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Visiting public libraries with young children: An investigation of individual and community factors among caregivers in an area of socio-economic disadvantage

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Abstract

This study examined an extended theory of planned behaviour (TPB), incorporating additional social influences, for predicting parents' and carers' decisions to visit the library with their young children. At Time 1, participants ($N=212$) completed a paper-based questionnaire measuring the TPB constructs as well as group norm, parental role construction, social support (i.e., family and friend support), and psychological sense of community in relation to visiting the library. At Time 2, participants ($N=171$) completed a telephone survey to measure behaviour over the previous six months. Attitude, subjective norm, perceived behavioural control, group norm, and parental role construction predicted intentions. Intentions and perceived behavioural control predicted follow-up behaviour. Results support the TPB and the role of group norm and parental role construction. The findings highlight the importance of social and cognitive factors in predicting parents' and carers' decisions to visit public libraries with their young children.

There is a large body of evidence highlighting the importance of the home literacy environment on young children's early literacy skills (Hood, Conlon, and Andrews 2008; Niklas and Schneider 2013; Sénéchal and LeFevre 2014). However, research suggests that children born into lower socioeconomic status households tend to have lower quality home literacy environments (Hemmerechts, Agirdag, and Kavadias 2017; Park 2008; Sénéchal, 2006; Son and Morrison 2010), and socioeconomic disadvantage has been identified as a risk factor for proficiency in two main aspects of early literacy development: phonological awareness (Henning et al. 2010; Lundberg, Larsman, and Strid, 2012) and vocabulary/oral language competency (Hay and Fielding-Barnsley 2009; Van Steensel 2006). Literacy gaps associated with low socioeconomic status can be evident from school entry (Chatterji, 2006; Duncan and Magnuson 2013), and research suggests strong continuity between early literacy skills and later reading ability (Duncan et al. 2007; Rodriguez and Tamis-LeMonda 2011). While numerous pathways exist to explain the complex relationship between socioeconomic status and literacy, the influence appears largely attributable to the quality of the home literacy environment (Buckingham, Beaman, and Wheldall, 2014).

The home literacy environment has been conceptualised as both passive and active (Burgess, Hecht, and Lonigan 2002). Passive aspects of the home literacy environment include access to books and shared reading and literacy related activities such as library visits, whereas active aspects involve the direct teaching of print concepts, letters, and sounds (Buckingham, Beaman, and Wheldall 2014). Studies have linked higher levels of passive aspects of home literacy environments to vocabulary and oral language ability (Bracken and Fischel 2008; Lonigan, Shanahan, and Cunningham 2008, Sénéchal and LeFevre 2002), and higher levels of active aspects to phonological awareness (Burgess, Hecht, and Lonigan 2002; Hindman and Morrison 2012; Kirby and Hogan 2008). While literacy acquisition has historically been thought of as a skill taught at school, the input and shared activities provided

by parents and caregivers through the home literacy environment are consistently shown as important to later literacy development (Shanahan and Lonigan 2010).

The positive influence of the home literacy environment on reading ability has been seen in many countries around the world (see Park 2008). Buckingham, Beaman and Wheldall (2013) describe improvements to the home literacy environment as 'inarguably the main element of sustained, generational change in early literacy development' (p.439). Although low socioeconomic status poses a risk factor to child literacy development, studies have found that the impact of socioeconomic factors is partly mediated by the home literacy environment, suggesting that literacy rich home environments have the potential to override some of the disadvantages lower socioeconomic status households often face (Park 2008; Zadeh, Farnia, and Ungerleider 2010). Public libraries offer an avenue that can make high quality home literacy environments possible for all families. Libraries provide freely accessible literacy rich resources, activities, and opportunities which enable families to provide high quality passive and active home literacy environments to facilitate literacy development. For example, library services provide opportunities for families to access age appropriate books to facilitate shared reading, an important activity to promote vocabulary/oral language development (Lonigan, Shanahan, and Cunningham 2008). Libraries also offer programs and activities, such as singing and action nursery rhyming, using techniques to teach parents ways to engage in enhanced literacy activities that have been linked to enhancing phonological awareness (Dunst, Hamby, and Star 2011).

