The other time that mothers noted that they might ask for help was if all else failed.

"I won't contact them until things are really bad like if the baby is constantly screaming and I don't know what else to do"

However, it was important to have a good pre-existing relationship with the service. 3 of the mothers in the current sample were struggling with post-natal depression, were having difficulties with accommodation and informal support, and all 3 of the mothers were not engaged with formal support services. None of these mothers had good relationships with service providers based on interactions antenatally or at time of birth and as such, they were refusing any contact with the individuals and therefore the services they were associated with. This will be discussed in more depth in barriers to service provision below. However, it does highlight that while mothers state they would ask for help when they do not know what to do, mothers in this situation still did not access services.

Reasons for satisfaction

Mothers were asked what they liked about the services they had used and why they had been satisfied with the service provision. Most mothers' comments related to the home visiting midwife services or clinics as these were the types of services most commonly accessed.

The most common reason mentioned was related to just having someone there who they could rely on and who would check on the baby.

"Because I had someone to actually rely on, like if I did need help."

Mothers were also satisfied with services that were easy to access, did not have lengthy delays, were free, and were able to provide information quickly and simply.

" Drop in clinics are good – no stuffing around for things like vaccinations. Which is good 'cause that's what I needed to know, you know. She gave me what I needed to know"

"Try to help out with advice – loan things like breast pumps, clothes etc."

"Clinic is good cause it is free – provide access to specialist services that are free – otherwise I wouldn't be able to access."

The type of support I need

Most mothers in the current study stated that they did not need help with parenting. However, several mothers clarified this and stated that they did not really need the type of support they were being offered. When asked what type of support they would like they asked they noted the following areas.

"Just sometimes I really need a break."

"Um, direct me into ways of like um, programs and that for him and like, parenting programs and that."

"Like you know, getting yourself, being able to get yourself together and like, I'm trying to get into therapy at the moment, just to talk through my issues, but it's just, I've got no one to look after …, for that one hour"

"I just think if they offered services like, you know, helping you to find the right child care centre or, you know, giving you other option, you know, with care and that sort of thing."

"A course for dads, 'get your shit together'."

"Financial. He's just grown out of his bassinet at my house so we next need to buy a cot."

"They need more support for food, 'cause no-one knows about that really. It doesn't tell you on the back of the food containers or anything. It just says, on the Farex it just says if they're reaching out for food, or if they're hungry after a bottle, well that's not going to tell me much. So yeah, it doesn't tell you when you're meant to feed them, like are you meant to take the bottle away and then give them a feed or anything. So that's hard.

This suggests that the main areas that they need help with are related to introducing solids, advice about childcare, timeout or respite, parenting programs for mothers and fathers, and financial or tangible support. The need for respite care was reflected by many of the mothers throughout the interviews.This may suggest a key area where service provision can focus particularly as it is the only type of support that is not currently being provided by any service for young mothers. The other areas of support that mothers noted they would like were mostly being provided by services in one format or another. However, mothers do not appear to know this.

Young mothers were very aware that they were being observed and judged within the wider community. They all voiced the stigma associated with teen parenting and how they would not be the one to 'dump their babies'. This meant that many of the young mothers were not getting any respite or time for themselves. Some were even cautious about asking close relatives to look after the baby for fear of being labelled a bad mother.

> *"It's our responsibility as parents to take this baby and we don't want people thinking, which is there are a lot of, like I've got cousins who are, she was 17 when she had her baby and she just folds her baby off to her mum, every weekend and just goes off and does her thing. Which, I get that, I understand that it does get tough but to me I don't think that's right. So I'm the kind of person who will try and struggle through it … on weekends. So basically yeah, we do it on our own. We should (*ask for help*) but we don't"*

"*I just think that it's my kid, not everyone else's, I should look after her."*

A second but related area that could be addressed was suggested by a mother who was looking for a childcare centre. The majority of what she classed as good daycares in her area were already full or were making it very difficult for her to apply for a place because she was a young mother. The only day care centres available to her did not have satisfactory child to staff ratios and she did not want to leave her child there. She noted that assistance with finding suitable and appropriate childcare and assisting with the application process may be a type of support that services could offer.

Barriers to service use.

The mothers in the current study expressed several barriers that prevented them or stopped them from accessing services.

Rapport: The main reason that prevented mothers from using a service was that they had not built a good relationship with the service provided. Several of the young mothers said that they did not feel comfortable disclosing the difficulties that they were having to the service that was available to support them. Some mothers also reported that they experienced service providers as rude and

judgemental, which prevented them from accessing the service. This was particularly problematic in regional areas where there were limited services or only one person working in a service.

"I don't like her"

"*I think it's scary when you go to the older nurses and stuff because they just, they come out with the book stuff, whereas at least there (*young parents program*), they just, they talk normal. They're all going through the exact same thing and so we all know what's going on. We have a little bit more perspective on it. I think that and you're not judged which is a good thing."*

"Yeah, they ended up being really rude. Like they would send Mum messages, Mum had given my number to them and they kept sending Mum the messages so Mum would say, yeah, how everything was going and stuff, and they'd send back the same message. So Mum would do that again and they'd send back – it was crazy."

"I didn't really like them that much 'cause they were just in and out, like they were just like well, right, bye"

These quotes highlight that it is important for service providers to met the young mothers where they are at and respectfully engage the mothers.

<u>Trust and interpersonal issues</u>

As discussed earlier in the report, three of the mothers were not transitioning well to parenting, and reported diagnoses of post-natal depression. All three of these mothers had no partner support, histories of drug use and violence (including DV) and lived in rural or regional areas with no transport. All three of these mothers had been contacted by services but had not built up trusting relationships with staff. As such, none of the mothers were disclosing to services that they were in need of help.

"every time she came around I was happy, jokeful, happy, doing everything. The way that she approved me and she thought, she said, "Well you're doing pretty good as a mother." And because I have my own doctor as well for …, she said, "Well you're obviously you

have your own GP, you're doing really well as a single mother, so you don't need my help anymore."

"Yeah, I've haven't heard from them for a while. Normally hear from them every week but I haven't heard from them. They probably think because my being me, I smile and that and hide everything, hide my emotions, they probably think the same thing. She's good, she's happy"

This suggests that two related barriers to service acceptance or provision are related to the staff and the relationship that they are able to form with the young mothers so that they feel able to ask for help. In addition, while professionals often talk about risk factors and there is an understanding of what may contribute to poorer adjustment (i.e. previous history), there does not appear to be an understanding that these factors may impair interpersonal relationships between young mothers and service providers. However, the young mothers in this project highlight that this is a barrier to service provision.

Location and transport

Mothers living in rural areas (N=8) had access to less services. Some services in regional areas provided limited service provision to surrounding rural areas. However, areas such as Gatton did not appear to be covered by different jurisdictions and mothers were required to travel to Toowoomba or Ipswich.

