AN INVESTIGATION INTO THE INFORMATION PRACTICES OF FIRST-TIME MOTHERS OF INFANTS FROM BIRTH TO 12 MONTHS

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This dissertation was submitted in part fulfilment of requirements for the degree of MSc Information and Library Studies

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Abstract

The research aims to provide an insight into the information practices of first-time mothers with infants aged one year or younger, as they face the challenges brought by their new status as parents. It was discovered that to date, very few studies have investigated the information needs and practices of mothers, and little is known about how they are influenced by social support networks.

It is an exploratory study which also investigates the methodological considerations necessary to undertake research in the unpredictable and changeable environment of a mother and baby group, as well as issues surrounding the researcher's engagement with the participants. By adopting a flexible and adaptable methodological approach, rich, narrative data on the information worlds of the mothers was collected, as well as from a sample of local information gatekeepers.

The mothers were well educated, and confident in their abilities to find the information they needed to support their parenting decisions. They preferred seeking information from known, interpersonal sources, and valued the experience of other mothers. Some sought the collective knowledge of other mothers via online discussion groups and forums, and complex patterns of information practices began to emerge. Many mothers visited their local library on a regular basis, but they do not view library staff as important source of information.

The mothers appeared to face no financial, material or literacy barriers to their information seeking, but still reported experiences of judgement, misinformation, conflict and confusion. A lack of time and conflicting pieces of information were the most frequently reported challenges. Analysis of the data collected revealed that mothers and gatekeepers experienced challenges in their information practices caused by wider social forces, and the mandatory nature of health policies and regulations.

The Parent Café appears to meet a need in the local community, demonstrated by its growth and the fact is being emulated by the library service. The current study offers suggestions for further research to increase our understanding of the information practices and challenges reported, in order to facilitate and improve future service provision.

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Chapter 1: Introduction

1.1 Chapter overview

This research aims to provide an insight into the information practices of first-time mothers with infants aged one year or younger, and the information needs which arise in their everyday lives. Furthermore, it investigates issues surrounding the researcher's engagement with this population through a mother and baby group, and the methodological considerations which may be necessary to undertake a study in this environment.

The researcher's interest in the topic stems from personal experience of the support and information services available to mothers of the very young, and a desire to better understand the information needs of mothers in order to better support them. It is hoped the research will provide an insight into the study of the information needs and preferences of a group in society, who have many new experiences and challenges to contend with in their everyday lives.

This chapter will outline the problem statement and research context of the current study, before introducing the research aims, objectives, and research questions.

1.2 Problem statement

Becoming a parent is a major life event, and new parents face the challenge of preparing for their new responsibilities and their infant's needs. Positive experiences and support strategies during this period contribute to the new parent's confidence (McKellar et al, 2009). Contact with peers has been shown to be a vital source of support for new mothers, and facilitating social networks can guide them through the transition to parenthood (Darvill et al, 2008). However, few studies to date have investigated the information needs and practices of mothers (Fisher & Landry, 2007). More specifically, little is known about role of social support networks on their information practices (Berkule-Silberman et al, 2010).

The researcher argues that a better understanding of mothers' information needs and preferences would better enable groups to offer them support, and further develop partnerships with other agencies such as health and library services.

1.3 Research context

"Healthy n Happy" is a Community Development Trust (CDT) based in Rutherglen, South Lanarkshire. The CDT has been involved in community consultation work with South Lanarkshire Council's Tackling Poverty team, aimed to engage with the local communities, increase levels of involvement and "connect residents to services and opportunities" (*Public Health 2011-12: The annual report of the Director of Public Health*, 2012). The organisation hosts "Parent Cafés" in Whitlawburn and Burnhill.

The Scottish Index of Multiple Deprivation (SIMD, 2012) identifies parts of both Whitlawburn and Burnhill as in the top 5% most deprived areas in Scotland, with parts ranked in the top 50. In 2012, 41% of residents in Burnhill and Bankhead and 48% in Whitlawburn were described as "income

deprived", with 37% and 38% described as "employment deprived" compared to the national averages of 13% for both measures (SIMD, 2012). Burnhill and Bankhead North is the most "education deprived" area in South Lanarkshire, and is amongst the 5% most deprived in Scotland (*Local Authority Summary: SIMD 2012, South Lanarkshire*, 2012). Furthermore, both areas have been described as "worsening" by the local authority after a comparison of the 2009 and 2012 indexes (*Economic audit of South Lanarkshire*, 2013).

The Whitlawburn Parent Café runs twice a week with one session for young babies (0-1 years) and their parents, and for parents and older toddlers (1-2 years). The Burnhill Café runs once a week for young babies only. Sessions include developmentally appropriate activities for the children, information sessions from guest speakers (e.g. on mental health issues), taster sessions such as baby yoga, or Bookbug sessions. In general, it aims to provide:

"a relaxed and friendly environment where you can meet other parents of new babies and enjoy light refreshments while getting practical help, support and ideas for enjoying your new baby." (Healthy n Happy, 2013, The Parent Cafés).

The Café has proved popular with many of its attendees first-time mothers. It has advertised in places where new mothers are likely to visit and via local midwives and health visitors. In the local press members of staff have attributed this popularity to it meeting the needs of mothers in the community:

"We have a guest come in [to discuss] things we've identified they'd [the mothers] like to know about...we can either signpost them to services, maybe accredited courses, or courses that we run... I think the secret to its success is that it provides an informal forum for parents to support one another and help each other out." (Smith, 2011, Parent café goes from strength to strength).

1.4 Research aim and objectives

1.4.1 Research aim

The aim of this research is to investigate the information needs and preferences reported by a group of first-time mothers with children aged 0-1 year old.

1.4.2 Objectives

- To create a typology of the self-identified information needs of the group, identify reported sources of information and any rankings ascribed to their importance, and identify any perceived barriers to information seeking.
- To suggest how the study of this group may inform the practise of information providers.

1.5 Research questions

The study seeks to answer the following research questions;

- 1. What are the self-identified information needs of first-time mothers with children aged 0-1 who attend the Parent Café?
- 2. What are their preferred sources of information?
- 3. Do they experience difficulties or perceive barriers to information seeking?
- 4. How do local information gatekeepers view the group's information needs, preferred sources and barriers faced?
- 5. What lessons may be learned about conducting research within a group such as the Parent Café, which mothers attend alongside their infants?

1.6 Chapter summary

This introductory chapter set the context for the study by recognising that becoming a mother is a major life event, and that mastery of this new role can be greatly assisted by an individual's support network and social contacts. The research problem was explained as a desire to gain a better understanding of the range of their information needs and preferences of a group of first-time mothers, during the first year of their infant's life. The chapter introduced the Parent Café support group and provided some background information about its set-up, stated purpose, and location. Finally, it introduced the research aim, objectives and research questions.

Chapter 2: Literature Review

2.1 Chapter overview

This chapter presents a review of literature which examines theories and models of information seeking behaviour (ISB), and what is known about information behaviour in relation to motherhood, parenting, and social support networks. It begins by setting the historical context to studies of ISB, and then of Everyday Life Information Seeking (ELIS), before considering the use of the terms "behaviour" and "practice" (section 2.2). Motherhood is then presented as a unique context in which to study ELIS (section 2.3). Finally, the chapter calls on literature from outwith the field of information and library science to consider traditions and practices which govern the provision of parenting information (sections 2.4 and 2.5).

2.2 Models of Information Seeking Behaviour

Case (2012) suggests that information behaviour is more interpersonal and complex than was first assumed. Seeking information is a dynamic process, and context is of extreme importance. He describes how "dozens" of models of information seeking have been published over the last 40 years. They offer "simplified versions of [the] reality" of the practices involved, but by making them concrete in flowcharts or diagrams allows them to be compared to observations of real life. These models allow for the simplification of a complicated set of behaviours, but are often limited by the specificity of the context or phenomenon described.

Influential models of information behaviour such as that of Kuhlthau (1993), Ellis (1993) and Wilson (1999), were derived from studies of scholars and academics, and describe systematic information search tasks rather than a wider variety of information behaviours in which individuals may engage in everyday life. Kuhlthau's "information search process" focuses on an individual's feelings, thoughts and their resulting actions after the identification of an "information gap". The role of emotions in the individual's motivation to bridge this gap, and their feelings of uncertainty during the process are key concepts (Kuhlthau, 1991). The model is applicable to any domain, and has been cited approximately 1,000 times in academic literature. Another distinguishing feature of the model is its focus on the search for information, but not the actions, cognitions, or emotions of the individual before or after this process. Therefore, it does not consider any of the contextual factors leading to the identification of information needs (Case, 2012).

Other work, such as that of Dervin (1976), looked specifically at everyday information needs, and emphasised the importance of informal sources of information. Later, Chatman's use of conceptual frameworks to examine everyday information needs highlighted their "a priori relationship to immediate reality" (Chatman, 1991).

Chatman's work on information behaviour drew from sociology in her use of concepts of *insiders* and *outsiders* and *social norms* (Pollock, 2002). Her "small worlds" theory was developed as a means to examine the information seeking behaviour (ISB) of individuals. The frameworks were developed by examining ISB in social environments in socio-economically deprived communities and inside prison (cf. Chatman, 1996; 1999). She concluded that female prisoners sought information within their immediate, restricted context, living "in the round" (pg. 213, Chatman, 1999). The

"small world" represents the boundaries of their social context, out of which individuals may not seek information. Avoiding information from which comes from outwith the group can become a social norm, and lead to a state of *information poverty* when individuals perceive themselves to be devoid of sources of information and utilise self-protective behaviours such as secrecy and self-deception due to a mistrust of "the interest or ability of others to provide useful information" (pg. 198, Chatman, 1996). Her later work considered the social environments or "small worlds" of other populations, but she mostly examined the concept of information poverty within the context of socioeconomic poverty (Burnett and Jaeger, 2008).

2.2.1 Everyday Life Information Seeking

Many early models of information seeking focussed on active information seeking, rather than for less directed, intentional purposes. As such, they did not capture the richness of information gained via the interaction of the individual and the sociocultural context (Savolainen, 1995); and have not incorporated research relating to more incidental forms of information behaviour, such as information gained accidently (McKenzie, 2002). Everyday life information seeking (ELIS) is information seeking that:

"people employ to orient themselves in daily life or to solve problems not directly connected with the performance of occupational tasks" (Savolainen, 1995, p. 267).

ELIS has attracted a growing body of research in library and information science (LIS) since the 1980s. The application of social theory to ELIS (most notably by Savolainen and Chatman), has shifted the focus from the "individual as the unit of analysis" to investigations of social groups and contexts that have been previously underrepresented in LIS research (Carey et al, 2001). Savolainen's model of ELIS reflected a new interest in sociological theory in information science, by drawing on concepts of social, cultural and cognitive capital (Case, 2012).

Savolainen's model describes how habits and attitudes allow individuals to make meaningful choices about their life based on their personal beliefs and values. It was developed after interviewing participants about non-work related information seeking, and consists less of a depiction of the process of information seeking but rather a series of important concepts which affect it; from personal values and attitudes, the searcher's psychological traits, and a variety of other situational factors (Agosto & Hughes-Hassell, 2006).

Williamson's model of everyday life information-seeking behaviour also emphasises the context of social and cultural factors, in both purposeful and incidental information acquisition. It highlights the role of wider personal networks such as clubs and voluntary organisations for both types of information gathering (Williamson, 1998). McKenzie's model of ELIS behaviour is also based on social interactions, and emphasises the role of social contexts and relationships in patterns of information-seeking and source selection. It was developed in response to her recognition that previous research-based models of information seeking behaviour tended to be based on studies of professionals or scholars, and focused on active information seeking. The focus on active information neglects the rich range of practices that can be:

"as premeditated as actively browsing for information to meet a known need or as serendipitous as encountering an unexpected source, miscellaneous fact, or familiar situation that may be of some assistance in meeting some present or future need" (pg. 19, McKenzie, 2003).

Thus, she argued existing models were limited in their ability to describe everyday life information seeking (ELIS) behaviours. Her model is based on the premise that the social context is a crucial facet to these behaviours and our understanding of them.

2.2.2 Information behaviour versus information practices

Savolainen (2007) critically examines the concepts of "information *behaviour*" and "information *practice*", as two major concepts in information science. He describes them as "umbrella concepts" which draw on "umbrella discourses". He concludes that the discourses appear to be patchy and fragmentary, and that researchers rarely reflect on their deeper meanings. He understands information *behaviour* as covering a broad area spanning information-seeking, information-searching and information-use behaviour. Thus, it can encompass actions from deliberate seeking via face-to-face communication with others, to more passive forms of information reception. It is most associated with a cognitive perspective on information behaviour.

Information *practice* on the other hand tends to reflect constructivist and more "sociologically and contextually oriented" lines of research. The use of *practice* shifts the focus from the actions and behaviors of one individual out of any social context, to the individual as a member of social groupings and communities (Savolainen, 2007). This is reflected in McKenzie's use of *practice*, declaring it to be preferable than *behaviour* in the context of her model; a decision which Savolainen refers to as a significant terminological choice and discursive move (McKenzie, 2003; Savolainen, 2007). He concludes that both terms are subject to multiple meanings in many disciplines, let alone in information science, which may explain their seeming interchangeability in the literature.

2.2.3 McKenzie's model of information practices

Although her model is based upon mothers' information practices during pregnancy rather than during early motherhood, McKenzie's interpretation of the characteristics of the experience are likely to be applicable to both; that of commonality of experience (i.e. all pregnant women/new mothers will encounter some similar challenges) and on the uniqueness of the experience (i.e. each will have their own experience of pregnancy, birth and motherhood) (McKenzie, 2003).

McKenzie (2003) reports rich and varied accounts of ELIS practices from mothers-to-be. A "typical" account presented a "saga of active, incidental and serendipitous information practices". The resulting model presents four modes of information practice: active seeking as the most directed mode; active scanning as browsing likely sources of information; non-directed monitoring as serendipitously encountering and recognising a source; and seeking by proxy as making contact with or interacting with information sources through the initiative of another agent. McKenzie felt that existing process models of ISB were designed to describe systematic searches for information which were not reflected in her participants' accounts of ELIS. In order to try to capture the richness and fluidity of their accounts, a two-phase model of the information process was developed:

Stage 1 *Making connections*. Considers descriptions of the barriers and practices involved in identifying (or being identified by) and making contact with (or being contacted by) information sources or potential sources, whether directly or through a referral.