Given the value libraries can offer, an initial understanding of factors guiding parents' and carers' decision-making toward library visits may help to inform programs aimed to increase library visits among at risk populations, and positively influence the quality of the home literacy environment. To the authors' knowledge, no study has investigated decision-making in this context using a strong theoretical base to guide investigations. The theory of

planned behaviour (TPB; Ajzen 1991) is one of the most influential models in explaining decision-making across a range of health and social behaviours (McEachan et al. 2011) and, as such, may be a useful model to adopt to understand this specific behaviour among at-risk families in regions with a high level of socioeconomic disadvantage.

The Theory of Planned Behaviour

According to the TPB, intention is proposed as the proximal determinant of behaviour, with intentions predicted by attitude (perceived positive/negative evaluations of the behaviour), subjective norm (perceived social pressure from significant others to perform the behavior or not), and perceived behavioural control (perceived ease or difficulty in performing the behaviour; also theorised to predict behaviour). Meta-analytic reviews demonstrate the ability for the TPB to predict intention and behaviour across a wide range of behaviours (Armitage and Conner 2001; McEachan et al. 2011), with emerging research demonstrating the model's value in understanding parents' decisions for their children's behaviour (Hamilton et al. 2011, 2017; Walsh et al. 2015). Despite extensive literature supporting the TPB, shortcomings have also been documented (Sniehotta, Presseau and Araújo-Soares 2014). Meta-analytic research has illustrated the subjective norm-intention correlation to be weaker than the attitude-intention and perceived behavioural control-intention relationships (McEachan et al. 2011), leading researchers to argue that the construct does not effectively capture the impact of social influences on behaviour (White and Wellington 2009). Ajzen (1991, 2015) suggests that the TPB is open to the inclusion of additional variables if they are theoretically and empirically relevant to the behaviour being investigated.

The current study aimed to extend the TPB to incorporate additional social influences that may be important for predicting and understanding parents' and carers' decisions to visit the library with their young children. Through the inclusion of additional variables, the

relative importance of these various social influences on decision-making and library use can be examined. An increased understanding of decision-making in relation to visiting the library with their child may help to inform strategies to encourage library visits among caregivers and their young children, ultimately improving the quality of home literacy environments and children's early literacy development.

Additional social influences

Group norm

The subjective norm construct within the TPB reflects the influence of perceived social pressure from significant others (e.g., family members; Ajzen 1991). Group norm, on the other hand, refers to implicit or explicit rules regarding attitudes and behaviours which are appropriate to a member of a specific group in a specific context (e.g., other parents and carers; Terry and Hogg 1996). Based on social identity and self-categorisation theories, through a process of internalisation and self-categorisation, group norm is assumed to contribute to individuals' decision-making over and above the TPB factors (Johnston and White 2003). Recent studies incorporating group norm into the TPB with samples of parents of young children have found group norm to independently predict parents' intentions (Hamilton et al. 2011; Hamilton and White 2012). As normative influences are theorised to impact upon groups and behaviours differently (Conner and Armitage 1998), the inclusion of a normative construct may help to identify the relative importance of varying social influences in explaining parents' and carers' library use intentions.

Parental role construction

Parental role construction refers to parents' beliefs about the actions and activities a parent should undertake in relation to their child's education (Hoover-Dempsey and Sandler 1997). Hoover-Dempsey and Sandler's (1997, 2005) model suggests that a major contributor of parental involvement includes a parents' construction of the parental role and sense of self-

efficacy. The motivational roots of parental involvement are based on tenets that roles incorporate goals and values held by pertinent social groups regarding desired outcomes as well as behaviours that become characteristic of the person as they work towards achieving these goals (Hoover-Dempsey and Sandler 1997). In contrast, the motivational orientation of subjective norm is derived from the approval of significant others (Ajzen 1991) and, as such, parental role construction should impact on intentions independently of subjective norm. Support for the construct's direct and independent influence within the TPB has been found in a number of recent studies investigating parental decision-making regarding their young children's behaviour (Hamilton et al. 2016; Spinks and Hamilton 2016; Thomson, White and Hamilton 2012). Therefore, it is proposed that parents and carers who identify visiting the library as part of their parental role will have stronger intentions to do so.