Mothers in rural areas were often reliant on their GP and some had a midwife that would do weekly sessions at the local hospital. As previously mentioned some mothers did not feel comfortable accessing this person and had no other service or person to contact.

Transport remained an issue at time 2 with most mothers relying on walking or public transport. Those with partners were more likely to have access to a car as most fathers were older. This also influenced service utilisation when mothers were able to get to the service.

Communication

The data from the current project also highlighted some points to note in relation to communicating with young mothers. First, the majority of mothers did not have regular internet

access or the time to spend on the internet. Therefore, while several mothers listed it as a source for acquiring information, the majority were unable to use this mechanism to engage in service use. The internet is often heralded as a forum that youth use, however, young mothers often do not have enough money or time to access this forum frequently.

Second, the use of text messaging can be problematic, as it does not allow service providers to build rapport with the young mothers. As previously discussed, mothers will not access a service if they do not have a good relationship with the service provider. Text messaging did not allow this relationship to be built and most mothers stated they would not reply. Similarly, some mothers noted that this became annoying after being used as the sole method of communication over time.

"Because they text us too much."

Financial/practical support

At time 2, the majority of the young mothers were reliant on pensions from Centrelink and many had had difficulty with setting up and receiving their pensions. This theme had originally been noted in regard to mothers of preterm infants who were struggling with finding time to meet the demands placed by Centrelink and the demands of caring for their infants in the nursery. The time 2 data suggests that this does not remit over time.

At time 2, 3-4 months post birth, one mother had still not received any money from Centrelink. A second had only received her first payment the fortnight before. A third was currently not receiving any payments, as she could not show she no longer lived with a partner. This meant that these mothers were trying to support themselves and their infants with little or no income. They were reliant on borrowing money from friends and family in order to survive, for up to 4 months. This was a particular problem for mothers who were 15 or 16 when they gave birth, as they had not previously had tax file numbers or bank accounts. This took considerable time to organise and mothers reported difficulty with organising this and managing the demands of parenting (i.e. no breaks and no sleep). This information suggests that the system is inflexible and as a result, young mothers may have no income.

Many of the mothers voiced their happiness that the baby bonus was being paid in instalments. They also voiced the danger that the money would be misspent or not spent on the

baby had it been paid in lump sum. This often meant for the first few months they were not struggling financially. However, this became more apparent once the baby bonus stopped being paid (12 weeks after starting) and many mothers noted that they were struggling. Despite this, they stated that they managed and coped as long as they had enough for the baby. Several were struggling with bills and were supported by family for groceries or extras. Those mothers struggling the least financially had partners in strong stable employment.

> "*I'm getting 160 one week and I think 250 the next and like it doesn't work out because once you've paid rent and you've paid other things and you buy nappies and formula, you're really left over with nothing, like so I thought there would be more. But it's okay, at least I get all the things I can out of it.*"

> (So financially, things have been a bit of a struggle too?) *"Yeah, but as long as she's got food in her tummy and clean nappies she's alright… nothing like you can't get over. But if something like is a bit of a challenge but eventually we get there."*

> "*…help with groceries, because it does get tough financially it's quite a strain. So it's just nice to have that type of support*."

> "*She spends two hundred or something bucks, hundred bucks on food and that's the food for the fortnight. And I said to her I can't keep doing it you now. Then the power goes off to. I think the power went off last week. It's due next Tuesday and … and I think holy shit."*

This data suggests that mothers may need more support with financial issues. This may include services that support young mothers to navigate Centrelink or more flexibility from Centrelink for young mothers to ensure they have an income upon which to support their infants. Alternatively, it may be worthwhile investigating short-term financial solutions to provide financial assistance.

Many of the mothers mentioned that other young mothers were having babies for the baby bonus and that they felt this was wrong and bad for the infant. However, the current study found no evidence that young mothers consider financial gain when they consider having a baby or decide to continue the pregnancy. This suggests that the number of mothers choosing pregnancy purely for financial gain may be small though the rhetoric has been embraced even by other

young mothers. This may also provide a point of difference for the young mothers (i.e. I am a different to other young mothers who are judged as bad mothers, because I did not do it for the money). All mothers reported that the instalments were a good idea as they allowed the money to be spent on the baby.

Additional challenges of being Preterm

Overall, mothers of full term and preterm infants appeared to be experiencing similar issues. However, young mothers of preterm infants with additional medical problems did appear to require extra assistance. This was exemplified by one mother in particular who had an infant with many additional health concerns and was very demanding. Despite strong partner and family support, she was finding parenting very demanding. This led her to join a young parents program, which provided emotional, informational, and peer support but also gave her time out. This case suggests that the additional demands of a preterm infant with medical concerns may place strain on the extended family network, requiring additional support. This was not noticeable at time 1 and assessments done at this time would have predicted a positive transition for this mother (i.e. strong family support, strong partner support, financially stable and stable housing, employed and on maternity leave).

A second area that may warrant addressing by services is related to infant temperament and development. The interview data from time 2 interviews suggested that young mothers may potentially have a lack of knowledge regarding their infants developmental attachment.

Preterm mothers were more likely to report that their infants were easy babies and if anything they were wanting more interaction from their infants. This finding is also common in adult mothers of preterm infants. However, it is important to note that this type of attachment relationship between mother and infant may influence long-term attachment, as there are less parenting rewards. This can also be true of infants with difficult temperaments. Mothers who were struggling with parenting were likely to report that they had difficult babies. Literature in this area suggests that difficult temperaments can also affect long-term attachment. Accordingly, mothers of preterm infants (or mothers of difficult temperament infants) may need some intervention, which provides information and education in this area.

Summary

At time 1, most mothers were noncommittal about their service use. Whilst most had heard of some type of service, they did not know if they would need to use them preferring to rely on informal supports. Several of the young mothers had been provided with flyers of services but had not read them. Similarly, young mothers do not seem to integrate information about various services i.e. who does what, what services provide what support. Time 2 data, suggests that most mothers had some contact with services but mainly thought of them as providing informational support. Rapport with the service provider is essential to young people using the service and service providers need to be perceived as non-judgemental and not rude. Other factors that may be important are the need for services to be easy to access, provide clear information, and to be free if possible. The provision of tangible items, such as breast pumps, clothing, and other non-essential items the mothers may not be able to afford is also appreciated.

A very clear relationship was seen by researchers between partner support and the need for assistance by young mothers. Mothers who reported good partner support, also had good relationships with their babies and were managing the demands of parenting well. Those young mothers that had poor partner support or no partner support were most in need of additional support. Several mothers who had good partner support had also joined young parents groups suggesting that good partner support does not preclude service use only that those without partner support need more support, particularly in respite and time out.

Adjusting to parenting.

Interviews at time 1 suggested that young mothers in general were experiencing a positive adjustment to parenting and described becoming parents as the best thing that had ever happened to them. In addition, the pregnancy served as a catalyst for change for many of the mothers with improvements reported in areas such as relationships with others, plans for improved work and education, and decreased maladaptive lifestyle choices such as drug and alcohol use.