Stage 2 *Interacting with sources*. Considers descriptions of the barriers and practices involved during the actual encounter with an information source, once the identification and contact have been established.

(pg. 28, McKenzie, 2003).

The four-mode, two-phase model was partly based on a study of women experiencing twin pregnancies, with pregnancy presented as a new situation for the women where their existing networks of help and information may no longer prove sufficient. The menopause can be viewed in a similar way – in terms of commonality of experience in women versus individuality. Yeoman (2010) concluded that McKenzie's framework was suitably flexible to be adapted to studying the information behaviour of women in this different but similar context, since it can represent the fluidity of the information behaviours whilst still "systematically describ[ing] the practices and the process" (Yeoman, 2010).

2.3 Motherhood as a research context

McKenzie (2003) speculates that pregnancy is a unique context in which to study ELIS, since: pregnant women can ask and are "expected" to ask questions about pregnancy, childbirth and infancy; their abdomens may make them "obvious and appropriate target[s]" for those who want to offer information; and it often is easy to identify possible "proxy connections" as sources of information (e.g. to identify another pregnant woman) (McKenzie, 2003). Each point could be equally applicable to a new parent, with their new babies and prams marking them out as "obvious and appropriate target[s]" for those who wish to offer or seek information. This would suggest that patterns of information behaviour which occur in this context may be unique, and not described in the same way as within other contexts.

When becoming mothers, women are faced with a number of challenges to their sense of control and personal integrity. As they develop their competence as a caregiver, the focus of their relationships changes, and they seek recognition of their new identity (Hjälmhult & Lomborg, 2012). Tardy found that engaging in talks about healthcare at a playgroup was an important facet of participants' identities and viewed as "evidence of being a good mother", who saw seeking and assessing healthcare information as her role. (Tardy, 2000).

In recent years the length of hospital stay for new mothers has been reduced, and some of the value of the traditional "lying-in" postnatal period for "rest, the support that women received from other women in similar circumstances, and opportunities for women to be nurtured" may have been lost (Leahy-Warren, 2005). During this period, the more prepared and competent a mother feels for the task of looking after her infant, the better her experience of motherhood and her ability to care for him or her. "Informational support" at this time has been shown to help mothers feel prepared and confident (Leahy-Warren, 2005). The people, places and experiences which comprise new mothers' sources of information are crucial to their feelings about parenting and responsiveness to their

infants (Berkule-Silberman et al, 2010). Mothers with a lower socio-economic status are more likely to use interpersonal networks for ELIS, so a lack of network support could be viewed as a significant barrier to information-seeking (Shieh et al, 2009).

Urquart and Yeoman (2010) report that there appear to be differences in women's information-seeking behaviour compared to men's, above those which may be ascribed to gender differences in traits such as anxiety and self-efficacy. They suggest settings in which women find themselves may have a substantial influence on observed ELIS behaviours, particularly due to their more frequent use of primary health care and the historic medicalisation of childbirth and early childrearing. Viewed in the context of mothers' experiences of perceived or actual power dynamics during mother-healthcare professional (HCP) encounters, it "is not surprising" that context could impact upon behaviour (Urquart & Yeoman, 2010).

Multiparous women have been shown to rely on their previous childbearing experiences to meet their information needs, and showing less desire for new sources of information (Shieh et al, 2009). Particularly heavy demands are placed upon first-time mothers, as they are required to learn new skills whilst simultaneously recovering from the emotional and physical demands of childbirth. As a group, they are more prone to post-natal depression [PND](Leahy-Warren et al, 2011). Functional support has been found to reduce PND in the first 12 postpartum weeks, and includes:

"the provision of information (informational support), hands-on services (instrumental support), emotive sharing of experiences (emotional support), and offering approval to each other (appraisal support)" (pg. 175, Leahy-Warren et al, 2011).

There is evidence to demonstrate the positive influence of social support on new mothers' parenting attitudes and behaviours, although there has been a limited amount of research on the people, places and experiences that comprise their sources of parenting information. Fisher and Landry surveyed "stay at home moms" (SAHMs), after concluding that "virtually no research" had been carried on their ISB or the role information plays in their lives. After a literature review, they describe how they found only "scant, unsystematic research", before concluding that mothers have;

substantial information needs, though little is known about the range of these needs, how they emerge, how they are (or are not) met, and how [they] share information with others

(pg. 215, Fisher & Landry, 2007).

Berkule-Silberman et al (2010) note that to date there did not appear to be a study of mothers receiving information from those whom they receive social support, despite previous studies demonstrating its importance. They sought to find out more about mothers' ISB use in order to lead to improved service provision, but concluded that the study must be viewed as exploratory due to the lack of established measures on how and where they obtain information. One conclusion of the study was that there is a need to understand the degree to which information is actively sought versus it being passively received.

It is widely accepted that parenting attitudes and behaviour influences children's development from the moment of birth. As Roberts (2009) puts it;

"The evidence is unequivocal: when parents have the knowledge, skills and confidence to provide the kind of relationships and experiences and experiences that children need in the early years, it makes a real difference to children's futures" (pg. 6).

The earlier in a child's life that resources are put in place to support his or her parents, the greater the impact on "turning round cycles of disadvantage". Previous research has identified a range of barriers which prevent parents from getting the information and support they require – from how services are provided and their previous experiences of services, to their individual circumstances (Roberts, 2009).

2.4 Existing guidelines for the provision of support

There are strategic guidelines to the provision of information to parents across various organisations. *Getting it right for every child* (GIRFEC): *Parenting Capacity Building in Lanarkshire* is a document which aims to enable North and South Lanarkshire Councils, NHS Lanarkshire and local voluntary sector organisations to work together towards common goals to support parents. Information sharing and signposting parents to local services is recognised as best practice (GIRFEC Lanarkshire, 2010).

MacLeod argues that traditional family and community supports and sources of information have been eroded in modern society, while the demands and expectations placed on parents has increased. At the same time, there have been well-intentioned attempts by successive governments to give children the best start through a "proliferation of projects, programmes and approaches". In reality, many of these have been embraced "without unambiguous evidence of sustained positive impact" (MacLeod, 2012).

In the *GIRFEC* document, some reference is made to staff gathering "knowledge of what works" to inform the development of future projects, but there appear to be no plans for trying to gain parents' perspectives on their information needs or preferences (GIRFEC Lanarkshire, 2010). It therefore appears that not only are these perspectives not being investigated in the LIS research community, but they are not currently systematically documented by information gatekeepers in Lanarkshire.

Gillies sounds a note of caution against the use of terms like "good parenting", or the promotion of particular child-rearing strategies and values above others, arguing that they are value driven rather than objectively definable (Gillies, 2007). The implication for a study of information needs and behaviours is that it should be remembered there may be a gap between what a practitioner sees as "proper" parenting information, and what is a practical and feasible course of action for a mother.

2.5 Information practices in Scotland

Parenting Across Scotland (PAS) is a multi-agency organisation which aims to collect data on the issues and concerns affecting parents, and "identify gaps in the support available" to them. PAS commissioned an Ipsos MORI telephone survey of 1,000 parents, which focused on respondents' experiences of bringing up children in Scotland. Parents were presented with a hypothetical problem and asked where they would seek advice. Most reported relying on HCPs, their own parents and relatives for information and advice. Parents with children under two years old most

commonly reported their local health visitor as a source of advice and support, followed by websites, doctors and their own parents. 15% reported "other parents" as a source of information (What Scottish Parents Tell Us, 2010). There are several crucial limitations to this study which cause problems with its ability to draw general conclusions about parents' information practices; not least being the fact parents were asked about a hypothetical situation rather than an actual occurrence of ELIS. Most crucially, the survey appeared to presume that parental ELIS was always intentional and directed, thus not capturing the richness described in ISB literature.

The study did allude to the fact that socio-economic forces may impact upon parents' information preferences. On average, 16% of respondents indicated that they would prefer to receive parenting information through local discussion or support groups. This preference was most common amongst parents in the most deprived areas (21% compared to 12% in the least deprived areas), (What Scottish Parents Tell Us, 2010).

2.6 Chapter Summary

The chapter reflected on the fact that there have been many models of information behaviour over the last four decades, and some of the major models were presented. It then described the shift in emphasis to models of *everyday life* information seeking, and recognition of the importance of the sociocultural context and non-directed information seeking. McKenzie's model of information *practices* and the use of 'practice' rather than 'behaviour' was discussed in detail. Her model was presented as one which particularly considers social interactions as an important information practice.

Next, the chapter introduced the idea of motherhood as a research context, concluding that it is a time when a woman faces challenges to her sense of control and identity. A review of research was presented to support the idea that gender differences may be apparent in information practices. The limited research on information preferences of mothers was presented, such as known differences between multiparous and first-time mothers or socio-economic status and the beneficial effects of support networks on maternal mental health. The research gap in the people, places and experiences that make up mother's information practices was acknowledged.

Finally, the chapter considered parenting information provision in the wider context, reflecting on the fact that multiple attempts have been made to support parents' information practices, but with little supporting research.

Chapter 3: Methodology

3.1 Chapter overview

This chapter describes the methodology for the research. The first two sections introduce the research topic and research context, describing the researcher's initial engagement with the Parent Café and the need for flexibility in the methodology (sections 3.2 and 3.3). The next section considers theoretical perspectives in LIS, and feminist and female-centric perspectives due to the nature of the group; and engagement with participants (3.4). The research methods are then described (3.5); search strategy and literature review, research tools, activities and interviews. The chapter concludes with a description of the piloting of the research tools (3.6), ethical considerations (3.7), risks identified and mitigation (3.8), adaptations made in the field (3.9), and data analysis approach (3.10).

3.2 Research Topic

The original scope of the research topic was to examine the role of the Parent Café group as part of the wider social context, including an investigation into information practices reported by mothers who used other locally available resources. However, it would not be possible in the given time frame to investigate different groups of mothers in enough detail to do their study justice. The Parent Café was chosen as an interesting context for the research since it offered a unique mix of more formal information-giving sessions, and informal socialising. It was believed this narrower focus would provide insights into how this particular group was viewed and used by mothers, reflecting an acknowledged research gap on the function of groups (cf. Berkule-Silberman et al, 2010).

It is known that mothers' socio-economic status and the number of children they have affects their information practices (Shieh et al, 2009). Shieh et al's discovery that those with a lower socio-economic status are more likely to use interpersonal networks is of note because of what is known about the locations of the groups (see section 1.3). Although not the main focus of the study, it was decided to collected limited demographic data about mothers' age, educational background and number of children.

Due to the research gaps identified in chapter 2, and the limited amount of work in this area, it was expected that the current study was exploratory in nature. The fact that it was a MSc-level dissertation project led to necessary limitations in scope, sample size and time spent with participants.

3.3 Research Context

The researcher had previously attended one of the Parent Café groups as a mother, and had developed a personal relationship with its leader and supporting volunteer. From attending the group with a new baby, the researcher had an impression of how important its role "felt" and personally valued its mix of informal information provision, support and community. It was felt that engaging with the group could potentially provide insights into the information needs of its

members. In turn, a better understanding of their information behaviour could enhance the provision for those needs.

The researcher has undergone volunteer training with the CDT, and helps with the running of the "follow on" group in Whitlawburn for 1-2 year olds. Wishing to become a familiar face to the mothers with younger children, she began attending the groups a few weeks before the field work period began. The start of each session was very informal, and mothers "dropped in" at various times before the main activities began. The researcher attended the start of the sessions to engage with and chat to the mothers, and used the introduction activity to remind regular attendees why she was there, and introduce herself to new members.

3.4 Research approach

3.4.1 Theoretical perspectives

Carey et al (2001) describe the "increasing prevalence of theoretically rich perspectives in LIS [library and information science]", marked by a shift to the application of social theories and qualitative approaches. In particular, Dervin's (1983) concept of "sensemaking", of individuals making an effort to make sense of aspects of their lives via information seeking, has been a "dominating force" in ISB research. Since then, researchers have drawn on theoretical paradigms from the social sciences such as social constructivism, constructionism and ethnographic research techniques (Bates, 2010). Social *constructivism* is a metatheoretical position which argues that although it is the mind which constructs the relationship between itself and reality, it is "informed by influences received from societal conventions, history and interaction with significant others". Social *constructionist* approaches to information science presume that information practices, needs, systems and information itself are produced as "linguistic and conversational constructs" (Talja et al, 2005).

Savolainen's ELIS research with its deliberative emphasis on *practice* rather than *behaviours* (see section 2.2.2), is based on social *constructivism* theories. From this perspective information seeking is often "un-self-conscious", i.e. individuals are striving to solve problems and challenges in their everyday lives rather than viewing themselves as actively seeking information. Research design should bear this in mind; asking participants "what have they done recently in the way of information seeking", and ignoring the wider context will simply not give an accurate set of data (Bates, 2010). Social constructivism has very little interest in the cognitive processes that are involved in IS, but is interested in social practices which are the focus of individuals' enquiries (Andrews, 2012). Fisher and Landry view mothers' ISB from a social *constructionist* perspective, asserting that it does not occur in a vacuum but in social contexts, and involving multiple people. This perspective is complimented by an interest in "affect" in ISB, which they argue stems from Chatman's descriptions of "fear" and "exposure", and Harris and Dewdney's assertion that "information seekers expect emotional support". They give examples of mothers being "frustrated", "angry" or "irritated" by thwarted attempts at IS, or "empowered" by successes (Fisher & Landry, 2007).

McKenzie's model of ELIS is based on constructionist empirical studies, which consider discursive accounts of the participants' information needs and seeking. As such, they consider the narratives related to ISB, and their relationships to individuals' practices, actions and self-understandings. This

approach can reveal how information practices can be viewed from many different perspectives when considered as part of "the social negotiation of meanings" (Talja et al, 2005). Fisher and Landry focus on affect and emotional support, and Tardy on the importance of the construction of roles in a group of mothers (Tardy, 2000, see section 2.3). The researcher believed that these theoretical perspectives would be a good fit for a study of this particular group. This is due to the fact the researcher expected the mothers to report that the group acts as a source of emotional as well as practical support, as well as the flexibility of the model as described in section 2.2.3.

Carey et al (2001) state that either of the research perspectives require the researcher to reflect on the relationship between the "observer and the observee", as crucial to the development of sound research practices. They point to a lack of clarity and detail in some earlier studies of ELIS in terms of descriptions of their research methods and practices. In particular, there has often been little detail on the selection of participants, engagement with them, and the construction of the LIS researcher-participant relationship.