Social support

Social support is commonly conceptualised as “aid and assistance exchanged through social relationships and inter-personal transactions” (Heaney and Israel 2002, 187). Research suggests social support from family and friends is an important resource that may enhance parenting practices directly through the provision of parental support or assistance (Kotchick, Dorsey, and Heller 2005). Social support has also been suggested to buffer some of the effects of socioeconomic disadvantage (Kotchick et al. 2005; Lin, Thompson, and Kaslow 2009). Conceptually distinct from social pressure asserted from subjective norm, it has been suggested that social support may be more influential for behaviours not under complete volitional control, as assistance is more likely to be required for performing the behaviour (Courneya et al. 2000). Social psychology research has also traditionally identified that non-pressuring forms of social influence enhance individuals' adaptive behaviour (Hagger et al. 2016; Ryan and Deci 2000). Incorporating a non-pressuring form of social influence may

therefore add to the ability of the TPB to predict and understand parents' and carers' decisions to visit the library with their young children.

Psychological sense of community

Psychological sense of community captures an individual's feelings toward and experiences of a community (McMillan and Chavis 1986). McMillan and Chavis (1986) conceptualised the construct to consist of four elements: the feeling of belonging; mutual influence; fulfilment of needs; and a shared emotional connection with other members of the group. Together these dimensions create and maintain an overall sense of community.

Literature on parental involvement suggests that the neighbourhood context may play a role in decision-making. For example, researchers proposing ecological and family systems conceptual frameworks for parental involvement in family support programs suggest that the neighbourhood context is a key factor influencing the likelihood that parents will seek out services (McCurdy and Daro 2001). Other research investigating parental involvement in a community-based parent training intervention reported parents with strong neighbourhood ties to be more likely to enrol, participate, and complete the program (Eisner and Meidert 2011). The influence of wider social and neighbourhood factors on parental involvement suggests that psychological sense of community may increase the understanding of parental decision-making in this context. Given libraries function as a community-based entity, psychological sense of community could influence parental intentions to seek out neighbourhood resources, specifically library services, and the addition of psychological sense of community may add to the understanding of decision-making in this context.

The Current Study

We aimed to investigate the factors influencing parents' and carers' decisions to access library services which, to date, have received limited empirical attention. The study focused on caregivers with children under the age of 6 years residing in regions of

socioeconomic disadvantage. In line with TPB specifications (Ajzen 1991), it was hypothesised that parents' and carers' intentions to visit the library would be predicted by attitude, subjective norm, and perceived behavioural control (H1), with their decisions to visit the library with their young children (behaviour) predicted by intentions and perceived behavioural control (H2). In relation to the additional variables, it was predicted that group norm, parental role construction, social support (i.e., family and friend support), and psychological sense of community would predict intentions over and above the TPB constructs (H3).

Method

Participants

The sample comprised 212 parents and carers (40 male, 172 female) aged between 20 and 61 years ($M_{age}=33.77$, $SD_{age}=6.40$) with children under the age of 6 years.

Socioeconomic status was determined by the Socio-Economic Indexes for Areas (SEIFA); a measure of an area's relative disadvantage (ABS 2013). Postcode rankings of the most disadvantaged to least disadvantaged areas in Australia indicated an average percentile rank of 45, indicating that, on average, participants resided in areas that are relatively disadvantaged. The majority of the parents and carers were married or in de facto relationships (81.2%). Over half of the sample (67%) was employed, with the remainder comprising a mix of students and those not in paid employment. Most of the parents and carers listed their highest level of education as a diploma or trade certificate (42.9%) or as having completed Year 12 (19.3%). The majority reported English to be their first language ($n=196$, 92.5%) and being born in Australia ($n=173$, 81.6%). Six months later, 171 (80%) of the parents and carers completed the follow up questionnaire. Participants were recruited through face-to-face contact at swimming schools, immunisation clinics, sporting clubs, a public library, and a shopping complex in geographic areas within the wider Brisbane,

Australia district containing rankings that indicated relative disadvantage, as provided by SEIFA.