Data from time 2 interviews suggests that most mothers were still enjoying parenting and it was viewed as a positive experience. For most, life had returned to a sense of normality as babies were more likely to be in good routines, mothers were getting adequate sleep, and babies were able to be taken out more.

"It's not to worry about. It's a good experience. It's a blessing to have a baby really it is"

"It's changed like back to kind of normal. Like you can take him anywhere, he doesn't cry. Just a happy little man"

"Oh, everybody told me how hard it was and all that but I don't think it was as hard as what they made it out to be. Like it is still hard sometimes"

"Yeah, you think, hey I'm a Mum now, so I've got something out of me, the worlds got something out of me, an extra person. Two arms and two legs. A little prize. I also think what I got out of it was I grew up a bit. Like in some way I haven't, I'm still, like in responsibility wise in some yes, in some no. It's in the middle. I am but I'm not. 'Cause I'm still on that learning curve."

This experience was not unanimous with four of the young mothers reporting at time 2 that the transition to parenthood was difficult. Three of these mothers had no partner support and one had an infant with a difficult temperament and a number of health issues.

"Yeah, it's been okay but I try and convince myself that I can do it, but I've had moments where I get really, really frustrated and then I cry and it's just like I intentionally stop and think I can't do it anymore."

"It has been. It's just been mayhem. ... and so I went home to a screaming baby, messy house, people in my ear, "... you've got to do this, ... you've got to do that." I wanted to go to the shops because I was hungry. And I was laying there and I was like, "I have a baby now. I can't do anything. What am I doing? Why did I do this to myself?" I was full on questioning myself, "What have you done? What have you gotten yourself into? You have a baby now, you can't do nothing. You have a baby now, you have to do everything for this baby." And I woke up the next morning and he was crying and crying and crying and I was just like, "I have to make you a bottle, why can't you do it yourself? I have to change your nappy, why can't he do it himself?" And it was a big shock to me that I had to

be not only independent for myself, be dependent for him. It settled after about a week but then with the post-natal depression…"

"I thought I was in, having like the post-natal depression at one stage. Because the screaming, the crying was constant and I could not, it just, it rips at your heart when you're the mum because, you think you can't, because they tell you, you should know why your baby's crying and you don't. Half the time I have no idea and a lot of people don't when you actually ask them."

One mother had her baby taken into care by the former Department of Child Safety at birth. She reported that the difficulty for her was establishing a bond with the baby once she got the infant back.

"Yeah, when I first got her back it was hard for me to kind of interact with her. Like I'd talk to her and cuddle her and all that, but it just felt really weird. But I got over it."

However, regardless of the difficulties and challenges they were experiencing, all of the mothers reported that they loved spending time playing and interacting with their babies. This was a particularly salient point for all mothers at time 2 as their infants were starting to smile and interact more, providing parenting rewards and reinforcement.

"And you can have a really bad day and then she'll smile at you and everything will be better."

"When she smiles, it makes my heart melt."

"I love interacting with her and like now she starts to interact back, like smile and laugh and sit up"

" yeah she can, she laughs with us and we tickle her and we kiss her feet and she giggles and stuff so yeah. So it's actually the best thing now that she can interact with us."

"I thought there was going to be no sleep, no rewards and oh, it was all pretty hard until you first see him smile and then you knew it was all worth it when he started smiling, it just changed everything"

Lifestyle changes and loss of peers

None of the mothers reported that they had returned to lifestyles associated with pre-pregnancy and only a couple of the mothers reported that they had left their babies overnight to be babysat so they could go out. This was usually for a special event (i.e. birthday, anniversary) and the decision to leave the baby overnight was a difficult one for the mother.

"It took me three months to go out like to leave her with someone babysitting and go out again. I just asked for the night. I went out on New Year's Eve and I had some drinks and stuff. That was fine but it did take me three months to get that separation up for me to actually leave her with someone overnight."

At time 1, many of the mothers felt that their social lives would not be greatly influenced by having a baby. These mothers reinforced this at 3-4 months post discharge stating that they would take the baby to barbeques at family or friends' houses. Most stated that they did not miss going out and getting drunk and were happy to have 1 or 2 drinks, if any, when they went out. Young mothers also reported that this was made easier by having a 'good baby' or peer networks where others had babies.

"Oh, well I still go out and see all my friends. Sometimes I come home late, most nights I don't like to, but once or twice through the week we come home late…. Yep. He just sits in his pram…Yeah, it's pretty easy so far to meet with your friends still, when you've got a good baby, you couldn't do that with a bad baby."

Some of the young mothers did report that they had experienced a loss of friends because they could not go out to parties. However, they also acknowledged that they would not trade that for motherhood.

"Some of my friends just like neglected me 'cause, you know, I can't go out with them to parties and that stuff. But that's okay because I'd rather choose to be a mum than go out

and waste some time on getting drunk, yeah, and doing things that I'm not supposed to be doing."

"Yeah, you can't go out clubbing and things like that or parties whenever you want to or go out with friends like even, it especially changes with your friends because like you have a baby and they don't and they're doing all the things that you wanna you know but they're doing it their age. Yeah."

Some young mothers also reported that it was difficult for peer relationships to be maintained as peers without children did not understand the demands of being a parent. In addition, some mothers were socially ostracised by same aged peers.

"*You can cope with it more when you have other people going through it and that are, your friends have been like oh I'll take bubby, because they understand. Whereas if your having a bad day and your friends turn up now, which they do. Now we're talking about parties and stuff and I'm half dead like with a baby. They don't understand that I can't really or you get like text messages, come out partying this weekend and then they get angry at you when you don't. You're like, well I have a baby, they don't, they just they're just not on that level yet, which is fine but, it just it makes it a bit hard for you"*

"No, I got invited out by a bunch of people that I went to school with, like um two of them have kids and it was at Easter time and I got invited. I was never really friends with them; I just went to school with them. And they invited me out to go out for Easter drinks and I was like oh I don't drink but I'll come out and socialise. And so I got there and I waited, and I waited, and no one turned up. So I sat there for an hour by myself... They just, they... it was just a joke."

Overall, the vast majority of mothers experienced a positive transition to parenthood and found parenting increasingly easy.

Juggling identities.

One of the strongest themes evident in the interview data at time 1 was the development of a maternal identity that occurred once the baby was born. All of the mothers described the

instantaneous love they felt for their babies at birth. They also described how their lives would now be shaped and forever changed by the baby. They no longer thought of themselves as teenagers and described how they had had to 'grow up' and take responsibility with the acknowledgement that they were responsible for two now; themselves and the baby. For most this was a positive and empowering place to be in.

In the interviews at time 2, there was a slight shift towards a juggling of identities. Although the maternal identity was still present and dominant for all of the mothers, there was also acknowledgement of their own needs as students, teenagers, workers, partners, and children themselves.