Therefore, due to a lack of detailed methodological examples to work from within LIS, the researcher sought guidance from sociology research texts. Bryman (2008) for example, advises that the researcher avoids "decontextualisation" when working with an existing group, and praises focus group and group discussion activities as underpinning a "lower level of artificiality" in the research. The concept of the researcher "relinquishing control" is used to describe the way in which a discussion may begin to be steered by the participants. This concept is developed in the text through a feminist perspective on the use of focus groups, presenting the argument that they may act as an empowering activity which offers a voice to marginalised groups such as women from a disadvantaged socio-economic class (Madriz, 2000 cited in Bryman, 2008).

3.4.2 Female-centric perspectives

As the study involved all female participants, and a female researcher it was important to also refer to work on feminist and female-centric methodologies. Crotty (1998) cites Gilligan as an influential figure who speaks from a "women's epistemological standpoint", who believes that women have a different way of perceiving the world and relating to it, speak in a different "voice" and value bonding and the formation of an interpersonal community more than men (Gilligan, cited in Crotty, 1998). Jagger urges caution in the use of the stereotype that the thoughts and actions of women are more influenced by emotion than those of men, but does conclude that the fact remains they live under different social pressures and are expected to perform different roles (Jagger, cited in Crotty, 1998).

May (2011) states that women are "more used" to intrusions into their lives from healthcare professionals and others. While this may mean they are less likely than men to find questions about their lives unusual, he believes that it highlights the importance of establishing the researcher and participants as on an equal footing through a less formal and structured interview style (May, 2011). Urquhart & Yeoman (2010) suggest that bringing feminist methodologies to ISB research can help to move away from a "lone ranger" model of an individual information seeker, to ones which appreciate the importance of situation and context.

3.4.3 Engagement with participants

May states it would be a barrier to engagement if a female researcher aimed to be an impartial observer in a discussion group of female participants (May, 2011). He cites the example of a study interviewing women about their experiences of the transition into motherhood. During the course of 233 interviews, the mothers asked the researcher nearly 900 questions, more than a third of which were asking for her opinion, for advice, and about her own experiences as a mother.

Where an existing group are invited to share anecdotes and experiences, it could be presumed that the researcher is entering an atmosphere with some degree of trust and openness. Assuming this, the researcher may be advised to perform a careful balancing act – "legitimising" the sharing of information via a personal anecdote to build rapport and gain acceptance within the group while maintaining a researcher/participant relationship and avoiding the possibility of researcher bias (Stewart et al, 2007; Crotty, 1998).

Based on their experiences of conducting ELIS studies of three populations, Carey et al (2001) conclude that participants' perception of the researcher's "insider" or "outsider" status was key to access and engagement. As described by Chatman (1996), the experiences of insiders or outsiders are shaped by the degree to which they share common social or cultural perspectives, or shared experiences, which provide expected approaches to life and behavioural norms. In her study of pregnant women, McKenzie's describes her own experiences as a mother as being "invaluable" in both gaining access to participants, and establishing and maintaining trust over the course of the study (described in Carey et al, 2001).

McKenzie suggests her insider status created an environment conducive to participants disclosing their feelings and experiences. Furthermore, she believes it agreed with research from other areas which champion a degree of reciprocal exchange rather than traditional informant/researcher interview models for studying issues of pregnancy and childbirth. From this perspective, the current researcher could appear to have an advantage as an "insider", as a former attendee of the group who is known to staff, and to the group members to be the mother of young children. However, this presumption should not be presumed, nor relied upon to provide a "smooth and static" relationship with participants, and sensitivity to the limits of "insider status" must be maintained (Carey et al, 2001).

3.5 Research Methods

3.5.1 Search strategy and literature review

An in-depth literature review was undertaken, first covering more general theories of ISB, and narrowing to models of ELIS. Searches of the library catalogue were undertaken to locate appropriate books and materials using keywords such as "information", "seeking", "needs" and "behaviour". Next a more specialist search for ELIS in the context of motherhood and parenting was conducted using the library catalogue, the LISA electronic database, and additional keywords such as "mothers", "parenting", "pregnancy" and "women". Then the search was widened to other ProQuest electronic databases and Google Scholar.

3.5.2 Selection of participants

The Parent Café presents itself as a group which aims to meet the needs of mothers, and liaises with the health and library service to do so. Therefore it was decided that the main point of contact with mothers would be those who attend the Café, but the views of information gatekeepers from the library and health service would also be sought. The local library service has links with the Parent Café, and the researcher knew that the library was beginning to host information sessions which were similar to those at the Café. The researcher was therefore keen to investigate why the format was felt to be meeting the needs of local mothers, and was worthy of being emulated. The researcher knew that local health visitors signposted mothers towards the Parent Café service, and wanted to learn more about why they considered it to be a valuable resource.

3.5.3 Selection of research tools

Semi-structured, narrative interviews have been identified as suited to qualitative research which involves a relatively small number of participants, and especially when conducted in the environment in which the interviewee's everyday experiences take place. The technique encourages "storytelling", enabling the researcher to gain insight into the participants' everyday experiences and understand the research topic from their perspective (Bates, 2004). Interviews and similar ethnographic methods have been shown to provide rich, authentic ELIS data, and can foster participant trust (Carey et al, 2001). Therefore, narrative interviews were originally chosen as the most appropriate method for the current study, since it aims to investigate the perspective of the mothers.

However, there was not suitable accommodation at either location for a traditional group interview setup. During the researcher's preliminary visits, the participation of mother and baby pairs in planned activities was often interrupted by the needs of the infant. Therefore a series of short, semi-structured group tasks was devised, which small groups of participants could complete independently during the normal operating times of the group. The tasks would be integrated into the group's usual programme of activities meaning the participants could attend the sessions at the usual times. Several groups could be working at the same time, and the researcher could move freely between the groups offering a prompt or answering a question if desired. These activities would perform the dual function of gaining valuable data about the type and variety of information needs and sources, but also act as an introduction to the wider discussion which followed. The planned tasks are described in detail in section 3.5.4.

Following a brief introduction by the researcher at the start of each session, participants were asked to sign a consent form to confirm that they understood the purpose of the study, their participation was voluntary, all their questions about the research had been answered, and that they could terminate or withdraw their involvement at any time (see Appendix 1). They were also asked for consent to audio recording of the interview, with the understanding that all data would be reported anonymously. Before each task, participants were asked to complete a slip to record simple sociodemographic data (see Appendix 2).

3.5.4 Planned methodology

When the group tasks were planned, it was decided to base an activity on each of the three themes identified in the first research objective; the mothers' *self-identified information needs*, their reported *sources of information*, and *barriers to information seeking* (see section 1.4.2). Three sessions at each group were timetabled initially, leading to six in total. This allowed the researcher some flexibility if it was felt an additional session was required later in the month.

The following format was devised for the group tasks;

Introduction to the task by researcher/collection of demographic data

Post-it note activity

Mothers would be asked to form groups of 6-8, and issued with a large sheet of cardboard, post-it notes and pens. They would be asked to brainstorm examples of either; parenting information that they have sought during the first year of their infants' lives (session 1, week 1); sources of information which they have consulted since their infants were born (session 2, session 2); or difficulties or barriers they had faced to their information seeking (session 3, week 3)

These examples were to be recorded on post-it notes by the group, and they would be encouraged to record and discuss their answers for 10-15 minutes.

Whole-group discussion of activity

The researcher would then facilitate a whole-group discussion of the needs, sources or barriers identified, encouraging participants to identify those they identified as most important, worrisome, frequently occurring or pressing. Mothers would then be invited to attend an additional aftersession group interview, as described in section 3.5.3.

3.5.5 Gatekeeper Interviews

Semi-structured interviews were carried out with a pilot sample of representatives from the Community Development Trust who run the Parent Café, and from the library and health visitor services. The semi-structured format was chosen to allow for a degree of flexibility, and allow exploration of any themes which emerged during the interviews. Bryman recommends this approach as a way of ensuring the interviewer covers the areas of research laid out in the interview guide, but allows for new questions should unexpected themes arise (Bryman, 2008). The content and the structure of the interview questions were informed by the literature review. Further details on the suitability of the chosen gatekeepers are provided below.

Healthy n Happy staff and volunteers

The Parent Café groups are co-ordinated by a Development Officer who is employed by the Healthy n Happy CDT. Each session is staffed by a Project Worker and a volunteer, although the Development Officer is often involved in the day-to-day running of the group. The researcher felt that there would be an opportunity to complement the views of the Parent Cafe participants with gatekeeper perspectives on the role of the group. Interviews were arranged with three members of staff from Healthy n' Happy who were involved with the Parent Café project; a development officer

who oversees the whole project plus two project workers who work directly with the mothers. Additionally, the researcher met with the development officer before the project began to discuss its scope and purpose, and with the project workers during the course of her visits. Therefore some additional narrative data was collected from the researcher's field notes

Health Visitor (HV)

The health visitor service is a universal point of contact with the health service for new parents in Scotland. Mitchell and Wilson (2012) call for recognition of the complex and varied role they may play in supporting new parents, and their function in the information worlds of new parents. A 2010 Ipsos MORI poll of 1,000 Scottish parents reported that a majority of parents of 0-2 year olds would turn to their HV for advice if they experienced problems with their infants' sleep (*What Scottish Parents Tell Us,* 2010). Based on this finding, and the ubiquity of HV contact with new mothers in Scotland, the researcher believes they are crucial information gatekeepers. Therefore, the researcher contacted a local health visitor service via a doctors' surgery, and was granted an interview with one of the local HVs.

Public Librarian

Members of staff from South Lanarkshire Leisure and Culture's Library service attend the Parent Café on a semi-regular basis to hold taster sessions of the Bookbug events which are held at local libraries (see *Bookbug Sessions*, 2013). These sessions are usually only held within the public libraries in the local authority. This suggested to the researcher that the service may have identified the group as one with which they wished to engage with, or an opportunity to promote their services. Therefore, it was decided to investigate the link between the group and the library service further. The researcher contacted the head of service, who referred her to the local children and family services co-ordinator to arrange an interview.

3.6 Piloting

Interview guides were piloted with a small group of Masters in Information and Library Studies to identify any areas which required clarification. After the pilot, the interview guide was adapted to include further definitions of certain phrases and to provide examples of information gaps, to prompt interviewees if required. All activities were piloted with a small group to ensure the instructions were clear and easy to understand.

3.7 Ethical considerations

Ethical approval for the study was obtained via the University of Strathclyde Ethics Committee, and the research run in accordance with guidelines set out by the *University Code of Practice on Investigations of Human Beings* (2009). Informed consent of volunteer participants was sought, and data collection adhered to the *Data Protection Act* (see *Data Protection Act: Guidance for Organisations*, n.d.).

The Café's development officer asked the researcher about Child Protection procedure. Although children were not directly involved with the research, she and the researcher were concerned that a mother may disclose information which led them to be concerned about the welfare of her baby.

Voluntary Organisations should have Child Protection policies and procedures in place, and the safety and welfare of a child must "always override the need to maintain confidentiality" (*West of Scotland Child Protection Procedures*, 2011). The researcher sought advice from the University, and the development officer was satisfied that any concerns would be reported to her, in accordance with their existing procedures. As part of the introduction to each session, the researcher explained that the confidentiality and anonymity of the participants will be respected, within the Child Protection policies laid down by the host agency.

3.8 Risks and mitigation

After attending and observing the group prior to the first session, it was clear that the question of the availability of the mothers to engage with any research could be difficult. This was primarily due to the mothers being distracted from conversations and activities by the needs of their infants. Additionally, a project worker identified a number of variables that affect mothers' attendance at the groups; school holidays affecting childcare of older children, or unusually sunny or wet weather for example. Due to the drop-in nature of the sessions, it was not possible to accurately predict how many mothers would attend each session.

The researcher therefore anticipated that the planned methodology would have to have a degree of flexibility and responsiveness to interruptions. It was anticipated that activities may have to be adapted from one session to another, depending on how feasible they proved to be.

Several steps were taken to mitigate for the anticipated risks; sufficient materials were prepared to account for larger numbers of attendees; activities were planned for the middle of the session to account for those would arrive later; detailed field notes were kept to inform subsequent sessions and time to make required changes was factored into the researcher's plan of work.

3.9 Field adaptation

Following the first Whitlawburn session, the planned methodology was adapted. Although the themes of the two sessions and the narrative interviews remained the same, some changes were made to the means of data collection. The methodology and adaptations are critiqued in sections 5.2 and 5.3.

Second session, sources of information

The focus of the second session remained on sources of information as planned. Rather than using post-it notes to record and rank sources of information, a paper-based task was used. Participants were asked to rate a series of sources of information on frequency of use, usefulness and importance. The use of ratings scales was informed by a study by Shieh et al (2009) and are included as Appendix 3. Afterwards, a group narrative interview was conducted as planned.

Third session, barriers and challenge to accessing information

Similarly, the third session was adapted from a post-it note based task to identify and rank barriers to information seeking encountered by the mothers. Participants were instead asked to rate a series of statements about barriers to information seeking. These statements were adapted from those

used by Shieh at al (2009), and are included as Appendix 4. Again, a group narrative interview was conducted after the session.

3.10 Analysis

3.10.1 Transcription and data entry

The text on the notes was then transcribed to Microsoft Word before coding. The numeric data from the 5-point scales used in sessions 1 and 2 was inputted into Excel.

Transcriptions of the audio recordings of group interviews with both mothers and gatekeepers were originally made using Microsoft Word before being transferred to Excel. Word is suited to the purpose of transcription, since has various features that can aid coding and sorting data, and text may be converted to "table" format to ease transfer to Excel (Eliot, 2011; Scandlyn, n.d.).

3.10.2 Coding

The complexities and richness of data collected in qualitative research has led to the development of specialist software packages of its analysis. However, the length of training time required to utilise such software effectively is prohibitive in the timeframe of the current study. Meyer and Avery (2009) present Microsoft Excel as an often overlooked alternative, and they demonstrate how its structure and its features designed for data manipulation and display may be utilised for qualitative analysis. Once data is imported into Excel from Word, rows can be used to define codable units of data, and columns to define attributes of those units, and hold whatever coding is chosen. Once the coding is in place, Excel's various search and filtering tools can be used to aid the process of qualitative analysis (Meyer & Avery, 2009).