Design and Procedure

Ethical clearance was granted by the Griffith University Human Research Ethics Committee (PSY/E2/14/HREC) and a longitudinal design with a six month follow-up was used. Parents and carers completed a paper-based main questionnaire comprising standard TPB items and additional measures of group norm, parental role construction, social support (i.e., family and friend support), and psychological sense of community. An information sheet was provided and by returning a completed questionnaire, respondents confirmed their informed consent. At follow up, participants were contacted by telephone after a period of six months to measure actual library visits. A unique identifier provided by participants was used to match responses. Participants were provided the opportunity to go into the draw to win one of four AUD25 department store gift vouchers upon completion of both questionnaires.

Measures

TPB variables were assessed using guidelines specified by Ajzen (1991). According to the TACT principle (Fishbein and Ajzen, 1975), the target behaviour was defined as: target (the library), action (visit), context (with my child), and time (in the next six months).

Participants were instructed that for the purposes of the research, *my child* related specifically to their child and/or children under the age of 6 years.

The theory of planned behaviour variables

Intention. Three items assessed the strength of intention (e.g., “I intend to visit the library with my child”, scored [1] *strongly disagree* to [7] *strongly agree*).

Attitude. Five items utilising 7-point semantic differential scales measured parents' and carers' attitudes (e.g., “If I were to visit the library with my child in the next six months it would be...” [1] *bad* to [7] *good*), scored [1] to [7].

Subjective norm. Three items assessed subjective norm (e.g., “Most people who are important to me would approve of me visiting the library with my child in the next six months”, scored [1] *strongly disagree* to [7] *strongly agree*).

Perceived behavioural control. Four items assessed perceived behavioural control (e.g., “I have complete control over whether I visit the library with my child in the next six months”, scored [1] *strongly disagree* to [7] *strongly agree*).

Additional variables

Group norm. Four items adapted from Terry and Hogg (1996) measured group norm (e.g., “How many other parents do you know with young children who would visit the library in the next six months”; scored [1] *none* to [7] *everyone*).

Parental role construction. Three items adapted from Green and Hoover-Dempsey (2007) measured parental role construction (e.g., “I believe it is my responsibility as a parent to ensure that I visit the library with my child in the next six months”, scored [1] *strongly disagree* to [7] *strongly agree*).

Social support: family and friend support. Four items measuring instrumental and informational support were adapted from Sallis et al. (1987). Participants rated the four items twice, with reference to family and friends (e.g., “During the past six months, my [family/friends] gave me encouragement to visit the library”, scored [1] *none* to [7] *very often*).

Psychological sense of community. The 10 item modified version of the Sense of Community Index (SCI) (Obst and White 2004) measured psychological sense of community (e.g., “I think my neighbourhood is a good place for me to live”, scored [1] *strongly disagree* to [7] *strongly agree*).

Reported behaviour

Six months later, parents and carers reported their decisions (behaviour) to visit the library with their young children in the previous six months using two items (e.g., “In the previous 6 months, to what extent did you visit the library with your child?”, scored [1] *not at all* to [7] *a large extent*). The behaviour scale items were significantly correlated, $r = .95, p < .001$.

Results

Means, standard deviations, correlations, and scale reliability statistics are presented in Table 1. All variables, except for psychological sense of community, correlated with intention and behaviour, with parental role construction having the strongest correlation with intention ($r = .65, p < .01$) and intention having the strongest correlation with behaviour ($r = .55, p < .01$).

Analyses predicting behavioural intention

A hierarchical multiple regression analysis was conducted to predict parents' and carers' intentions to visit the library with their young children. The TPB variables of attitude, subjective norm, and perceived behavioural control were entered together in Step 1, and the additional social variables of group norm, parental role construction, social support (i.e., family and friend support), and psychological sense of community were entered together in Step 2.