> *"I need mothering. I think that's the most important thing, someone who's being a mother needs their mother just as much so. You need that mothering yourself I think, in the end."*

> "*I'm still a kid as well, like, and you can't change that. You can't make a person grow up as fast and you can't make a person grow less. But I still like to have fun and I still am very lazy and I can vouch for that".*

> *"Yeah and also like fitting it in with my partner, he also works as well and like trying to catch up with him and look after the baby at the same time was kind of not really a good – like it's kind of hard."*

> *"Sometimes you need just 10 minutes to yourself to sit down and go… I'm 19, I want to go and buy a new shirt or I want to go and spend half an hour by myself, but"*

These quotes highlight the multifaceted demands placed upon the young mother who is trying to juggle and maintain the various roles and identities she has. At 3-4 months post-discharge, they were trying to balance all of the demands though all seem to prioritise their maternal identity at the expense of other aspects of themselves that may need nurturing. Most young mothers felt that they must do it alone, without help, as they got themselves into this situation.

"Yeah 'cause I know that, you know, if I was like "Can you watch (baby) for an hour?" They would be like "Yeah, no problems." But I don't want to do that. I don't want to ask them. It's frustrating for me 'cause I'm like just... you know... I know it's okay to have a break but..."

"I don't know, I guess it's me, that's like well I don't want to ask people all the time"

"but I just think that it's my kid, not everyone else's, I should look after her"

Where do I learn how to be a parent?

As reported in the Interim report (April, 2009), a consistent theme throughout interviews was that young mothers had an extensive history of exposure to childcare and a love of babies/children. The vast majority of mothers had described how they had helped raise brothers or sisters, nieces or nephews, or babysat neighbours' children. In addition, several had worked or volunteered in childcare settings such as before and after school care or day care centres. This previous exposure to babies made the young mothers feel more confident with parenting tasks and more prepared for motherhood.

This theme continued in interviews at 3-4 months post-discharge with most young mothers reporting that parenting was easy. In some cases it was seen as an extension of tasks done to self (i,e, bathing, washing, feeding).

All it is is putting washing on, feeding her, changing her bum, changing her, bathing her, you know, giving her some comfort. I can bath myself, I wash my own clothes, I feed myself; I don't know why I can't do it for someone else.

No one reported struggling with parenting tasks and maternal or paternal grandmothers were seen as a source of help that respected the young mothers parenting ability and role.

"Yeah and then yeah she let me do my own thing…. My way and then yeah sort of yeah, but it's kind of good to have her like to tell me to help me, not tell me, but help me. But I

see a difference between helping and telling me and at the hospital I was getting told and at home I was like getting help so"

Instinct and intuition, which reportedly emerged once the baby was born (see Interim report, 2009) were still present 3-4 months on. Young mothers reported gathering information from a large range of sources and then using a trial and error approach to working out what was best for their infant.

"A book. Ask friends do youse know what I can do, and that's about it, otherwise I just think of everything in my head that I know, and if it doesn't work, it doesn't work. I try the things I know."

"Don't know, it just comes naturally. You know, yeah, because like we were all brought up to look after kids anyway."

There appeared to be much less discussion around the emotional and attachment needs of the baby suggesting that these young mothers may have less of understanding of these issues. In addition, many of the mothers expressed regret at having picked the baby up to much or having shown too much affection and often noted this is something they would not recommend to other young mothers. Although attachment was not assessed in the current study, some of the statements made by the mothers in interviews did suggest that they did not have a clear understanding about infant behaviours.

"As soon as I wake up, he wakes up and he just wants attention"

"Every time she would cry (FOB) picked her up and, you know, she became a cling-on, so I got her out of that by letting her cry. Yeah – well no, she was crying because she wanted to cry because babies cry"

"Yes, I wish I'd known don't pick him up all the time."

This suggests that young mothers are not struggling with the tasks of parenting although they may need more information about infant attachment needs. Mothers were accessing various

sources of information and then applying these in a trial and error fashion until they find what worked for their infant.

Supported Parenting

One factor that seemed to differentiate the young mothers interviewed at time 2, in terms of their experience of parenting, is the extent to which they had people willing to provide supported parenting. Social support is discussed in great depth in the literature and has been shown to make a difference to outcomes for young mothers. However, the current research suggests that it may be more subtle than that with partners providing a small amount of parenting support that provides the young mother with guidance and respite.

> *"Yeah. We take it in turns feeding her. You see I feed her during the day when he is not here but when he comes home this afternoon he takes over feeding her so I get the rest"*

> *"He will bath him on the weekends but he does football training during the week so I sort of just get everything done myself during the week and on the weekends he sort of cooks and helps and stuff like that. Yeah I need to do it on my own now, it's easy… On the weekends, I get to sleep in on Saturdays"*

> *" I don't know, he just, he helps me like if I'm doing something and she cries, he'll go over and pick her up without me asking him. He's just really good with her."*

> "*Oh, it's easy (*parenting), *(*FOB's name) *does most of it. If he wasn't here I think, I don't even know*".

Alternatively, young mothers without partner support still reported that the tasks of parenting were easy suggesting they could manage the tasks of parenting, but highlight that it can be stressful due to the constancy of the demands and the lack of time out.

> *"Actually, quite easy. It's not as bad as I thought it was, but sometimes it does get a little bit stressful because I'm the main carer. You know, it would be good sometimes to have five minutes away from her. Even when she's sleeping, you kind of have to be near her. That way, she's not stopped breathing or choking on her own vomit or something. Just a*

*lot to do. Yeah, with (*boyfriend*), he'd sit with her for half an hour to an hour every day. It gave me time to myself."*

Results at time 1 suggested that the young mothers who did not have strong role models for mothering, often due to maternal grandmother drug/alcohol use or they had been in the child protection system, appeared to have less experience with childcare and less clearly articulated expectations of parenting and the constancy associated with it. In addition, they had less well developed social support networks. Therefore, it was posited that they would have more difficulties whilst transitioning to the parenting role. Results at time 2 partially support this but suggest that it was not necessarily having a role model that makes parenting easier but more having a person who can provide parenting support in small but consistent ways so that burden is shared that makes a difference.

Impact of the Special Care Nursery on the transition to Parenting.

Time 1 data suggested that the unique experience of the special care nursery sometimes provided additional challenges for the mothers whose babies were born preterm or low birth weight. For these mothers, the transition was characterised by feelings of emptiness and loss as they left their child behind each night.

"I just spent 9 months carrying her and pushing her around and now I don't even have her near me. It was like they'd almost taken her away from me"

Other dominant emotions during this time included shock, fear and sadness related to unexpected health concerns. Feelings of frustration and anger were also prevalent, particularly when mothers were having difficulty navigating the systems. At 3-4 months post discharge, mothers reflected on how it had been such an emotional time.

"I reckon I wouldn't have gotten so emotional like because he didn't have to stay in hospital So the whole emotions because there were a lot of emotions going on as well having to leave him and all that"

Surprisingly, mothers at time 1 were stating that the baby's stay in the special care nursery had not affected the bond between mother and child. Some of the mothers even described that the bond had been strengthened.