During the current study, data was collected and collated throughout. Face codes were assigned to data which was inserted into Excel tables. It was then sorted into meaningful categories, via identification of patterns and regularities. Initial working categories and coding for this process was derived from Agosto & Hughes-Hassel's (2006) and McKenzie's (2003) models of ELIS, and supplemented by other coding where necessary. Such an approach reflects those in "grounded theory", where a database of text is read and re-read to discover and label categories and concepts in the process referred to as coding (Borgatti, n.d.)

The interview transcripts were coded via a process of thematic analysis, where the researcher identified individual themes in the data and assigned them to an initial category. Coding was an iterative process, which was informed by Zhang and Wildemuth's (2009) description of the "constant comparative method", whereby each new piece of data assigned to a themed category is compared to those already present. This way, coding consistency could be checked and new themes emerged through the process.

3.11 Chapter summary

The lack of detailed explanations of methodologies used in LIS research was explained, and perspectives on group-based research from sociology research were investigated. After consideration of the literature review and the scale and scope of the study, research tools were selected. The format and conduct of these methods is discussed in detail, as are the field

adaptations which took place. Through discussion with the university and the organisation, appropriate ethical guidelines were agreed upon, and the methodology was approved by the University's ethics committee. Word and Excel were chosen as appropriate tools for the transcription, collation and coding of data. Findings are presented in the chapter which follows and the methodology, including adaptations, is critiqued in sections 5.2 and 5.3.

Chapter 4: Findings

4.1 Chapter overview

The chapter presents the results of the group interviews and gatekeeper interviews in the study. In the first section (4.2), the demographic details of the participants in the study are described, and data analysis and the presentation of findings. The data from the mothers is then presented in three sections to reflect the first research objective; *information needs, information sources* and *barriers* to information seeking. The data from the information gatekeepers is then presented in a similar manner. Themes identified by the researcher in each category are identified and illustrated by narrative data.

4.2 Participants

Data was collected from 20 mothers at the Whitlawburn group. Of the 20, 18 answered the question about educational attainment. One of the 18 had attended the school until S5/6, while all others had either attended college or university. 15 participants disclosed their ages, which ranged from 22-43 years old, with a mean age of 29.

The researcher intended to conduct group discussions in the Burnhill Café, as she had at Whitlawburn. However, only 2 mothers attended during her visits, and during separate sessions. One was a 30 year old mother of four, and the other an 18 year old mother of one. Neither of them had attended school beyond S4. The researcher was still keen to hear about their experiences even if they could not participate in a group discussion, and so conducted brief, individual interviews with them.

A pilot sample, representing 5 key information gatekeepers from the local community was interviewed: a local health visitor, a local librarian, a development worker and two project workers from the Parent Café project (described in section 3.5.5).

4.3 Data analysis and findings

All sessions were digitally recorded and transcribed verbatim, apart from the interview with the health visitor who did not want to be recorded, citing local NHS policy. Data was collated and coded as described in section 3.10, and health visitor interview data was summarised from the researcher's field notes. The findings of these sessions are presented using narrative data to illustrate the key themes.

4.4 Information needs

At the initial session at Whitlawburn, the mothers were asked to compile a list of information needs which they had experienced since their babies have been born. As a group, the mothers compiled a collection of needs, which were then sorted into rough categories in collaboration with the researcher. The researcher presented these at subsequent sessions, and the mothers were asked to add to them, and decide on which needs had felt most pressing or worrisome. Mothers reported that needs felt most pressing when associated with frequently occurring problems, e.g.;

I would say it's probably because it was like a problem all the time... [I was] looking for information all the time

Figure 4.1 shows a list of the information needs reported by the mothers during the sessions, in decreasing order of importance as determined by discussion. In addition to these reported needs, the researcher observed the participants seeking information or advice from each other. The list of information needs illustrated in figure 4.2 has been compiled (in no order of importance) from her observations and field notes.

Information needs reported by mothers			
Category	Examples		
Sleeping	use of sleeping bags, baby in own room, co-sleeping, crying, settling techniques		
Milk feeding	breastfeeding, formula feeding, use of bottles, giving cow's milk, use of "sippy" cups, weaning from bottles		
Weaning	weaning age, snack choice, healthy eating, including fruit and vegetables in diet		
Health	supplementary vitamins, immunisations, developmental checks, first aid, illness		
Family	childcare, going back to work, family finance		
Activities	local baby groups, places to go		
Products	recommendations for nappies, carseats, prams, books and toys		

Figure 4.1

Queries noted by researcher Reusable nappies Use of "dummies" [soothers] The atmosphere of various baby groups Website recommendations Online forum recommendations Facebook group recommendations Activities for infants How to keep infant cool in hot weather Sun safety Infant clothing Online selling groups for infant equipment Physical development of infants Swimming lessons and equipment for infants

Figure 4.2

Several mothers expressed that it was difficult to identify *individual* needs, i.e. to separate one need (e.g. how to resolve a problem with sleeping), from another (e.g. how to resolve a problem with night-time feeding). It was difficult for them to accurately identify the source of a problem, since one issue could compound another;

I think we had a problem with the feeding, but it was affecting the sleeping...

[on trying to resolve a sleep problem] do that it's gonna affect this, and it's gonna affect that...

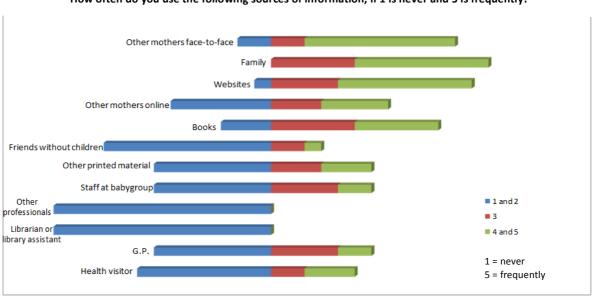
There was a general consensus that in the first year of an infant's life mothers experienced multiple information gaps. As one put it, "there's a lot of stuff to get to know".

4.5 Information sources

The mothers who attended the second session at Whitlawburn (n=13) completed a questionnaire on preferred sources of parenting information. The sources of information were derived from the model by Agosto and Hughes-Hassell (2005; 2006). Mothers were asked to use five-point scales to rate possible sources of information based on frequency of use, importance and usefulness. The following data is presented with the caveat that it is to illustrate possible trends, and no claims are made to any statistical significance.

4.5.1 Frequency of use

Figure 4.3 illustrates the frequency with which mothers reported using each information source, presented in a diverging stacked bar chart (cf. Robbins and Heiberger, 2011).



How often do you use the following sources of information, if 1 is never and 5 is frequently?

Figure 4.3

The median rating for the frequency of use of each of the sources of information was calculated, and is presented in figure 4.4.

4.5.1.1 Peers and family members

There was a trend towards certain interpersonal sources of information such as other mothers and family members. This trend was also apparent during the discussions, with the majority of mothers indicating that they sought information and advice from other mothers. Several concluded that they received most information from peers by "just chatting", and while they may actively seek information from others it often "just happens". Others reported that on occasion, they may seek advice from a peer if an issue is worrying them;

there'll be some nights I'll sit and I'll be like 'argh!' Next time when I see them [friends with children] I'll say this and see what they think about it.

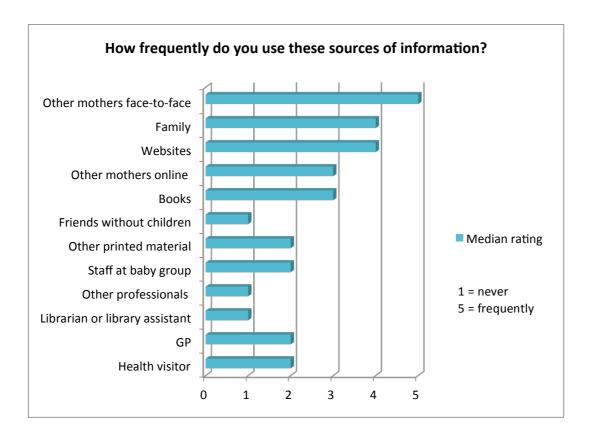


Figure 4.4

The trend towards seeking information from family members illustrated in figures 4.3 and 4.4 also emerged in the discussion. Although in some cases, this preference had changed over time. For example, one mother reported that she initially turned to family first, before realising that the information they gave was now out of date, since "the way they did it, it's really different". She now chose to go online for information instead.

Others seemed more at ease reconciling the differences between their parenting styles and that of other family members, and still valued their input. One described how the first person she normally turned to for information and advice was her own mother. She explained that her mother was a nurse, but she felt that had little bearing on her preference, explaining "it's because she's my ma". This preference was not universal however, with one mother reporting that she disliked disclosing

information about problems with her infant to family members, since they offered unsolicited advice and judged her parenting abilities;

Then you've got my gran trying to give her input...that's just too much sometimes... Family are more judgemental!

4.5.1.2 Online sources

As can be seen in figure 4.4 websites appeared to be consulted more frequently than peers online (i.e. other mothers on an internet message board or on Facebook). Figure 4.3 suggests that online sources of peer information were sought by around half of the group.

Figures 4.5 and 4.6 illustrate the participants' responses to questions about their internet use. 20 participants completed this section of the questionnaire. 75% of respondents reported using the internet to look for information "daily", with only 5% (n=1) reporting that they "rarely" did so.

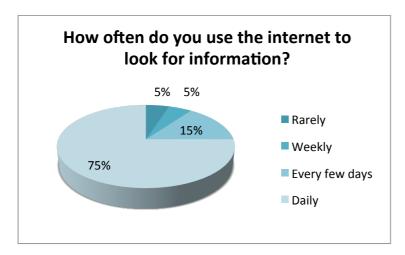


Figure 4.5

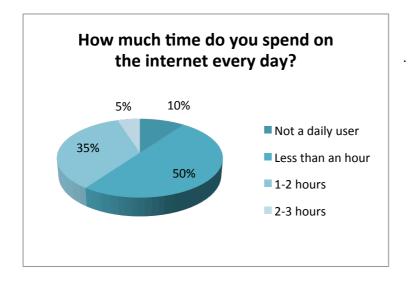


Figure 4.6

50% of respondents reported that they spend less than an hour on the internet every day, and only 5% (n=1) spending more than 2 hours online each day. These results would seem to reflect a "little and often" approach to seeking information online, which was borne out in the discussions which followed.

During one discussion, mothers reported that there were many websites which gave parenting information, but that they tended to return to the same ones;

There's so many different websites, so some you've got to trust more than others.

Yeah, I just go to the same kinda websites.

Most reported cross-referencing information from various websites if they were seeking information as a solution to a problem. Various explanations were given such as "quite a lot of folk [online] disagree", and that different solutions may work for different infants; "You can't like say yeah all babies are like that and it worked for mine". Many of the mothers reported reading online forums to seek information, although several described themselves as "lurkers", i.e. they read threads without commenting on them, sometimes reading information to prepare them for the next stage in their infants' development;

I also read ahead...so that when I reach that stage I've got some tips ready.

One explained that she found it hard to find information about parenting twins since no-one in her social support network had twins, and she thought that health professionals "don't really know". She frequently used internet forums to search for information, since "it's good to be able to ask a *twin thing...* from mums who've got twins".

Two of the mothers from Whitlawburn had set up their own Facebook group, which now had members across the U.K. One explained that it had been set up as a way of sharing information and advice;

Anybody can ask any kinda questions. So there's people from all over... and you get so much advice

They explained that on other pages they had witnessed friction, since "quite a lot of them [posters] annoy each other". They believed that these tensions or "competition" amongst mothers affected how comfortable others felt posting on the forums;

I've definitely noticed it on other pages. And people are like scared to like say stuff

As a result they set clear ground rules for their own online forum, and believe it has been successful as a result;

We stated very clearly that on our page that we didn't take kindly to bullying...people know that they're not going to get judged, and if they are judged in any way then, well they're [the perpetrators] going to get their wrist slapped!

4.5.1.3 Healthcare professionals

Figure 4.4 shows that participants tended to report seeking information from HCPs with moderate frequency. Figure 4.3 shows that in fact many do not seek information from these sources at all, or do so infrequently. This was reflected in the discussions which followed. Several of the participants reported that they had good relationships with local HCPs, and sought their advice regularly. When talking about a "good" health visitor, mothers often made reference to their availability and the fact that the health visitors would encourage them to ask any questions. One praised her health visitor for giving "realistic" advice.

Conversely, several of the mothers reported that they were uneasy asking HCPs for "too much" or "certain" pieces of information. They expressed worries that they would be viewed as overprotective;

I think sometimes you're a bit not sure of asking about things in case they think ...oh, worried mother, or paranoid mother, or you know. And it makes you think, nah.

4.5.1.4 Library staff and other professionals

The "other professionals" category was explained to the mothers as representing information gatekeepers who were not HCPs, library staff or Parent Café workers. Several examples were given such as representatives from Childsmile (an oral health scheme) or members of a charity who came to speak at the Café. None of the participants reported seeking information from this group, and very few sought information from librarians or library assistants. 20 participants completed questionnaire data about how often they visited the library, as shown below in figure 4.7.

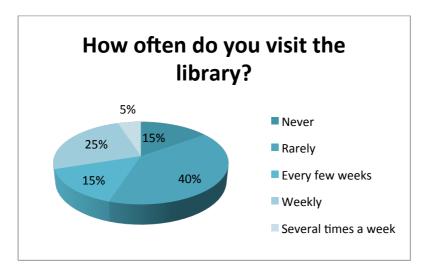


Figure 4.7

As figure 4.7 shows, the majority (55%) "never" or "rarely" visit the library, although 30% reported visiting "weekly" or "several times a week".

4.5.1.5 Books and printed material

Although books and "other printed material" (e.g. health promotion material provided by HCPs) appear to be moderately well used from figure 4.4, figure 4.3 shows that parenting books obtained

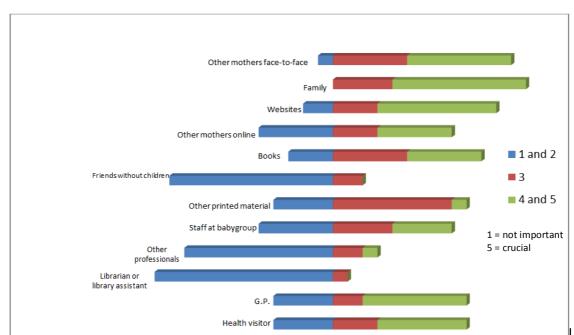
by the mothers were consulted more frequently, while "other printed material" was unpopular with many. Many expressed doubts about the "BIG pile of stuff", which health visitors provided. In particular, they were suspicious of some of the information provided soon after birth which is sponsored by various companies and did not consult it as a result;

I know there's like, controversy about that just now! [agreement from group]

It's quite commercial and that, you just don't know... yeah, it's a bit funny.