As shown in Table 2, the TPB variables at Step 1 accounted for 50.4% (adjusted $R^2 = .50$) of the variance in intention, $F(3,204) = 68.97, p < .001$. Attitude ($\beta = 0.25, p < .001$), subjective norm ($\beta = 0.41, p < .001$), and perceived behavioural control ($\beta = 0.29, p < .001$) contributed significantly to the model. After the TPB variables had been accounted for, the additional social variables at Step 2 significantly added an additional 11.6% of the variance, $F_{change}(5,199) = 12.09, p < .001$. In the final model, five of the predictor variables, attitude ($\beta = 0.12, p < .05$), subjective norm ($\beta = 0.26, p < .001$), perceived behavioural control ($\beta =$

0.23, $p < .001$), group norm ($\beta = 0.12$, $p < .05$), and parental role construction ($\beta = 0.33$, $p < .001$) significantly predicted intention.

In summary, caregivers who hold more positive attitudes towards visiting the library (attitude), perceive that people important to them approve of the behaviour (subjective norm), have available resources and control over visiting the library (perceived behavioural control), consider other parents with young children to hold similar attitudes towards visiting the library and would perform the action (group norm), and believe that visiting the library is part of their responsibility as a parent (parental role construction) are more likely to intend to visit the library with their young children (intention). The strongest predictor of intention to visit the library was parental role construction, followed by subjective norm, perceived behavioural control, group norm, and attitude. Current results do not support the role of family support, friend support, or psychological sense of community as influencing intention to visit the library.

Analyses predicting behaviour

A hierarchical multiple regression analysis was conducted to predict parents' and carers' library visits (behaviour). Intention and perceived behavioural control were entered at Step 1, with all other variables entered at Step 2. As shown in Table 2, Step 1 accounted for 32% (adjusted $R^2 = .31$) of the variance in behaviour, $F(2,168) = 39.50$, $p < .001$, with intention ($\beta = 0.47$, $p < .001$) and perceived behavioural control ($\beta = 0.16$, $p < .05$) reported as significant. The additional variables entered at Step 2 accounted for a further 2.9% of the variance in behaviour, $F_{change}(7, 161) = 9.59$, $p = .42$. In the final model, intention ($\beta = 0.39$, $p < .001$) and perceived behavioural control ($\beta = 0.17$, $p < .05$) were the only significant predictors of behaviour. Therefore, consistent with the TPB specifications, caregivers who hold stronger intentions to visit the library (intention) and feel they have available resources

and control over visiting the library (perceived behavioural control) are more likely to visit the library with their young children.

Discussion

To the authors' knowledge, this is the first study to adopt a sound model of decision-making with the inclusion of a range of theoretically- and empirically-relevant social constructs, to understand parents' and carers' intentions and decisions (behaviour) to visit the library with their young children. Further, the study was conducted among families in regions of socioeconomic disadvantage. Results provided support for the TPB: attitudes, subjective norm, and perceived behavioural control significantly predicted intentions (supporting H1); and intentions and perceived behavioural control significantly predicted behaviour at six-month follow-up (supporting H2). In partial support of H3, findings supported the inclusion of group norm and parental role construction, but not social support (i.e., family and friend support) or psychological sense of community, as significant predictors of intentions.

Theory of Planned Behaviour

The adoption of the TPB for understanding parents' and carers' decisions to visit the library with their young children proved to be useful, with all the model's constructs emerging as significant and as hypothesised. Although numerous studies have indicated the subjective norm–intention relationship to be less reliable than the attitude–intention relationship (Armitage and Conner 2001; McEachan et al. 2011), subjective norm emerged here as the strongest predictor. Thus, for this behaviour, perceptions that important others expect or value the behaviour is a key motivator in parents' and carers' intentions to visit the library, a finding supported in educational research, such as decision-making for parents' level of involvement in their children's education (Hoover-Dempsey and Sandler 1997). The strong influence of subjective norm suggests unique conditions in which perceived social pressure from others may be an important factor, particularly when decisions are made for

another person (Hamilton et al. 2012; Thomson et al. 2012). Contrary to previous meta-analytic findings (McEachan et al. 2011) and Ajzen's view that intention is primarily influenced by attitude (Ajzen 1991), attitude was the weakest predictor of behavioural intention. These results support Ajzen's (1991) notion that the predictive value of the TPB constructs may vary for different behaviours and populations. The less dominant, but significant, role of attitude, and the strong influence of subjective norm, has also been found in other TPB studies investigating parental decision-making (Spinks and Hamilton 2016; White and Wellington 2009).