> *"No I think it has made me stronger really it just made me be able to deal with it easier. Leaving her here just probably made my bond with her stronger the fact that when I had to spend time with her I had to actually soak it up and pay attention to her and not just let her lay there".*

However, some of the mothers noticed the difference and improvement in the relationship with the child once they were home and the sole carer of the infant.

> "*It was a bit more different at the start when we weren't allowed to hold him or anything, so we didn't get to bond as much as other Mums get to. Yeah, I didn't feel as bonded with him. It's like I couldn't really touch him at all really"*

> *"It kind of may have affected the bond, do you know what I mean? 'Cause like when you have them you've got to have them with you like, I didn't even get to hold her after I had her. They just took her straight away. But look at her now. I think we've made up for lost time."*

In addition, one mother particularly felt that the environment of the SCN had had a long lasting impact on her child.

> "*He's not good, I think because when he was at the nursery they told us not to stimulate him… So we're finding it really tough to even go out places with him because he just gets really worked up and then that whole night he'll be like really restless… Because in the special care nursery it's all quiet in there so, you'd think of a baby, he's just been born normally they get passed around and there's noise and everything going on whereas in the nursery there's quiet. But he does seem to get a bit overwhelmed…. We tend to stay home a bit now.*

> *I didn't realise it would be this full on. It's really taken an impact …the way he sleeps is very similar to what they did, but he's unsettled now, because it's not in that environment… It's just I don't know whether he's kind of stuck in that hospital world…*

he's just very to what was in the hospital he's still in that mode and whereas he's in the outside world so he's a bit confused. I think that's what it is, I really do."

Judgement

Judgement from others was a dominant theme for all young mothers at time 1 and time 2. At time 1, the judgement and negative attitudes were felt from nurses and midwives as young mothers tried to establish themselves in the parenting role.

"Really it's the attitude too. They can be having a bad day and you get pushed until you are in tears and then back away and go well damn you shouldn't have pushed it that far, sort of thing".

"I would say the special care nurses need to realise just because we are young we do actually know what we are doing".

"I know it's all hard when you go in there because you know they are watching everything you do. Like you go to pick them up and they are watching you pick them up and when you bath them they are watching you but like I don't let them worry me. You know it's my daughter so"

At time 2, the judgement was more blatant from the wider community.

"Oh, I've had a few people saying you should do this and you should do that. And you know, it's not your baby… just walking the streets, so, people tell you. This is such a small town, everyone knows everyone. So, yeah, there are some people who think they know everything and they want to tell you how to raise your kid, but really it's not their kid so they can't tell you."

"Yep. Like every time I see an older mum, they're all giving me dirty looks and like saying like – well I know it's wrong that I had a child at my age, I do know it's wrong but – and I really didn't want a child at my age, but, you know, these things happen for a reason… Well one woman said to me "It's like a baby having a baby"

"... anyway this lady with four children was looking at me, and I turned around to her and I'm like, "What's your problem?" And she goes, "Aren't you a bit young to have kids?" And I'm like, "No I'm not." And she goes, "How old are you?" And I'm like, "That's none of your business really." Anyway I walked off and she turned around and she's called me a slut"

Young mothers were very aware of the judgements and stereotypes of teenage mothers in the community. As previously highlighted with the baby bonus, they use some of the fabled aspects of teenage parents as points of difference between themselves and the stereotypical teenage mother. Despite this, all of the mothers in the current study noted that they did not think there were any differences between young mothers and older mothers. Most pointed out quite accurately that you can have good and bad in either age bracket and that age should not be the point of classification.

Discussion

The aim of the research project was to investigate the experience for young mothers of preterm or low birth weight babies as they transitioned home from hospital. To address this aim 3 broader research questions that were posed: 1) What is the relationship between a teenage mother's psychological health, maternal adjustment, and social support provided by formal and informal supports, 2) What factors influence whether a teenage mother will engage in community services, and 3) To what extent do current services meet the needs of teenage mothers following the birth of a pre-term infant.

What is the relationship between a teenage mother's psychological health, maternal adjustment, and social support provided by formal and informal supports,

Both interview data and questionnaire data provide insights into the relationships between a teenage mother's psychological health, maternal adjustment, and social support provided by formal and informal supports.

Psychological adjustment at 3-4 months post-discharge was related to perceived helpfulness of support provided by formal service (i.e. nurses, doctors, professional helpers), informal supports (such as friends), family support, and partner support. This suggests that perceived helpfulness of various social supports does aid with the psychological adjustment of young mothers and supports much of the previous research in the area (Bunting & McAuley, 2004a; Letourneau et al., 2004). However, the current study was unable to find a causal link between the two variables, which means that an alternative explanation is that young mothers who are adjusting well and reporting little distress may be more able to engage the help of others. This also fits with the interview data suggesting that mothers who have poorer experiences of parenting or postnatal depression have trouble establishing trusting relationships with service providers and have little or no family support.

Interestingly, there were no differences between mothers of preterm or full term infants on any of the support variables. Also, contrary to findings with adult mothers (May, 1997; Pinelli, 2000), the current study did not find that young mothers were wanting more support after discharge or that support reduced following the acute phase of having a premature infant. One explanation for this is that young mothers may be more likely to receive ongoing support following the birth of their baby than older parents do.

The father of the baby was also a vital source of support for the young mother with the father meeting most of the support needs of the young mother, particularly when the infant was in the special care nursery. Specifically, while both groups of mothers initially rated their partners as helpful, this decreased for mothers of full term infants and increased for mothers of preterm infants once they were home. This result has not been reported as frequently in the literature with the role of teenage fathers being a hugely under researched area (Bunting & McAuley, 2004b).

Previous literature suggested that there were variations on how involved the father was in the care of the infant and noted that often relationships were unstable (Bunting & McAuley, 2004b; Unger & Wandersman, 1988). However, the current research found that fathers that were involved with the mother during pregnancy were still involved and co-parenting at 3-4 months post-discharge. It was also highlighted that supported parenting provided by the father was vital in the young mothers' positive experience of parenting

Consistent with previous research, maternal grandmothers were an important source of support for young mothers (Bunting & McAuley, 2004a; Caldwell & Antonucci, 1997; Clemmens, 2001). However, the current study highlighted the diversity of a young mothers support network and the role of a positive parenting role model who is often not the maternal

grandmother. Time 1 interviews suggested that a risk factor for poorer adjustment to parenting may be the absence of a positive female role model. However, at 3-4 months one of the most important factors for a positive experience of parenting was the supported parenting role provided (mostly) by the father of the baby, regardless of whether they lived together. Mothers with no partner support described struggling with the demands of parenting themselves with little or no time out or respite. Some mothers were also hesitant to contact maternal grandmothers for support due to fear of being labelled as 'dumping their babies' and the very strong belief that they needed to manage alone.