4.5.2 Importance of information source

Figure 4.8 illustrates the importance which mothers ascribed to each information source, which was explained to the participants as a measure of how they valued it as a source of authoritative information.



How important are the following sources of information and advice are to you, if 1 is not important and 5 is crucial?

Figure 4.8

It appears a similar trend to that apparent in the mother's ratings of frequency, with friends without children, other professionals and library staff ranked much lower than others. Figure 4.9 shows the median importance ratings for each information source.

4.5.2.1 Peers and family members

Other mothers and family members appear to be considered particularly important sources of information. In discussion, the experience of other mothers who the participants could speak to face-to-face was valued by many. For example, one explained that she sought and valued information from peers who are in a similar situation to her own over other sources;

I probably make like a point of asking all the people that had all had babies at the same time if I've got a specific question... as supposed to going anywhere else.

During one discussion, all agreed that it was easier to speak to someone face-to-face. Figure 4.9 shows that face-to-face contact was seen as more important as a source of information than speaking to other mothers online.

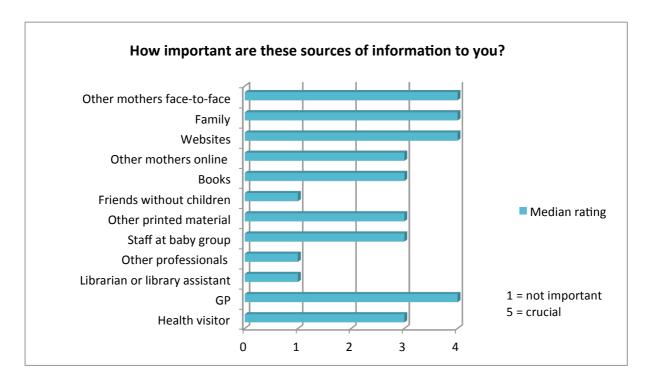


Figure 4.9

4.5.2.2 Online sources

Several mothers said they preferred to seek information from other mothers online when they wanted to draw on a *breadth* of experience. For example, when they wanted information about the "next" stage in their infant's development, they valued the input of mothers online since "their kids are all different age groups". Some valued the diverse information which they could gather from a larger group of mothers if they wanted to try for example, "different sleeping techniques" from those they already knew.

However the theme of "judgement" from other mothers online appeared again;

If you think it's something ... people might judge you on, then you feel more comfortable maybe asking your friend rather than putting it out there to everybody [online]

Again, websites appeared to be viewed as a relatively important source of information, and more important than parenting books or other printed material (see figure 4.9).

4.5.2.3 Healthcare professionals (HCPs)

The median ratings ascribed to the importance of HCPs as sources of information would appear to be higher than the frequency with with they are consulted, as seen in figure 4.8. This reflects a trend noted during the discussions, where mothers sought information from HCPs as the gatekeepers of the "right" information. This could lead to conflicts with family members when they did not agree

with the information provided. For example, one mother said that she did not routinely ask her own mother for parenting advice any more, explaining;

It's different, they did things in a different way...health visitors tell you things that they didn't when we were young

4.5.3 Usefulness of information source

Figures 4.8 and 4.9 illustrate the mothers' ratings of each information source in terms of usefulness.

How useful is the information which you receive from these people and sources, if 1 is not at all useful and 5 is extremely useful?

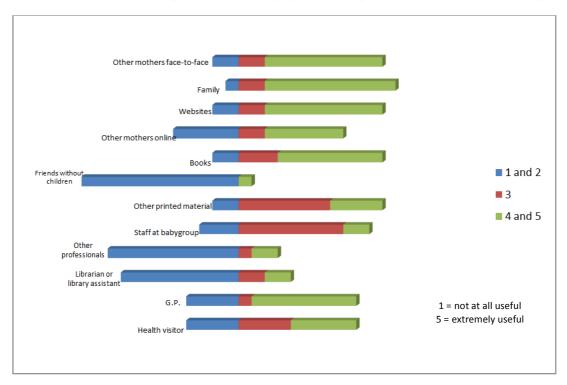


Figure 4.10

As can be seen from figure 4.10, information from peers and from family members continued to be rated highly for usefulness. As with the measures of frequency and importance, speaking to other mothers online received mixed ratings. One explained that she liked the way online forums were often organised by the month and year of infants' birth, since;

All the mums have went through stuff at the same time when they had their babies within the same month...so I got much, like, relevant information off that.

Although another felt that some mothers asked questions in forums to "show off" (for example about a new purchase), and said that if she was worried about others passing judgement on her parenting choices she would ask off-line friends instead.

As can be seen in figure 4.10, many saw websites as extremely useful sources of information. Several reported that they found useful information online about various products and pieces of equipment online, and sought online reviews before making expensive purchases. Some also sought

this information from other mothers online, with one explaining that busy Facebook groups were very useful for finding out information about different products, since she could quickly ask for many individual opinions before spending any money.

The usefulness of HCPs as an information source received a middling to high rating as can be seen in figure 4.11. However, figure 4.10 reveals a more complicated pattern, and a more mixed set of ratings for both GPs and health visitors. Many mothers reported receiving conflicting information from these sources, which will be discussed in section 4.6.3. Others felt that they had been patronised or that their concerns had been dismissed.

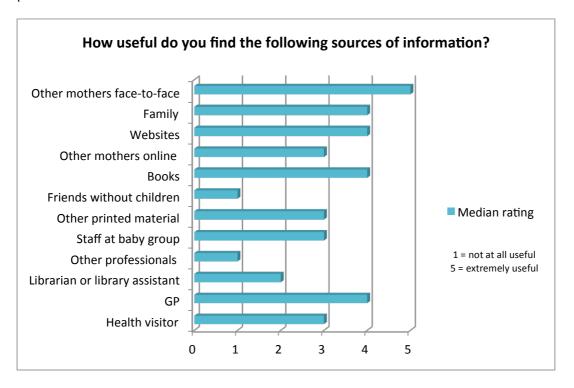


Figure 4.11

One mother for example believed that HCPs could "talk down to people", and cited an example of how she met a mother at the clinic who was "practically in tears when she came out" of the health visitors' room because of how she was spoken to. Another believed it would be good if "folk like doctors" would recognise that first-time mothers like herself were not "paranoid", but rather "just don't know about stuff the first time". Others concurred, and discussed the use of the phrase "first time mother syndrome", which they recognised as a joke about over-protective mothers.

From figure 4.11 it can be seen that the "usefulness" ratings for the information from other professionals (such as those who offer talks at the group) and for library staff are still very low. However as can be seen in figure 4.10, a few participants had given a middling or high rating to the usefulness of information than (i.e. towards "extremely useful").

4.6 Barriers to information seeking

4.6.1 Questionnaire data

Six mothers attended the session at Whitlawburn designed to discuss barriers to information seeking. They were asked to rate a series of statements on potential barriers or challenges to information seeking. A graph of the median score for each statement is presented as figure 4.12. As can be seen, the median scores often were around the midpoint (3) on the rating scale, although several outlying results can be noted. For example, the median rating for "I have to make parenting choices based on limited information" was very low, i.e. there was a trend towards disagreement. "My health visitor provides me with useful information" also was rated lower than many other statements, again indicating disagreement.

Other notable trends illustrated on figure 4.12 are high median ratings for "I have access to the internet at home" and "I am comfortable with speaking to other mums face-to-face", suggesting strong agreement with the statements. All of the mothers in this group had internet access at home. There were also trends towards higher agreement ratings for statements about preferring to rely on "instinct" rather than information, receiving "unwanted advice" from family, finding parenting books and magazines expensive, believing there was not much information about parenting on the television and radio, and being able to travel easily to sources of information. Finally, there was also a tendency to agree that it was time consuming to find information on the internet, although they knew where to do so.

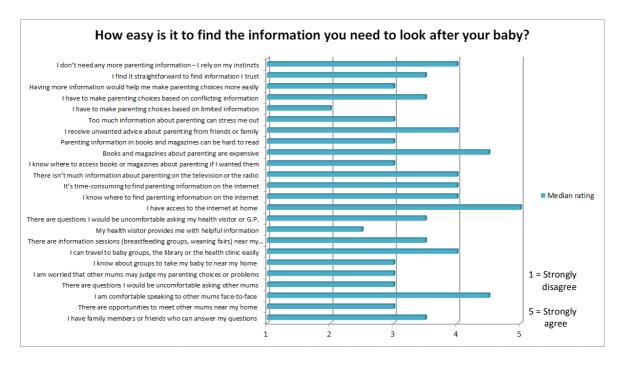


Figure 4.12

Barriers encountered by the mothers were a common topic during discussions in several sessions. Through thematic analysis, the researcher identified four main themes in the mothers' reports of barriers which they have faced to their information seeking: lack of time and opportunity; receiving conflicting information from different sources; seeking information about potentially contentious or

sensitive topics; and lack of engagement with peers. Each of these themes will be discussed in the sections which follow.

4.6.2 Time and opportunity

When asked what was the biggest challenge or barrier to their information seeking practices, the vast majority of mothers questioned answered that it was the time available to them. When the researcher asked a group to describe how lack of time impacted upon their information seeking, several laughed and one said simply "I don't *have* time!" Several reported that they used Google on their mobile phone if they had a particularly urgent need for information, and cross-referenced websites which they had previously used and trusted.

Two of the mothers reported that they occasionally come to the Parent Café meaning to seek some information or advice from their peers, but find it difficult to find the opportunity. Under these circumstances, seeking information online is seen as a convenient alternative;

It's just busy when you're here, isn't it?

Yeah, you're busy with your baby and that, so sometimes when you're at home and you actually HAVE half an hour of peace [laughter from group] That's when you have time to look something up on the internet.

4.6.3 Conflicting information

Many reported that they received conflicting information from different sources, particularly from people sources such as HCPs;

...you get so much conflicting as well, that's like even like from health visitors and midwives ... they each tell you different things

Several mothers gave examples of such conflict, for example one mother received conflicting information on how to soothe her infant's reflux;

He [The G.P.]said, you avoid putting them in a carseat after they've been fed, cos it crunches up the stomach. And then a couple of days later my health visitor said, oh put her in her carseat after she's been fed so she's upright! [laughter] You just don't know what to do...

Another explained that she receives conflicting pieces of advice from two HVs from the same clinic;

I had one health visitor tell me to give him water, and the other telling me not. And that was in the space of a week!

This conflict seemed to be especially apparent when the infants were very young, and several mothers reported being worried about how to evaluate different pieces of information at this time;

But it makes you worry in the beginning... you're getting involved, and getting all this information and you're learning... and you're afraid to make the wrong choices

One mother believed the health visitors were themselves receiving information from many sources, and were therefore unsure as to how to advise mothers. This belief had led to her lacking

confidence in the ability of her health visitor to provide her with the "right" information. Several mothers agreed that the best way to resolve conflicting information was via a "trial and error" approach, where they followed various pieces of advice in order to find a solution which worked for their infant. For example, one described the problems she had getting her son to sleep, and the various pieces of advice she had received, concluding that "you just try them both". Another added "and from that you just choose your own way". First-time mums reported that they became more confident differentiating between different sources of information, and seeking information for themselves, as their infants became older;

[you're] more confident about like making your own decision...whereas it's like you take like everything that your health visitor or like other people tell you as gospel.

This mother indicated that the level of trust in the information provided by her health visitor had waned over time.

4.6.4 Barriers relating to potentially contentious or sensitive topics

Several mothers reported that they had encountered difficulties obtaining information about what they viewed as the contentious subject of the decision to breastfeed. One mother who breastfed thought that it was "great that they [healthcare professionals] encourage you" to breastfeed, but was uncomfortable with what she saw as the assumption that a mother would feed that way, and the complete lack of information provision on bottlefeeding. As she explained;

You wouldn't like see that [bottlefeeding] as an option and be able to balance it out until you decide...I think they should probably tell you about that as well

Another mother then spoke about her experiences, and became visibly upset as she recounted them. She had decided to bottlefeed her infant, and described various information practices she undertook at this time such as telephoning a formula manufacturer, and sourcing smaller teats and bottles. She then attended an information session with other mothers where she asked a midwife several questions about formula feeding;

And the midwife looked, and she just went yeah but surely that wouldn't be happening... everybody here you will be breastfeeding, won't you? And everybody went yeah... but I said, I'm not, I know I'm not. And she was like right... well I don't have an answer to your question

This led to a conflict where the mother challenged the midwife after she indicated that she may not be able to provide bottlefeeding information by the next session;

And she went, well I can try and find out but obviously it's like pretty short notice and I'm pretty busy. And I said well I'm sorry, but that's the information that you should have and you should be aware of, and what I'm saying is I'm looking for that information

Although the midwife later apologised, and the incident was resolved, it had clearly upset the mother;

And obviously, I left there feeling pretty down, I've got to say... I was made to feel really, really difficult.

The mother was upset by the silence of the others in the group at the clinic, and believed that they were "judging" her questions. However, she then poked fun at some of the questions that they had asked;

One of the girls was actually asking things like could you take your hair straighteners so I can straighten my hair [laughs] ... And these were people who were fairly educated people I have to say...

She said she believed her questions were more "appropriate", and that it had been hard to relate to other members of the group because of what they were asking. In other words, she was passing judgement on what she perceived to be the appropriateness of their information seeking. The concept of "judgement" also appears in sections 4.5.1.1 and 4.6.2.2, and will be returned to in the discussion.

4.6.5 Barriers to engagement with peers

Several mothers said that they felt more "comfortable" at the Parent Café group than at other mother and baby groups, which is why they attended. One described trying several groups in the local area, before beginning to travel to one in South Glasgow since there;

She [her daughter] can kinda go and be herself, and I can be myself and we won't be judged.

She felt that previously she had been judged by other mothers and excluded from their social circle since she did not breastfeed her infant. She described an incident where she had felt rejected by a group of mothers which she tried to engage with at a clinic;

[she said] we're just going to the breastfeeding group and then we're all going for coffee... only the breastfeeding mothers can. Catch you later!