The relatively strong direct effect of perceived behavioural control is noteworthy, although caution is needed in interpreting this finding given the high mean and low variability in responses. Nevertheless, the predictive power of perceived behavioural control in this context is in line with Hoover-Dempsey and Sandler's (1997, 2007) model that suggests a parent's sense of self-efficacy, a construct conceptualised within perceived behavioural control, is an essential component of parental involvement in their children's education. Consistent with TPB guidelines (Ajzen 1991), the current study used items reflecting external constraints of controllability and internal traits of self-efficacy, which may have contributed to the strong effect of perceived behavioural control in this context. The findings suggest that visiting the library is a behaviour that is perhaps not under complete volitional control. Given the role parental self-efficacy plays on parenting behaviours (Jones and Prinz 2005), it is not unexpected that parents' and carers' perceived ability influences their intentions and behaviour to visit the library with their children.

As per the TPB, intentions (and perceived behavioural control) significantly predicted parents' and carers' actual behaviour in visiting the library. These findings are consistent with the theoretical underpinnings of the TPB (Ajzen 1991) and with previous research supporting the statistically significant relationships among the TPB constructs across a range of

behaviours, including parental decision-making regarding their children's behaviour (Spinks and Hamilton 2016). Despite current criticisms (Sniehotta et al. 2014), the TPB is argued to be a useful framework to adopt as a starting point in the pursuit of a better understanding of human behaviour (Hagger, 2015). Findings of the current study support this argument, and provide support for the predictive and explanatory utility of the TPB and its theorised pathways. The model accounted for a large proportion of variance in intention (62%) and behaviour (34%), larger than the average reported in previous TPB meta-analyses (see Armitage and Conner 2001; McEachan et al. 2011). In addition, current findings add to the growing body of research supporting the utility of the TPB in understanding individuals' decisions for others' behaviour (Hamilton et al. 2016). Taken together, the findings of the current study provide support for the TPB and its constructs and add to the existing body of literature by expanding the application of the model to this novel behaviour among an at-risk group.

Additional social influences

The findings of this study also revealed group norm and parental role construction as significant predictors of behavioural intentions. The construct of parental role construction was investigated due its recognised strength in predicting parents' involvement in their children's education (Hoover-Dempsey et al. 2005) and previous utility within the TPB framework (Hamilton et al. 2016, 2017; Spinks and Hamilton 2016). The current study's results support these previous studies in that parental role construction emerged as the strongest predictor of intention, reflecting the extent to which parents and carers identify visiting the library as part of their responsibility as a parent (Hoover-Dempsey and Sandler 1997). While parental role construction provides the foundation for active involvement, a sense of self-efficacy and control over the behaviour is important in enacting involvement (Hoover-Dempsey and Sandler 1997). Thus, in combination with perceived behavioural

control, parents' and carers' construction of the parental role is an important predictor in making decisions about library use and, thus, provides some understanding of the processes for making decisions for children's education-related behaviour.

The significant influence of group norm, along with subjective norm, suggests that parents and carers are more likely to visit the library if they perceive that important referents think they should engage in the behaviour (subjective norm) and that other parents with young children engage in the behaviour (group norm). This finding is consistent with previous research demonstrating that subjective norm and group norm independently predict behavioural intentions (Hamilton and White, 2012; Hamilton and Schmidt 2014) and concurs with research suggesting that social norm messages regarding other parents' behaviour positively influence parents' involvement with their young children (Colgate and Ginns 2015). The findings emphasise the importance of direct social pressure from important referents (subjective norms) and other parents with young children (group norms) in providing normative influences in the context of parents' and carers' library intentions. The results support a social identity/self categorization approach for an increased understanding of the role of norms in children's education (Terry and Hogg 1996) and illustrate the importance of considering different forms of normative influence within the TPB.