Overall, most young mothers were not reporting high levels of distress and their interviews did not suggest that they were having difficulty transitioning to parenthood. However, at 3-4 months post-discharge, three of the young mothers had developed post-natal depression and were using pharmacological treatment (though not psychological treatments) under the care of their GP's. It does appear that mother's of preterm infants are experiencing more distress (as measured by the GHQ) than mothers of full term infants at time of discharge from the hospital. However, this had dissipated by time 2 where there were no differences between the mothers. This is particularly notable as the literature on adult mothers suggests that this dissipates much more slowly, with some studies reporting increased distress 18-24 months post discharge (Doucette & Pinelli, 2000). This suggests that the additional demands associated the hospital environment were initially influencing the mother's wellbeing. Convergent support for this was found in the mothers' interviews where young mothers described a range of negative emotions that they felt during the experience, including the emptiness associated with leaving their babies behind, the struggle for control over parenting, and frustration at trying to navigate systems. The struggle for control of parenting is a common finding in adult mothers of preterm or sick infants as they describe struggling as they hand the care of their infant over to midwives (Affleck et al., 1991; Miles, 1989). Similarly, adult mothers have described the feelings of emptiness. However, young mothers may have more challenges than adult mothers may in regards to lack of transport for getting to and from the hospital and dealing with the negative attitudes of the midwives.

Interestingly, this study did not find that mothers of preterm infants reported a combination of anxiety and happiness at the thought of transitioning home from hospital. This is inconsistent with previous research, which found that adult mothers reported these mixed

emotions (Affleck et al., 1991). Also contrary to findings in the adult literature (Whitfield, 2003), the current study did not find that young mothers were reporting that a preterm birth was the worst major life event nor that the experience was contrary to their expectations. Instead, the current study found that young mothers had few expectations of what parenting 'should' be like. This may act as a protective factor against distress when they have a pre-term infant as their expectations are not violated. Alternatively, adult mothers often report that having a preterm infant is different to their expectations and there is distress associated with the loss of the idealised 'healthy baby' (Affleck et al., 1991; Franck, Cox, Allen, & Winter, 2005; Hughes, McCollum, Sheftel, & Sanchez, 1994; Miles, 1989; Miles & Holditch-Davis, 1997; Seideman et al., 1997). However, this was not reported by young mothers in the current study.

At 3-4 months post discharge, as they reflected back on the experience some of the young mothers in the current study reported that the special care nursery had affected them and their babies. Some mothers reported that they had not felt as bonded with their infants in the hospital and noticed this more when they went home and the bond strengthened. Other mothers felt that the environment of the SCN had influenced their babies' tolerance of stimulation in the outside world. This limited the mother's ability to take the baby out and they found it easier to stay home.

Additional factors that were found to influence psychological adjustment to parenting in the current study were cognitive appraisal and coping strategies. Specifically, how young mothers appraised the situation changed over time with mothers perceiving the situation as more uncontrollable but less challenging at time 2 than time 1. In addition, parents of full-term babies may be appraising parenting as less challenging than young mothers of preterm babies. Young mothers of preterm babies also appraise the situation as more central to their wellbeing than did mothers of full term infants. In addition, young mothers were perceiving the birth of their baby as less central to their well-being 3-4 months post discharge than they had at time of discharge. This suggests that the act of having a baby becomes very central to whom the mother is when the baby is born, particularly if they are preterm, but this decreases over time. These results are further supported by the interview data which suggested that maternal identity was dominant at time of discharge but that this became slightly less central 3-4 months post discharge as they began juggling identities.

Perceiving the situation as stressful was related to poorer psychological adjustment at the time of having the baby and 3-4 months post-discharge. This is consistent with the relationship

posited in previous research suggesting that if you appraise the situation as stressful you are more likely to report higher levels of distress (Lazarus & Folkman, 1984). The current study also found that young mothers who did appraise having a baby as threatening and central to themselves were also reporting less confidence in the parenting role. Alternatively, perceiving the situation as a challenge and controllable by self was related to greater confidence in the parenting role.. This relationship between cognitive appraisal and self-efficacy has not been reported in the previous literature but demonstrates that how we think about a situation is related to our adjustment to parenting.

The results of a recent study stressed the importance of partner support for adult mothers during the transition to home with a preterm infant (Jones & Rowe, 2007). The current research suggests that this is also vital for younger mothers. At time 1, young mothers of preterm infants most commonly coped with the demands of the nursery by seeking social support. Interview data suggested that this was most commonly the father of the baby. In addition, the father was able to provide a unique type of support as they shared both the burden on the hospital routine but also the emotional upheaval the separation from the infant caused.

Young mothers in general were more likely to use distraction techniques 3-4 months post discharge than at time of birth. Distraction techniques may provide the mother with a mechanism for coping that can be employed easily and routinely while acknowledging that not all problems associated with an infant can be solved or avoided. Accordingly, this increase in distraction techniques over time may demonstrate the young mothers attempt to cope with their infant in a way that gives the mother time out and is not necessarily negligent to the child unlike some avoidance strategies. Mothers may use distraction more as a way of coping with the baby over time because there is little else they can do. Alternatively, the fact that mothers are getting more sleep may account for the fact that mothers may have more time and capacity to use distraction techniques (reading mags, listening to music). Mothers using active and distraction techniques were more likely to report higher belief in their parenting ability. The link between the use of active or minimising coping strategies and adjustment is often reported in the literature (Affleck et al., 1991; Kotchick, Forehand, Armistead, Klein, & Wierson, 1996; Weiss & Chen, 2002). However, it has not previously been associated with beliefs about parenting ability.

The relationship between age and avoidant coping suggesting that younger mothers were more likely to report the use of avoidant coping strategies than older mothers is somewhat

worrying as many studies have found that the use of avoidant or passive coping patterns are more are associated with poorer psychological adjustment (Kotchick et al., 1996; Weiss & Chen, 2002). However, the current study did not find a link between this type of coping, age, and psychological adjustment, possibly due to the limited number of mothers within each age group.

What factors influence whether a teenage mother will engage in community services

At time 1, most mothers were noncommittal about their service use. Whilst most had heard of some type of service, they did not know if they would need to use them preferring to rely on informal supports. The interviews with young mothers at the time of discharge from hospital suggested that they were often overwhelmed with information on top of the demands associated with becoming a new mother. Several of the young mothers had been provided with flyers of services but had not read them. Similarly, young mothers did not seem to integrate information about various services i.e. who does what, what services provide what support. Time 2 data, suggested that most mothers had had some contact with services but mainly thought of them as providing informational support. Rapport with the service provider was essential to young people using the service and service providers needed to be perceived as non-judgemental and not rude. Other factors that may be important are the need for services to be easy to access, provide clear information, and to have no cost associated with them. The provision of tangible items, such as breast pumps, clothing, and other non-essential items the mothers may not be able to afford was also needed.