4.7 Information Gatekeepers

4.7.1 Information needs recognised by gatekeepers

The health visitor (HV) agreed the list of information needs (see section 4.4) covered all of the common questions which mothers asked of her. Furthermore, they broadly corresponded with a tick-box list of items on a form intended to be discussed with mothers at home visits.

While discussing the standardised forms, the HV explained that they were designed to drip-feed information to mothers at appropriate time in their infants' development, so as not to overwhelm them with too much information at once. She explained that this was especially important in cases where mothers had PND, since she believed overwhelming them with information may prove to be anxiety-inducing.

The HV described how mothers stored up questions to ask her between visits, and reported various practices they use to note down questions such as using notepads or keeping notes on their phone. She explained that she does not necessarily encourage mothers to do so in case it puts them under pressure, but welcomes the extra insight into their needs and will work systematically down a list at a visit.

In another interview, one of the Parent Café project workers explained that the Café had been set up after a focus group of local mothers following a post-natal programme ending. This programme had consisted of various services such as baby massage classes, post natal exercise, etc. as well as informational sessions. She explained that the evaluation carried out at the focus group "identified that there was still a very great need for *something*" to support local mothers. She commented that many mothers in the area required information on play, activities and language development since;

[Because] of the community we have and the way society operates now [mothers] don't necessarily have the ideas, they don't know what to do with these wee babies. And everybody just wants the best when they're starting out with their babies, it's just about being able to support them and give them ideas how to do that.

The researcher presented Parent Café staff with a copy of the list of information needs (see 4.4) identified by the mothers in the study. Again, they believed that they were as they expected, with one commenting;

Yeah, yeah. It's always the same old, the same old... The things that everyone's going through with sleeping, and eating, and sleeping... [laughter]

She explained that the Parent Café often had a relatively fast turnover of mothers, as some stopped attending as they returned to work or their infants became more mobile. As a result, they had been able to develop a rolling programme of guest speakers and activities to ensure that all of the "hot topics" were covered. Even with a programme in place, the groups aimed to remain adaptable and flexible to meet the information needs and interests of the mothers as they arise. The week-to-week structure of the group has been designed to encourage discussion and active information seeking between the mothers;

We go round and introduce ourselves, and we talk about how the week's been and what's been going on. Cos then it's quite kinda normal... there's not necessarily something you want to seek advice on, but if someone else has brought it up you might think, 'oh do you know what?' And that's the idea.

The development officer explained that the group was set up based on what the mothers wanted to hear about, and on "issues we first of all thought they would face". As will be discussed further in section 5.4.4, she explained how the Café has had to strike a balance between what it feels the information needs of the mothers are, and the conditions of the funding which it receives. She asked if she could add to the sheet, and wrote "stress" and "isolation" explaining;

These were hot topics. Definitely...some of them were looking for information on post-natal depression and stuff like that. And they did specifically ask.

The development officer described how she thought that for the Whitlawburn group in particular, the Café played a part in a larger information world for the mothers. She described how they would prepare for an information session and ask for more detailed information;

So you're talking to them about the weaning... everytime you tell them something, they'll come back with an answer they read online, or on Google you know.

She believed that the location of new housing developments on the edge of Cambuslang had separated first-time mothers in the area from traditional, family sources of support. She explained that in older parts of town;

You can have a baby, a mother and a granny and a great-granny all living within six, half a dozen houses of each other, two streets of each other... And they have a massive support system. And a lot of the time, they're getting their information from that. Right or wrong information, but their information's coming from there.

She was particularly interested in the study, since she wondered if there was any evidence of the "peer education" she believes occurs at the group, i.e. if the mothers were learning from each other and using each other as information sources;

[are] there people sitting there listening and saying oh well I do this, I make that, I make the next thing, and somebody listening is thinking, well I'm going to try that? But that information's no being passed back... who knows if that happens?

One of the project workers was concerned that it was difficult to get the balance between encouraging the mothers to support each other, while ensuring that they were accessing "evidence-based" parenting information. As she explained;

...because though peer support's great, everybody is different and what works for one baby won't necessarily work with that baby... I think a lot of that information that we get is experienced based, it's opinion based, and it's not necessarily the right information to make the best [choice]

She gave an example of a local breastfeeding support group which was no longer facilitated, but instead was organised by a group of mothers without any additional input. When the project worker had visited she discovered how the mothers had been sharing "bad information", no-one had been available to help them source information about breastfeeding in public, and many had gone on to bottle-feed instead.

In another interview, the librarian discussed the popularity of Bookbug sessions amongst local mothers;

You could run Bookbug sessions all day, every day, for every branch and you'd still get an audience for them!

The librarian believed such sessions were beneficial for "mums who've felt a bit isolated... it becomes quite a social thing". From customer feedback, she believed that parents were expressing a desire for more information and support on "how to encourage the children with language and literacy", and suggestions for activities "that they [can]do together to help with attachment".

As a result of this perceived need, a programme consisting of activities for the infants and information provision for parents via guest speakers similar to that of the Parent Café was developed. The librarian attributed the success of the programme so far to the fact it was presented in the library instead of a more formal healthcare setting;

Parents are quite comfortable in the library ... they'll not go and listen to a talk about Childsmile... but if it's introduced into a session we do here then they're quite happy to come along

She also believed that the information sessions which had been and will be offered at the library are important to mothers since;

If you're listening to a professional telling you something it's... validated information they give you. Whereas if you're just reading something off the internet, you're just hoping it's correct.

In an earlier interview, the HV had indicated that she had signposted mothers towards what she described as the public library's "self-help library". The librarian explained that the service ran a *Healthy Reading Scheme*, and that books were available on subjects such as childcare, child development and child nutrition. She said that the books on nutrition were relatively popular, and that parents liked borrowing recipe books. Apart from that, she did not believe the scheme had been the "biggest success that perhaps people think it has". She attributed its lack of success to parents' information preferences stating;

I don't think the majority of parents actually access information that way. They prefer a person-to-person kinda thing. Talking to people or listening to people, or watching something, rather than reading your way through a book on child development...

She believed that mothers who used the library still "want that personal contact, which you don't get from the internet".

The HV joked that her job had become much harder now that "everyone uses Wikipedia" and said it had become a real concern to her if she was worried at all about the mother. She described "obsessive" internet searching as "very dangerous" when a mother was showing even mild symptoms of post-natal depression (PND), as she believed reading information from many sources could feed the mother's anxiety. She explained that one of the symptoms she associated with mothers she had attended who were diagnosed with PND was a fixation on the health of their infants, and more demands for advice and reassurance.

To keep up with developments in her field the HV used the internet, and was mostly likely to use NHS-approved websites which she knew about. She described an example where a mother was "in crisis", and needed information to help her and her baby urgently. In such a situation, the HV said so she performed "research" overnight and contacted the mother the next day. She described a process of using Google to search for support groups, filtering out ones she did not think looked reliable, and then made a decision based on the availability of the service to the mother. She said that she was sometimes wary of the fact she could be accountable for giving advice from the internet, so preferred to look in her usual sources first. In general, she said that her work has to ultimately be NHS policy-driven and reflect the standardised assessments of wellbeing. She acknowledged time and a heavy workload due to understaffing as the main barriers to her own information-seeking practices, and credits having a strong team of other professionals around her as the key to keeping abreast of the latest guidelines and local information.

4.7.3 Barriers to information seeking as identified by information gatekeepers

The development officer was again very keen to emphasise that she felt *isolation* was one of the most significant problems faced by mothers in the local area. She explained that she believed isolation was related to poverty, health problems and inequality in the local community, explaining;

If you're a single mother with three children in a ten-storey flat, and it's been pouring of rain for three days, and you've no money to go anywhere... you are completely isolated from the world.

Because you're in that situation and you don't have a phone, or you do have a phone but you've got no credit, you don't have access to wi-fi or broadband, and you know you just think... it's totally, it's information poverty. Totally.

She was keen to ensure that all mothers were encouraged to use the services offered at Whitlawburn, even if they were from a more affluent area outwith the impoverished "datazone". As she explained, there are individuals who "can live in a massive big fancy house who are very isolated", and that those who live "live ten floors up in Whitlawburn...can be better off than that person coming in their 4x4".

The Café seemed to work hard to remove as many barriers to participation and engagement as possible, with one of the project workers explaining that mothers had been consulted on the most appropriate times of day and format, to minimise disruption to infants and avoid clashing with other local services. She joked about mothers not having time to feed themselves, and adding that offering tea, coffee and snacks was an important way of engaging mothers and encouraging them to attend since "It's worth getting up and getting out for that [tea]!" She added that some mothers found it more difficult to engage with the group since "it might not be something that comes naturally to them". To overcome these barriers, she explained that she shared more information about the meaning and value of sharing a certain activity with an infant for example, stating that;

Every mum that I've ever met all over the place, they'll do it if the baby gets a benefit... even they've all been like that in the group [purses mouth to illustrate being shy/quiet]

She said that when she started the job it was "horrendous" that local mothers did not know about the local services and sources of information which were available to them, although she believes the situation is slowly improving. Another project worker was less sure that information provision for first-time mothers in the community was sufficient;

We give them the information, they make the choice. Whatever choice they make is up to them... but I don't think some people are always given enough information to do that. Or they don't know where to get it, or what to do.

The librarian believed that the main barrier to mothers accessing information via the library was that some mothers just "don't see it as a place for them to come to", perhaps due to the fact that they did not use the library themselves as a child. Another issue was that when mothers attended a group for several years running, the staff worried they became "cliquey" and believed that "it's hard to break into that kinda group". This was a problem which the librarian was hoping to overcome by offering a wider range of sessions for mothers to attend.

When the HV was asked to identify barriers to information seeking faced by first-time mothers, she identified what she described as "territorial" problems. She explained that some will not access services in particular areas of their town, due to feeling intimidated or afraid of threatened or actual violence. This is a problem which she had encountered frequently in recent years, and severely limited her ability to signpost mothers to services and resources. It had been combatted to some degree by organising taxis to and from the children's centre, but the availability of such transport was restricted.

She also identified what she described as "psychological barriers" faced by some, due to their history, previous experiences with services and institutions, feelings of helplessness or mental health issues.

Finally, she acknowledged that lack of internet access could provide a significant barrier to information provision, since many of the NHS leaflets which she could provide for mothers had web addresses on them. She said an important part of her job was striking a balance between standardised care and personalising the information she provides to mothers.

4.8 Chapter summary

Section 4.2 described the participant group of mothers and information gatekeepers who were involved in the study. Reported and observed information needs of mothers were presented in 4.4. The frequency of use of different sources of information was compared (4.5.1), before comparing their reported importance (4.5.2) and usefulness (4.5.3).

Section 4.6 presented the barriers of time and opportunity, conflicting information, sensitive topics and engagement with peers, which were reported by the mothers.

Section 4.7 presented the information gatekeepers' perspectives on the information needs of mothers, sources of information and barriers to information seeking.

A summary of all results will be presented in Chapter 6.

Chapter 5: Discussion

5.1 Chapter overview

In this chapter, various limitations of the study are discussed in section 5.2, and the field adaptations made to the planned methodology in section 5.3. An analysis of the findings presented in chapter 4 is presented in section 5.4 which discusses information needs (5.4.1), sources of information (5.4.2-5.4.3) and barriers to information seeking (5.4.4).

5.2 Limitations of the study

5.2.1 Participants

The study was intended as an exploratory study to investigate the information needs and practices of first-time mothers. However, out of the twenty participants, four of the mothers already had children. The researcher made a decision to include these mothers in the group discussions, since the alternative on two occasions would have been to exclude them from a discussion that involved every other mother in the room. Given the ethos of inclusion and participation of the group, it was not felt this would be appropriate.

One mother of two explained she had been upset by her health visitor's presumption that her needs for information would be much less the second time round, and was frustrated by what she saw as her own failings when she experienced an information gap;

I felt stupid...and it's not like I was a first-time mum, but it's just different circumstances.

The study does not consider the information practices of partners, fathers, or other members of the household which may affect parenting behaviour and decisions. Although technically fathers may attend the Café this is rarely happens, and only mothers attended during the study. It is worth restating here that the study's focus on mothers is not simply a result of convenience sampling but a deliberate decision determined from the literature (see section 3.5.2).

5.2.2 Engagement with participants and building trust

As was discussed in section 3.4.3, a review of ELIS studies across a number of participant groups drew on Chatman's lifeworld theories of insiders/outsiders, and concluded that participants' perception of the researcher's status was key to successful access and engagement (Chatman, 1996; Carey et al, 2001). In particular, McKenzie believed that identifying herself as a mother was "invaluable" to establishing the trust of the participants, and conferred her with "insider" status in the group (McKenzie, in Carey et al, 2001).

In the current study, the researcher found it was a difficult task to tread the line between sharing her own experiences in order to be accepted in the group as an "insider", while simultaneously avoiding researcher bias and leading the participants. Due to her connections with the Parent Café, it would have been impossible to present herself as a true "outsider". Therefore, the researcher chose to disclose the fact that she was a mother, had been involved with the group, and shared her own experiences during discussions in order to establish trust and rapport with the group in the

short timescale which was available. However, it is recognised that this may limit the study's repeatability or generalisability since another researcher could not draw upon these connections. The potential conflict between maintaining a researcher/participant role and an insider/outsider status is discussed more in section 6.2.

5.2.3 Generalisability of findings

It was recognised that the selection of the Parent Café group as a means to reach the intended participants may be problematic. However, it was felt it would provide a platform from which to examine the social context of mother's ISBs which is a recognised research gap (Fisher & Landry, 2007; Berkule-Silberman et al, 2010).

It is known that a mother's ability to perceive and react sensitively to her infant's signals and needs is greatly influenced by her attachment to the infant and their relationship, which is in turn influenced by how her needs are met by her social support network and supporting professionals (Thorstensson et al, 2012). The fact that the mothers in the current study attend a group which aims to facilitate additional peer and professional support means that findings from the group may not be generalisable to sections of the population who do not. As the mothers attend the group, meet peers on a regular basis, and regularly meet information gatekeepers, they clearly have access to sources of information which they would not otherwise. This is not to presume that their presence at the group means they are seeking information while there, but it does mean the findings may have limited applicability to those who do not attend such sessions.