The current study also aimed to assess the influence of social support within the TPB. Although previously untested within this domain, evidence regarding the predictive utility of social support within the TPB is mixed, with some studies finding a direct effect on intentions (Courneya et al. 2000) and others failing to do so (Hamilton and White 2008). Previous research in the educational literature has also resulted in equivocal findings. For example, Ice and Hoover-Dempsey (2011) reported significant results for the construct's ability to predict parental involvement at Time 1 and non-significant findings at Time 2. The results of the current study suggest that visiting the library, a behaviour not under complete volitional

control, may not be strongly influenced by the support given by friends and family members to do so and, in fact, indicate that parents and carers receive low levels of assistance from friends ($M= 2.09$; $SD=1.57$) and family ($M=2.39$; $SD=1.65$) to visit the library.

It has been suggested that social support may be a resource that plays more of a role when difficult contextual variables undermine parents' perceived ability to become involved (McConnell, Breikreuz and Savage 2011). The results of the current study suggest that parents and carers perceive a high level of control over visiting the library ($M=6.01$; $SD=0.99$). Furthermore, some studies have found that after accounting for the effects of parental self-efficacy, the effects of social support on parenting cease to be significant (Izzo et al. 2000). The variance accounted for by perceived behavioural control, a construct conceptually similar to self-efficacy (Ajzen 1991), could explain the weak relationship found between social support and intentions. In addition, the current study measured instrumental and informational support; however, other forms of social support, such as emotional support, have been suggested to positively impact parenting practices (Green, Furrer, and McAllister 2007; McConnell et al. 2011). Therefore, it could be that other forms of social support may be more influential in informing parents' and carers' library visit intentions. The finding could also be attributable to the current study measuring perceived support, with research suggesting that measures of received support are a more accurate and objective measure of social support (Cohen et al. 2005). However, some researchers have argued that perceived social support has a stronger, more proximal influence on outcomes, with received support having more distal effects (Prati and Pietrantonio 2010). Given the high amount of control parents and carers perceived in this study, it could also be that caregivers do not desire the support. Evidence suggests that support may not always be effective, with research indicating instrumental support can be perceived as invasive or demanding (Deelstra et al. 2003).

The study further aimed to investigate the influence of psychological sense of community on intentions to visit the library. Previously untested within the TPB, the findings suggest that psychological sense of community may have a limited role in predicting parents' and carers' intention to visit the library. Generally, literature on psychological sense of community has investigated outcomes of psychological wellbeing and community-orientated involvement behaviours, such as political participation (Hughey, Speer, and Peterson 1999). Similar to social support, psychological sense of community has been suggested as a resource for meeting the psychological needs of individuals at a community level (Nowell and Boyd 2010). It may be that for visiting the library, pressuring forms of social influence are more influential on parents' and carers' intentions than non-pressuring forms, such as psychological sense of community. It has been suggested that through a reciprocation of met needs members engage in a variety of important social outcomes, such as community enhancing efforts (Long and Perkins 2007; Nowell and Boyd 2010). Given that bi-variate correlations revealed a non-significant correlation between psychological sense of community and intention, the findings could also be attributable to the target behaviour investigated, and psychological sense of community may be more relevant for predicting community-orientated enhancing efforts.

Strengths, limitations and future directions

To the authors' knowledge this is first study to investigate decision-making in this context, using a well-validated theoretical model with the inclusion of additional empirically- and theoretically-relevant constructs. The study benefited from a large community sample and included families in regions of socioeconomic disadvantage. The study is not without limitations. The sample in the current study was predominately female; however, as mothers often identify as the primary caregiver in a child's life (ABS 2012a), they may also be the most likely to take their children to the library. Most participants were born in Australia and

identified English as their first language. In Australia, migrants from non-English speaking countries are more likely to have lower literacy levels (ABS 2008). As libraries are community hubs, with a focus on the most disadvantaged (ABS 2012b), the findings may be less generalisable to such groups. Thus, future research is needed to confirm the study's findings with individuals from a wide range of non-English speaking backgrounds. A further limitation was the use of self-report measures, which can be susceptible to social desirability bias. Further research may employ multi-dimensional and alternative methods of measurement, such as observational research, focus groups, or face-to-face interviews, for the purposes of triangulation. Additionally, the current study measured instrumental and informational support whereas, other forms of social support have been identified to impact positively on parenting practices (Green et al. 2007; McConnell et al. 2011). Investigation of different forms of social support may allow for a better understanding of the potential influence on parents' and carers' library intentions. Given the study's findings of perceived social pressure and parental responsibility as key drivers to library visits, the role of social support may be complex (Hamilton, Warner, and Schwarzer 2017; Zhou et al. 2017). Further exploration of the relationship between social support and parental resistance, in terms of when support may undermine parental responsibility, warrants investigation in a wider arena. Finally, continued investigation of the applicability of psychological sense of community within the TPB is warranted and may allow for a more comprehensive understanding of how other wider community level influences may affect individual motivation across various behavioural domains.