A very clear relationship was seen by the researchers between partner support and the need for assistance by young mothers. Mothers who reported good partner support, had good relationships with their babies, and were managing the demands of parenting well. Those young mothers who had poor partner support or no partner support were most in need of additional support. Several mothers who had good partner support had also joined young parents groups suggesting that good partner support does not preclude service use rather those without partner support did needed more support, particularly in respite and time out.

Interviews at the time of discharge from hospital suggested that the process of deciding whether to engage in a service was based on a) awareness that they had a need, b) awareness that services existed to meet that need, and c) all other sources of support failed to meet that need. Follow-up data supported this model but suggested additional barriers that exist.

First, mothers were most likely to be aware of needs related to informational support or the needs of the infant. They were less aware of needs related to parenting or parent-child relationship or their own needs as mothers and teenagers. Second, most people were aware of services to access for informational support but they were less aware of services related to other needs such as skill development, tangible support, peer support, financial support, or psychological support. Finally, mothers, where all their sources of support had failed to meet their needs, were often in rural areas with limited services. They were also more likely to have no rapport with contact people in local support services and to have experienced interpersonal or trust issues. Problematically, young mothers appeared to identify with a person as opposed to a service, with several of the young mothers unable to relate contact with a person to the service that person is associated with. This prevents the young mothers accessing services or asking for a different contact person. It also means that if they have a poor relationship with one person at the service they are likely to refuse all contact from that service. These findings support previous literature that has found that it can be difficult to engage teenage mother's in programs (Armstrong et al., 2000) and that teenage mothers who most need support are least likely to accept help or are unaware of the supports offered (Crockenberg, 1986; de Jonge, 2001; Hanna, 2001; McCurdy et al., 2006). At 3-4 months post-discharge, those mothers needing help were still the least likely to engage in support service use. Poor relationships with the contact person for the service often prevented them from contacting the service. Similarly, interpersonal and trust issues prevented them from opening up and sharing how difficult they were finding the parenting experience. This is consistent with previous research which posited that one of the predictors of whether mothers intended to engage in home visiting programs is good interpersonal relationships with the service providers (McCurdy et al., 2006). Similarly, our findings mirror Hanna (2001), who found that young mothers discontinued use of the services despite the fact that stress featured heavily in their lives and they had no family support due to negative attitudes.

Young mothers of preterm infants appeared to rely almost exclusively on the support of their partners during their time in the special care nursery with results demonstrating an almost unanimous rating of the partner as extremely helpful. This is consistent with research conducted with adult mothers but has yet to be reported for younger mothers (Affleck et al., 1991; Jones et al., in press). Young mothers also relied on a range of supports to provide assistance with transport to and from the hospital, help with preparing the nursery, and help maintaining the

household. Transport was the one area where virtually all young mothers of preterm infants reported difficulties as they were either reliant on either public transport or had to place great pressure on extended support networks to travel to and from the hospital several times each day. This is contrasted to mothers of full term infants who did not have to arrange travel to and from the hospital each day and may have contributed to their higher levels of distress compared to mothers of full term infants.

By 3-4 months post-discharge, partner support appeared to be the most important factor contributing to the young mothers' positive experiences of parenting. In particular, a form of supported parenting was found whereby the burden associated with the baby was shared and young mothers were given respite and time out.

Three of the 4 mothers enrolled in school when they fell pregnant had returned to or completed school at 3-4 months post discharge. One mother had also enrolled in TAFE despite having two children. Our data supports Carey et al's (1998) findings that the current educational system allows women who parent as teens to return to study. Our findings also support previous findings that suggest that for most young women, school dropout occurs prior to falling pregnant (Fergusson & Woodward, 2000) and that teenage pregnancy does not cause reduced education attainment (Furstenberg, Brooks-Gunn, & Chase-Lansdale, 1989) rather there are mutual risk factors. This suggests that while services to keep pregnant and parenting adolescents at school are important, preventative measures that reduce disengagement from school at a young age may also be necessary.

Many young mothers were employed at the time of becoming pregnant and intended to return to work though few had managed this at 3-4 months post discharge. Mostly this was because they were still settling into a routine and the demands of parenting, while for one mother it was because of problems with childcare.

Finally, findings from a recent naturalistic inquiry describing the postpartum experience of 12 adolescent mothers who gave birth to preterm infants described the devotion these mothers exhibited toward their babies (Neu & Robinson, 2008). In line with this, mothers in the current study related how becoming a mother had given their life direction and meaning, served as a catalyst for change to more positive lifestyle choices, and fulfilled an existential need. Themes of hope, vision and foresight have been identified in other research surrounding teenage adjustment

to parenthood. Arenson (1994) reported that mothers described detailed plans for the future, including education, better jobs, and improved provisions for children. A similar sentiment was echoed by mothers in the current study at time 1. However, at 3-4 months post discharge mothers were juggling many different roles and identities, with many feeling that they could not ask for help. All of the young mothers in this study felt the negative judgement of young mothers by society and within their smaller communities, and their drive to not be labelled as a poor parents prevented many young mothers from asking for help.

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To what extent do current services meet the needs of teenage mothers following the birth of a pre-term infant?

The vast majority of young mothers stated that they were doing well during interviews 3-4 months post-discharge. This is consistent with self-reported psychological functioning measured at both discharge and 3-4 months post-discharge. This suggests that the main services for teenage mothers (i.e. child health services) are providing an adequate outlet for young mothers to access information and to receive infant related support. However, the young mothers did report several areas where they would like more support. These included an avenue for mothers to receive respite or time out. Most mothers did not want formal childcare services, instead it appeared that they needed someone who could provide short term breaks for them to be able to attend to some of their own needs. Other areas that they needed help with were related to introducing solids, advice about (suitable) childcare, parenting programs for mothers and fathers, and financial or tangible support.

Young mothers were very aware that they were being observed and judged within the wider community. They all voiced the stigma associated with teen parenting and how they would not be the one to 'dump their babies'. This meant that many of the young mothers were not getting any respite or time for themselves. Some were even cautious about asking close relatives to look after the baby for fear of being labelled a bad mother. Mothers engaged in group programs specific to young mothers found the experience normalising, non-judgemental and a good opportunity to take time out from the demands of parenting. However, this type of program was not widely accessible with few mothers in Ipswich or rural areas having access to this type of service. The young parents program at Stafford received very high praise from all young mothers who had attended groups there. In addition, all mothers birthing at RBWH had heard of

the program suggesting that their mechanisms for dissemination of information are adequate. Similarly, the young mothers program at Morayfield placed a follow-up call 2 months post-discharge and was able to engage a mother who was in need of peer support at that time.

Rural areas to between Ipswich and Toowoomba appear to have limited access to services. There are also a number of young mothers with high needs in these regions, who are reliant on their GP for all types of support. It was particularly problematic when interpersonal problems occured with service providers in these areas due to the limited number of services available. This meant that some young mothers had reduced access to services if they did not have a rapport with the local contact.