5.2.4 Timescale

Many of the mothers had very young children (the mean infant age was 7.8 months), and most were first-time mothers (4 of the 22 participants had older children). As a result, they were being asked to reflect upon their information behaviour over a short period. The study simply gained a snapshot of their information practices, and cannot reflect upon how it may change over time. Furthermore, they were asked to remember information which they sought or acquired in order to make decisions in the past, albeit the recent past. There is evidence to suggest that memories of problem solving and decision making can be influenced or altered by knowledge of the outcome of the decisions (Arden, 2009).

As discussed in section 3.4.3, time is also required to build trust and acceptance with participants when the researcher is not known to participants (i.e. is perceived as an outsider). In this case, an alternative was to seek participants to a group known to the researcher such as the Parent Café.

5.2.5 Mothers' availability to participate

At the second and busiest session at Whitlawburn, the group of mothers who participated in the group interviews was necessarily self-selecting, since many of the infants were fussy and unsettled during this session due to the stifling heat in the room. It is difficult to accurately predict how the mothers' participation in the interviews was affected by the presence of their infants. The researcher observed many mothers in the group interacting with other mothers while simultaneously feeding or interacting with infants. Others appeared to have interactions with other mothers or the researcher interrupted by attending to their infants. As a result, the study may have

failed to collect pertinent data from those who were not able to participate fully at all times. Several adaptations to the planned methodology were required, which are discussed in section 5.3. It should also be remembered that the group operated on a "drop-in" basis, so not all mothers were present for the whole session, and it was difficult to predict how many would attend on any given day.

5.2.6 Burnhill group

The researcher intended to repeat the sessions conducted at the Whitlawburn group on a Wednesday, with the Burnhill group on a Thursday. Due to the timetable of the Café, and the researcher's limited timescale, only two visits were possible rather than the three sessions at Whitlawburn. During the researcher's first visit to Whitlawburn, she was warned by a volunteer that attendance at Burnhill had been particularly poor, she surmised due to the good weather and the school holidays. On the first visit one mother attended, and on the second a different mother supported by two first-steps workers. Keen to learn from their experiences, the researcher chatted with them, and conducted an informal, narrative interview with each. For the researcher, the experience provided further support for the need to be adaptable while conducting research in such a flexible, drop-in group.

The Parent Café development officer explained that the Burnhill group had originally been conceived as a more local service (partly for reasons of funding), and was promoted as for Burnhill residents only while the Whitlawburn group was open to all. The trust was now trying to decide if the Burnhill group should also be open to everyone. She joked that some of the attendees at Whitlawburn were "yummy mummies", and represented a more socioeconomically "diverse" group than the other.

She believed that in Burnhill mothers relied on the support network provided by their families, and that they met their information needs within that network. This belief has interesting parallels to Shieh et al's (2009) finding that mothers with a lower socio-economic status are more likely to rely on such interpersonal support networks to support their information seeking. It was unfortunate that the current study was not able to recruit enough participants at the group to make any comparisons between the two, or examine if there was a difference in how mothers engaged with the groups. The researcher would suggest that a future study of mothers' engagement with sources of information would benefit from further measures of socioeconomic status for the sake of comparison.

5.2.7 Assumptions about socio-economic status (SES) and researcher bias

The study was not intended to specifically investigate the influence of socio-economic background on information practices, although it was known that the groups were sited in areas of multiple deprivation as was determined by government statistics (section 1.3). No claim was made that the current study was of mothers with a low SES, and it was merely recognised as a potential contextual factor. As will be discussed in section 5.4.4.1, the usefulness of the statistics to describe the local area can perhaps be called in question.

The literature review revealed a limited amount of research which suggests that there may be a preference amongst mothers with a lower SES for interpersonal sources of information, and based

on this information and her pre-conceptions about who would attend the groups, the researcher may have unwittingly been biased towards discussing interpersonal sources more than others.

Similarly, the researcher had herself benefitted from interpersonal sources of information facilitated by the group, and therefore may have been influenced by those experiences. Interviewer bias was avoided where possible, but it was possibly apparent to the gatekeeper interviewees that the researcher was approaching the research with a particular viewpoint, by virtue of her past and current involvement with Parent Café.

5.2.8 Sample size and questionnaires

Although basic demographic data was collected from all 22 participants, the data collected via the ratings scales presented in sections 4.5 and 4.6 was from groups of 13 and 6 participants respectively. These samples were too small to provide the statistical power required for detailed statistical analysis. Therefore the quantitative data presented in the sections is presented with the caveat that it is presented to illustrate possible rather than statistically significant trends.

During analysis of the findings, it became apparent that the wording of some of the statements used on the ratings scales completed by the mothers may have been unclear or ambiguous. For example, the mothers were asked to rate "librarians and library assistants" on various measures such as their importance or usefulness as an information source. However upon reflection, the researcher realised that this data did not account for a participant using library resources independently, and not consulting any members of staff. Therefore the usefulness and importance of the services offered may have been misrepresented. Had the methodology been piloted with a more representative sample, these questions may have been clearer.

5.3 Adaptations to the Methodology

One of the research questions outlined in section 1.5, was to investigate if any lessons may be learned about conducting research within a group such as the Parent Café, which mothers attend alongside their infants. As was identified in section 3.8 *Risks and Mitigation,* it was expected that a degree of flexibility and adaptation may necessary.

During the first session with the Whitlawburn group, it became very apparent that it was simply not feasible to command the attention of the mothers as a group for any sustained period of time. This was not due to any unwillingness on the mothers' part to participate, but was simply due to the demands of their infants. The researcher introduced the post-it notes activity to record information needs (see section 3.5.4). It was clearly very difficult for the mothers to concentrate on the task, as infants were crawling around the room, snatching pens and post-it notes. Several notes were chewed or removed, and fruit juice was spilled on the board. The mothers did appear keen to participate, and one offered to scribe so that others could attend to their infants.

After a break, the researcher conducted a group narrative interview with the group, as described in section 3.5.3. The mothers appeared to be much more relaxed and spoke at length. It was observed that mothers were happy to fill in a little of the demographic data at a time, setting it aside to attend to their infants if necessary. Due to these observations, the methodology was adapted for subsequent sessions as described in section 3.9.

These adaptations did relieve some of the initial problems, although use of the ratings-scales brought problems due to sample size, which are discussed in section 5.2.8. Not all of the problems of interruption and distraction were solved however, as can be illustrated by the following piece of transcribed data;

Babble from infant near microphone. Section is impossible to make out. Interviewer: "oh, I've got a wee friend here, hiya... [to infant] No, I don't want any of your toast thanks".

The development officer described how the Café had occasionally encountered similar problems in the past, and had to remain flexible in its approach to information provision;

We brought in speakers that they'd [the mothers] asked for, but you know it wasn't always feasible with babies and noise, and concentration... the way we work is always very needsled and we're dead open to adapting.

The researcher's experiences of the groups underlined the need to remain flexible, adaptable and understanding while working with participants in this setting. After her experiences at the first session, the researcher took care to explain to the mothers that her activities at the group were designed to fit around the needs of their babies, which should remain paramount. The subsequent recordings of the group interviews are peppered with the babbling of infants, but also provided rich narrative data.

5.4 Analysis of findings

5.4.1 List of information needs

Arguably the list of information needs could have been written without the mothers' input, by simply asking the information gatekeepers for example. Nothing which appeared in the final list surprised the gatekeepers, nor the mothers who were present at subsequent sessions.

As noted in section 4.4, the mothers found it difficult to tease apart what their information needs had been, and the researcher noted many arose in discussion which they had not identified. Perhaps this is not surprising when it is remembered that the vast majority of participants were first-time mothers of young infants who are experiencing a "trying time", distracted by learning new caregiving tasks (Cronin, 2003), which may be compounded by "physical tiredness, fatigue and interrupted sleep" (Leahy-Warren, 2005).

Despite the limitations in sampling (sections 5.2.1 and 5.2.5) the list could act as a set of categories recognised as important by one group of mothers and information gatekeepers on which to base a more detailed study of needs.

5.4.2 Interpersonal sources of information

5.4.2.1 Friends and family

Other mothers and family members were frequently consulted, and considered to be important sources of useful information. The majority of mothers reported seeking information or advice from peers, and a mixture of actively seeking information or finding information serendipitously.

McKenzie's model of ELIS (see section 2.2.3), would appear to reflect this process. In the mothers' accounts of information practices, the four modes of information practice in the model are represented; active seeking as the most directed mode; active scanning as browsing likely sources of information; non-directed monitoring serendipitously encountering and recognising a source; and seeking by proxy making contact with or interacting with information sources through the initiative of another agent (McKenzie, 2003). Yeoman (2010) predicted that the model was flexible enough to describe the rich, complex practices of groups of women who required information to support a new role in life, and it certainly could describe the variation and richness in the mothers' approaches to seeking information.

The mothers valued the experiential nature of the information they received from peers and family members, and the shared reality of their experience with other mothers. Parallels may be drawn to Chatman's *Life in the Round* theory, where she describes how the social norms of the group become key to their acceptance of particular pieces of information. Although some did report that speaking to other mothers online could be an important source of information, the vast majority preferred speaking face-to-face, and valued a group where they felt welcomed and accepted. Many were worried that they would be not be accepted by peers, and made several references to fears of being "judged" about their parenting choices. This fear of being judged led to them holding back, and not seeking advice on certain topics.

One of the Parent Café's project workers indicated that she was in the process of developing a "welcome" pack for new attendees, which would contain information about other local activities and resources, for example. She explained that she was considering adding a code of conduct or a set of rules to the pack. If viewed in the context of Chatman's small world theory (Chatman, 1991) the mothers could be imagined as currently influenced by a set of unspoken information behaviour norms within the group. It is interesting to speculate how this dynamic may change if an agreed upon and spoken set of rules or guidelines are negotiated, and the researcher would suggest this could form the basis of a future comparative study.

In a study of mothers' attitudes towards healthy eating information, O'Key and Hugh-Jones partly attribute the credence given to advice from family members to the fact that it was perceived as being driven by a principle concern for the child (O'Key & Hugh-Jones, 2010). In other words, the source of information did not have any wider agenda, such as the need to promote local or national initiatives. Chatman's theories have been criticised for not "systematically examin[ing] interactions between small worlds and the broader society within which they exist" (Burnett & Jaeger, 2008). In other words, the role of phenomena such as the rhetoric surrounding some parenting choices such as the decision to breastfeed and public policy is not fully represented by this theory. Issues around providing infant feeding information are more fully explored in section 5.4.4.2.

5.4.2.2 Healthcare professionals (HCPs)

Mothers reported seeking information from HCPs relatively frequently, although some did not use this source at all or did so infequently. While some reported a supportive relationship with their health visitor or GP and valued their "realistic" advice, others were worried that their parenting abilities were negatively judged.

Although acting as a source of information for mothers, in the case of health visitors it is the presence of the infant that underpins their relationship with the mother, and they have a need to "establish some knowledge and understanding about the families they are visiting" (pg. 372, Peckover, 2002). Peckover describes how this can led to tension, as mothers try to determine if the HCP is concerned with support or policing, leading to practices of concealment and resistance as part of their "discursive production" of themselves as good mothers.

The current study does not allow for in-depth analysis of mothers' perceptions of the HCPs who they have formed relationships with, but the variability in the findings on how mothers perceived these sources of information may be underpinned by their relationships with these individuals, which may in turn be influenced by how their role is perceived. The mean ratings ascribed to the importance of healthcare professionals such as health visitors and G.P.s as sources of information would appear to higher than the frequency with with they are consulted (figure 4.8). Assuming a difference existed, it perhaps could be explained by the fact that an appointment system is required to see them in person (GPs), or they can only be seen at certain times (health visitors at weekly clinics) although no data was collected to support this.

Carolan (2007) argues that there is a growing trend for well-educated and well-resourced individuals to request additional healthcare information (e.g. more printed materials or website suggestions) from HCPs, and for HCPs to provide it to them. She argues that this leads to an "over-consumption" of information which can lead to anxiety and confusion. This was reflected in the current study by the health visitor, who believed that some anxious mothers "obsessively" sought health information.

5.4.2.3 Library staff and other professionals

Very few mothers reported seeking information from library staff or "other professionals" (i.e. gatekeepers who were not HCPs, library staff or Parent Café workers). Unfortunately, no data was collected on how frequently mothers came into contact with this category of "other" gatekeepers, if it all. Therefore, it is not known if mothers' low ratings for this group are based on recent experiences, or reflect a lack of experience.

Library staff were ranked far lower in terms of importance as an information source, although a few mothers did regard library staff as useful sources of information. More than half of the mothers reported that they "never" or "rarely" visited a library. Just under a third of the mothers *did* visit the library on a weekly or basis or more. No data was collected on what services the mothers were accessing during their time at the library, but the researcher would suggest that there may be a trend towards mothers attending the library for Bookbug sessions and nothing else, since they appear to be popular.

Certainly, the librarian reported that attempts to provide a "self-help" collection of health material had been met with mixed success (section 4.7.2). She perceived a need for a different approach to information provision for parents based on customer feedback, and recognised the Parent Café as a local example from which the library service was learning. Although the library's new informational sessions are still in development she believed they were proving successful so far, which she attributed to the fact they were presenting "validated" health information in a more relaxed, neutral setting than a clinic.

5.4.2.4 Conflicting information and misinformation

Many mothers reported receiving conflicting information between HCPs and between HCPs and family members or friends. They also described conflicts which arose when family members disagreed with the information the mothers had sought or received from a HCP.

Similar conflicts were reported in Arden's study of mothers' decisions of when to introduce their infants to solid foods. Mothers reported having to weigh up the official recommendations, more tailored advice from HCPs and advice from friends and family. Arden suggests that this conflict should be investigated more thoroughly in order to better frame health education messages and future information provision (Arden, 2009).

One of the Parent Café's project workers described how one of her initial "biggest worries" about the group was how to maintain a supportive atmosphere, but ensure mothers were not sharing "harmful" information (for example, incorrect information on how to prepare bottles of infant formula which could lead to illness). Cronin reported that first-time mothers expressed a desire for semi-structured group support, where they could "moan about without feeling guilty...where no-one will say anything back" (pg. 264, Cronin, 2003). It would therefore appear that there may be a need for sensitivity on the part of the information gatekeepers at the Café, in order to maintain the atmosphere valued by mothers. The health visitor and the Café's development officer also described having to deal with issues with sensitivity, so as to support and guide mothers' information seeking rather than condemning their efforts.