Summary

The current study was the first to investigate parents' and carers' decision-making to visit public libraries with their young children using a sound theoretical model (i.e., TPB). The findings support the application of the TPB as well as adding to the existing literature by

extending the application of the model to this specific childhood education behaviour. By making a direct comparison among a range of social influences, a greater understanding of their independent influences on parents' and carers' library visit intentions could be identified. Perceptions of parental roles and responsibilities appear to be the most important social influence in this context, with perceived social pressure from important others (e.g., partner/spouse, child's grandparents) and perceptions of normative support from behaviourally relevant referent groups (other parents with young children) also emerging as important. Overall, current findings provide useful insight into the social cognitive factors influencing parents' and carers' intentions and behaviour concerning visiting public libraries with their young children and suggest that strategies aimed to increase engagement levels should take a multifaceted approach.

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Table 1

Means, Standard Deviations, Bivariate Correlations, and Scale Reliability Statistics for all Variables in the Model

Variable	1	2	3	4	5	6	7	8	9	10
1. Attitude	(.95)	.44**	.30**	.40**	.46**	.19**	.16*	.15*	.51**	.25**
2. Subjective Norm		(.87)	.27**	.41**	.46**	.31**	.26**	.07	.59**	.34**
3. PBC			(.74)	.25**	.28**	.13	.14*	.03	.47**	.38**
4. Group Norm				(.84)	.50**	.36**	.38**	.15*	.52**	.37**
5. Parental Role Construction					(.96)	.38**	.32**	.17*	.65**	.40**
6. Family Support						(.90)	.54**	.18**	.35**	.30**
7. Friend Support							(.95)	.16*	.31**	.22**
8. PSOC								(.85)	.13	.02
9. Intention									(.85)	.55**
10. Behaviour										—
Mean	5.99	5.57	6.01	4.12	5.10	2.39	2.09	4.64	5.31	2.33
SD	1.18	1.30	0.99	1.42	1.70	1.65	1.57	.96	1.73	1.84

Note. * $p < .05$ ** $p < .01$

Table 2

Hierarchical regression analyses of parents' and carers' intention and behaviour for visiting the library with their young children

	β step 1 (95% CI)	β step 2 (95% CI)
<i>Intention</i>		
Step 1		
Attitude	.246***(.199, .523)	.116*(.016, .323)
Subjective norm	.410***(.399, .690)	.264***(.212, .490)
PBC	.287***(.321, .681)	.234***(.246, .570)
Step 2		
Group norm		.122* (.017, .281)
Parental role construction		.326***(.217, .445)
Family support		.039 (-.072, .154)
Friend support		.013 (-.102, .131)
PSOC		.007 (-.147, .173)
ΔR^2	.504	.116
ΔF	68.965***	12.090***
Adjusted R^2	.496	.604
Model F	68.965***	40.448***
<i>Behaviour</i>		
Step 1		
Intention	.472***(.351, .653)	.387***(.195, .628)
PBC	.162*(.036, .564)	.170*(.049, .581)
Step 2		
Attitude		-.073 (-.355, .126)
Subjective norm		.011(-.213, .245)
Group norm		.104(-.072, .341)
PSOC		.051(-.136, .246)
Family support		.116(-.046, .305)
Friend support		-.022(-.206, .155)
PSOC		-.068(-.380, .117)
ΔR^2	.320	.349
ΔF	39.504***	1.026
Adjusted R^2	.312	.312
Model F	39.504***	9.586***

Note. * $p < .05$; *** $p < .001$. PBC=Perceived Behavioural Control, PSOC= Psychological Sense of Community