In terms of the provision of services to young mothers of preterm infants, the current study found that limited support was provided in the area of parent-child relationships. This is important because the infant's temperament is related to the mother's experience of parenting (Belsky, 2006; Deater-Deckard, 2004; Wachs, 2006). In addition, preterm babies can often be less interactive than full-term babies or more difficult due to medical issues. If there is no intervention in this area, the attachment between mother and child can be affected. As such, services could target this for young mothers.

The current project also noted some additional cautions related to communication. First, many young mothers did not have regular access to internet, due to cost and lack of time. This may mean that though the internet is often heralded as a forum that youth use, it may be less appropriate for young mothers. In addition, the use of text messaging can be problematic, as it does not allow service providers to build rapport with the young mothers.

Finally, many young mothers were struggling financially. This was usually because they were having trouble navigating the system with Centrelink. However, even mothers with working partners noted that it was difficult to manage particularly if they were trying to be independent. This suggests that mothers may need more support with financial issues. This may include services that support young mothers to navigate Centrelink or more flexibility from Centrelink for young mothers to ensure they have an income upon which to support their infants. Alternatively, it may be worthwhile investigating short-term financial solutions to provide financial assistance.

Future Directions

The current study highlighted the key role of the father of the baby in the positive experience of parenting for young mothers. However, it was also highlighted that young mothers were struggling to juggle these relationships with the demands of parenting and that they were trying to maintain relationships. Future research should investigate how these relationships play out over time and how this impacts on the mothers psychosocial adjustment as well as their use of support services.

Although four of the young mothers of preterm infants had returned to school at 3-4 months discharge, only one mother had attempted to return to work. Future research should examine the additional challenges mothers face as they return to work and whether assistance is needed in this area. Childcare was not a concern for most mothers in this study as few had returned to school or work, however, this may become more of an issue as they transition back to work.

Mothers in the current study were experiencing varying degrees of financial distress, despite the fact that many of them were still receiving the baby bonus instalments. How they manage after these instalments are completed will need to be addressed over the longer term.

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Appendix A: Means and Standard deviations for Data set A (Time 1 and 2 data)

Variable name	Range	T1 preterm	T1 Fullterm	T1 total sample	T2 preterm	T2 Fullterm	T2 Total sample
N		13	9	22	9	7	16
GHQ	0-23/ 48	12.23 (4.14)	9.56 (3.78)	11.14	11.11 (5.20)	11.19 (7.24)	11.14 (6.04)
Self efficacy	48-95/ 100	70.07 (11.52)	70.56 (9.59)	70.27	83.11 (10.35)	77.00 (11.97)	80.23
N in support network	2-15	6.44 (2.65)	4.25 (1.75)	5.42	5.92 (2.49)	6.33 (3.46)	6.09
Informal supports	1-5/5	2.83 (1.03)	2.90 (.85)	2.86	2.76 (.76)	2.35 (.92)	2.56
Formal support	1-5/5	3.38 (1.28)	3.19 (.53)	3.31	3.08 (.83)	3.21 (.97)	3.14
Family support	1-5/5	3.59 (.85)	3.71 (.78)	3.65	3.25 (1.02)	2.90 (1.28)	3.08
Partner support	1-5/5	3.91 (1.97)	3.75 (2.31)	3.84	4.44 (.72)	3.12 (2.10)	3.82
Active Coping	1-4/4	2.61 (.54)	2.25 (.45)	2.49	2.60 (.36)	2.38 (.44)	2.53
Avoidant Coping	1-4/4	2.25 (.61)	1.93 (.58)	2.15	2.38 (.36)	2.09 (.64)	2.29
Coping by seeking social support	1-4/4	2.52 (.71)	2.23 (.37)	2.42	2.32 (.61)	1.94 (.31)	2.20
Distraction	1-4/4	1.69 (.36)	1.87 (.39)	1.76	1.9 (.83)	2.02 (.56)	1.91
Threat appraisal	1-5/5	1.48 (.57)	1.67 (.54)	1.55	1.58 (.56)	1.93 (.55)	1.71
Challenge Appraisal	1-5/5	4.46 (.85)	4.21 (.55)	4.37	4.50 (.48)	3.45 (.54)	4.09
Stress Appraisal	1-5/5	2.40 (.92)	2.21 (.55)	2.34	2.56 (.58)	2.65 (.96)	2.59
Centrality appraisal	1-5/5	4.67 (3.51)	2.57 (1.04)	3.18	3.12 (1.03)	3.26 (1.06)	3.17
Controllable by self	1-5/5	4.19 (.86)	4.05 (.40)	4.10	4.58 (.49)	4.13 (.38)	4.41
Controllable by others	1-5/5	4.12 (.84)	4.28 (.37)	4.17	4.28 (.60)	3.12 (2.89)	4.25
Uncontrollable	1-5/5	2.03 (.98)	1.92 (.55)	1.99	4.31 (3.50)	3.12 (2.89)	3.91

Appendix B: Full list of coding categories for time 2 interviews

Name	Number of Sources	Number of References
Accessing information	8	14
Adjustment to parenting	14	67
Baby feeding	13	22
Baby temperament	12	31
Drug and Alcohol	4	8
Baby sitting	14	31
Challenges	14	48
Developmental milestones	13	40
Housing-moving	14	34
Expectations	11	17
Father of the baby	15	41
Schooling	6	8
Work-career	12	15
Finances	9	13
Friends	12	30
Getting things for baby	8	10
GP	4	6
Grandmother	14	36
Grand parents	9	24
Impact of SCN	6	13
Judgement from others	5	5
Maintaining partner relationships	12	23
Managing two babies	1	2
Managing stress-coping	14	32
Positives being home	2	4
Postnatal depression	6	9
Problems with separation SCN	2	2
Rewards of parenting	12	19
Siblings	11	24
Sleep-routine	10	24
Support service use	15	63
Supported parenting	11	19
Time for self	14	34
Transport	11	14
Trying to do proper	4	5
Violence	2	5

Appendix C: Full list of coding categories for time 1 interviews

Name	Number of Sources	Number of References
Adjustment	25	116
Baby bonus	1	1
Antenatal Care	16	22
Drug and Alcohol	13	18
Family history of teen pregnancy	4	5
History of exposure to childcare	17	25
History of peers with children	15	16
Housing	12	19
Planned/unplanned pregnancy	20	22
Previous children	4	6
Schooling	18	36
Work	18	30
Centrelink	3	4
Characteristics of teen mothers	5	6
Coping	3.	47
Dept of Child Safety	1	3
Efficacy	6	9
Expectations	25	81
Hospital Experience	11	20
Impact on life	25	69
Parenting	22	97
Social Comparison	7	13
Social support (SS) FOB	25	113
SS – Fathers	19	51
SS – grandparents	2	2
SS – inlaws	18	44
SS- Mothers	24	91
SS – Nurses/midwives	20	44
SS- other	1	1
SS- peers	23	48
SS – relatives	9	19
SS – satisfaction with	4	6
SS- siblings	20	47
SS- step parents	6	14
Use of support services	22	47
Transport	25	50