5.4.2.5 Maternal instinct

In order to resolve conflicts of information, mothers in the study reported using their maternal "instincts". The researcher noted that the concept of "maternal instinct" emerged several times in interviews with both the mothers and gatekeepers. One mother explained that;

I just like, follow my instinct. [Agreement from group] I mean that happens all the time.

Arden reports that maternal instinct or "some specialist abstract knowledge that only a mother could have" was one of the most commonly reported reasons for decisions about when to introduce solids to an infant. She describes a conflict that can exist between "rigid" health education recommendations, more tailored guidance from HCPs, what mothers recognise in their infants, and what their "instinct" tells them (Arden, 2009).

O'Key and Hugh-Jones noted that claims about instinct or intuition were most common where a mother's parenting decisions were in opposition to recommendations from information gatekeepers. They argue that mothers rationalise dismissing health education messages by believing that relying upon their unique knowledge of their children establishes them as "autonomous, knowing and good mothers" (O'Key & Hugh-Jones, 2010).

In the current study, the health visitor stated that ultimately she and her team have to start from the basis of believing that the vast majority of mothers want to do the best they can for their infants, and that they would not knowingly harm them. Because of this, she advises mothers that in the end

they should always go with their "instinct" as to which recommendations are best for their child. "Mother knows best" she said with a smile.

5.4.3 Online sources

As reported in section 4.5.1.2, the mothers reported a "little and often" approach to using websites to seek information, tending to rely on a few trusted sources and cross-referencing information between them. Around half of the mothers reported that they sought information from peers online, via forums, message boards or Facebook groups. However, many of the mothers did not actively seek information this way, but "lurked" without posting.

Those who did actively use forums reporting doing so for a variety of reasons; when looking to learn from others who were not represented in their offline support network (e.g. from other mothers of twins), to seek information which they did not believe their HCPs could provide, to seek advice from more experienced mothers or to seek a variety of opinions. Not all of their experiences were positive, with some mothers reporting friction, "showing off", competition and feeling that they were being judged by others. Several expressed that fear of judgement online led them to avoid posting, or made them more likely to consult offline, interpersonal sources of information. It was apparent in the researcher's observations of the mothers, that for several the boundary between their online and offline social support network had blurred as they spoke face-to-face about their shared experiences on the same forum and their online interactions.

Hasler et al (2013) performed an analysis of posts across Internet groups to identify information needs expressed by those who felt they had no other source to turn to (i.e. they were in a state of information poverty). They state that the possibility of anonymity and the availability of a wide range of topics covered by online groups can make them "prime environments in which people in situations of information poverty could potentially seek much-needed information and support". They conclude that their study uncovered evidence that those in a state of information poverty used online groups as forum to express information needs which they may have had difficulty expressing offline. This serves as a stark contrast to the online information behaviour to the mothers in the current study, perhaps unsurprisingly given their descriptions of their use of interpersonal sources which those in Hasler et al's study felt unable to use (Hasler et al, 2013).

To gain more context about the online forums used by the mother the researcher posted the question "What does your birth board mean to you?" on several boards within the Babycentre online community (http://community.babycentre.co.uk/groups/topic/1/birth_clubs). This followed the precedent of Hasler et al who collected posts from groups which were publically viewable and searchable, did not require registration to read, and had over 100 members, believing that such a group would represent a "public" rather than a "private room" space (Hasler et al, 2013).

The researcher received 30 replies, which were all overwhelmingly positive about their online experiences, although clearly results are limited by the fact that the replies were gathered from a small self-selected group. Although merely a brief exercise designed to complement the main study several noteworthy themes were apparent to the researcher, which she suggests may warrant further investigation in the future. These themes could be roughly described as valuing the boards for meeting others in *similar situations*, their *availability*, the *variety* of information available, the perception of *freedom* to enquire about anything, how they provided *reassurance*, and finally how

they were a source of community support. Some tentative comparisons between the posters' answers and those of participants in the main study may be made.

Situation, context and availability

In a reflection of mothers in the main study, many of those who replied emphasised the importance to them of being able to speak to other mothers in a similar situation, which infants the same age, who were experiencing similar information needs or problems. For example;

I really enjoy the fact that you have loads of nice people in the same situation as you ready to answer your questions no matter how trivial or silly they may seem [mother of 9 month old].

Variety of information, and perceived freedom

Many reported that they view the boards as a source of a variety which they may not receive from other sources;

[there are] second time mums, breast feeding mums, midwives, teachers, solicitors etc, you would never get this depth of knowledge in your own circle of friends [mother of newborn]

As with the mothers in the Parent Café, several mothers seemed to value this breadth of information.

Several replies expressed the fact that the group enabled the posters to be free to post to ask for information which may have been embarrassing;

We can discuss any subject no matter how gross or personal and no one is bothered or makes you feel embarrassed, in fact they will try to make you laugh while helping, we all need that [another mother of a newborn]

Reassurance

Several explained that they found it reassuring to find that others had common information needs, or were experiencing similar problems to their own.

I'm a FTM, [first time mum] and it's lovely to read how the other little ones are doing and to see how it compares with mine. Not in a competitive way though....just to ease my mind on what's 'normal' as I have no idea! [mother of 6 month old].

Again, such comments are similar to those made by the mothers in the main study.

Community

The strongest theme identified by the researcher relates to the online boards providing an interpersonal network that posters identify as being a source of support and personal and practical help. Several members of one board discussed how the group pulled together to support mothers who lost babies during pregnancy and shortly after birth, by organising charity collections and

offering a listening ear. Many of the mothers use words such as "family" or "community" to describe the boards, and several have made "real-life" friends;

These women are as real a presence in my life as my friends and family. Their opinions matter to me. [mother of newborn]

Hasler and Ruthven conclude that individuals may turn to sources of online information and support if they experience an information need which would make them appear to be less able to deal with problems than others, or could represent a socially undesirable trait (Hasler and Ruthven, 2011). What was striking about most of the replies in the current study was that although the Babycentre boards are publically viewable, many of the mothers had personal information such as their photograph, name, age, their infants' names, dates of birth, etc. visible as part of their "signature" automatically published at the end of their posts. Only one of the thirty replies stated that she valued the anonymity of the online format, stating that it allowed her the freedom to post about "everything that I wouldn't be confident enough to share with people in real life". The mothers from the Whitlawburn group reported consulting different sources of information depending upon the topic, possibly suggesting that they were making judgements about which information needs they would reveal to which people.

Drentea and Moren-Cross conducted a study of mothers' use of "birth boards" similar to those on Babycentre (i.e. online discussion boards organised by infants' date of birth). They used theories of social capital to do so, explaining that mothers' social capital has decreased in postmodern society as demographic trends have led to a decline in traditional sources of support, advice and interaction. They found that the birth boards increased mothers' social capital by providing community, emotional support and informational support (Drentea and Moren-Cross, 2005)

The mothers' comments about valuing a range of opinions reflect those of the participants in the current study, and of those who replied to the researcher on Babycentre. Similar conflicts to those reported by the mothers in the current study were reported, and described as being the cause of "much anguish". In the same way that the mother from the current study reported on her efforts to police her Facebook group (section 4.5.1.2), mothers called upon "admin" figures of authority to sort out conflict, and fought to maintain a stable, supportive atmosphere. Finally, they posed the question of whether participation of these groups might not perpetuate race, class and gender differences inequalities in access to such support and information (Drentea and Moren-Cross, 2005).

The researcher would urge some caution with this suggestion given the age of the study, and the ever-evolving picture of digital provision in recent years (Naysmith, 2013, *Glasgow faces new call to plug the digital divide*; *Deal to boost high-speed broadband*, 2013). However, it does raise interesting questions on whether creating "female spaces" to provide informational support is empowering to women since it represents pulling away from what Drentea and Moren-Cross view as the traditionally male world of the medical establishment.

5.4.4 Barriers to information seeking

5.4.4.1 Barriers reported by mothers and gatekeepers

The researcher identified four main themes in the mothers' reports of barriers which they have faced to their information seeking: lack of time and opportunity; receiving conflicting information from different sources; seeking information about potentially contentious or sensitive topics; and lack of engagement with peers. Lack of time was the most commonly reported challenge, and several reported choosing information sources based on how quickly they could be accessed (e.g. "Googling" information on a smart phone).

The mothers did *not* report any barriers related to their ability to travel to groups, access to the internet or literacy as may have been expected from a participant group sampled from a socioeconomically deprived (Berkule-Silberman et al, 2010; Shieh et al, 2009). The Parent Café's development worker has lived in the area for many years and believed that the way parts of the town were labelled as "datazones" (i.e. areas of deprivation) was a crude measure of the true socioeconomic status of residents. As she explained;

They build new houses in between, you know, kinda areas of deprivation... it isnae very meaningful.

She explained that although the group received *Tackling Poverty* funding, she believed the most pertinent problem of isolation and related stress and anxiety transcended socioeconomic barriers, so it was important to her that the group was open to all. In general, there was a disparity between those barriers reported by the gatekeepers and the participants, with the gatekeepers reporting barriers to engagement and participation.

However, by the fact that the mothers in the study *were* attending the Parent Café in the first place means that they had clearly made an effort to participate in a group, and were engaged to some level. It is not therefore surprising that the barriers reported by them were more to do with their experiences of engaging with others or feeling welcome in a group in which they wanted to participate. The most crucial barrier reported by the development officer of *isolation* clearly is not going to be so pressing for participants who already attend at least one group. Additionally, around 44% of those asked met other mothers on a social basis *in addition* to their attendance at mother and baby groups.

Furthermore, the data that was collected on their educational background (see section 4.2) suggests a well-educated participant group, who had not experienced the educational deprivation that the national statistics suggest they might based on postcode area (*Scottish Index of Multiple Deprivation*, 2012). Not only were they actively participating in the group, they were seeking information from a wide variety of sources and in two cases taking the proactive step of spending time setting up their own online support group to help other mothers as well as to seeking information themselves (see section 4.5.1.2).

The researcher suggests that this disparity between the reports of the gatekeepers and the mothers may be explained in several ways. The views of the health visitor are perhaps coloured by the fact that she is more likely to encounter those who are having a more problematic experience of

parenting, or have been referred to her via social work and have other problems in their lives. Or there may be some interview bias, with gatekeepers reporting the "worst case" scenarios to the interviewer, believing that they were the most important or most serious. The methodology described in sections 3.5.4 and 3.9 to investigate the barriers experienced by the mothers was adapted from Shieh et al's (2009) study of mothers with a low SES, and therefore may not have been appropriate for the participant population in the current study. Finally, there is the possibility that participants were reluctant to report barriers related to finance, although this seems less likely based on the personal nature of other information they shared.

5.4.4.2 Restrictions placed upon information gatekeepers

One mother described a situation where she felt a health visitor had been deliberately obstructive following her attempts to seek information about formula feeding. In the United Kingdom, *The Infant Formula and Follow-on Formula Regulations* contain regulations regarding the provision of informational material that deals with infant feeding. Under these regulations, HCPs *must* include certain information when speaking to mothers including; the benefits and superiority of breast-feeding, the possible negative effect on breast-feeding of introducing partial bottle-feeding, the difficulty of reversing the decision not to breast-feed, and *where needed*, the proper use of an infant formula (pg. 21, *Guidance Notes on the Infant Formula and Follow-on Formula Regulations [2007]*, 2013).

The 2007 regulations do not allow the promotion of formula milk through the health service. Therefore if a mother is seeking information on which formula brand would suit her infant for example, legally she could not obtain it from a HCP. Formula manufacturers cannot promote infant formula, but can promote "follow-on" milk for use with infants over 6 months. A report from The National Childbirth Trust describes how this limits parents' ability to make decisions on formula feeding based on "information free from commercial influence", and they believe that such information should ideally be "research based and come from an impartial health professional" (*NCT Briefing: The UK Infant Formula Regulations, 2010*).

The policies governing infant feeding information control the information available to the public, and reflect Burnett and Jaeger's argument that "public policy climate has become much more restrictive of the access and exchange of information" (Burnett & Jaeger, 2008). Clearly, the regulations have the potential to act as a real barrier to mothers who are seeking accurate, impartial information from a HCP. The distress of the mother described in section 4.6.4 in the current study showed how she had struggled to obtain the information she required. The scope of the current study does not examine the provision of any *particular* type of parenting information, but it suggests the provision of and needs for infant feeding information may be subject to unique phenomena and barriers which warrant further study.

The health visitor acknowledged that ultimately the information that she provided to mothers had to reflect NHS policy. She explained that she could be wary about signposting mothers to services other than her trusted, NHS-approved sources which she preferred to suggest first, before taking time to filter Google search results for others that she "reliable". She acknowledged that she experienced barriers to her own information seeking due to a lack of time, and in general had to cope with an extremely heavy workload due to understaffing in the service.

The Parent Café development officer described the difficulties that the group initially had in securing funding. During this time, she struck a balance between providing sessions which she felt met the needs of the mothers and ensuring that the group could continue. She described trying to strike a balance between which informational sessions they *had* to deliver as a condition of their funding, what the staff felt should be a priority, and what the mothers had identified as important during the initial focus group and subsequent evaluations;

We said we'd run it, we'll find the money... we were able to say this funding paid for the Café, because we delivered X amount of workshops or sessions on that [alcohol awareness and smoking].

The Café has now secured funding through the *Tackling Poverty* scheme, although as the development officer says "with funding comes conditions". This funding is intended to support those who live in "datazones", i.e. postcodes which have been deemed to be areas of deprivation. However, the development officer has always felt that there was a need for a source of social support for the community as a whole;

We're getting it right. It's just convincing the funders, it's the way they work. Yeah, you know they're tackling poverty..... But it's trying to get them to see, we say well it's not just for people who live in a datazone.

One of the things that I've always argued about is that... I did not want this to be exclusively for datazone mothers. One because it isnae fair, two because there is so many mothers who don't live in a datazone area, who can live in a massive big fancy house who are very isolated.

She was convinced by the Café's success over the three years since it had been set up, due to user evaluations and her own observations of the group's "success stories".

5.5 Chapter summary

The chapter discussed various limitations of the study including its limited size and scope, issues around participants, generalisablity of the findings, the Burnhill group, issues surrounding socioeconomic status and data collection. Next, the adaptations to the study made in the field were discussed, and the lessons learned about the need for flexibility while working with this population. The findings described in chapter 4 were analysed, and the trend towards preferences for certain interpersonal sources discussed, as well as the problems caused by conflicting information and misinformation. The concept of maternal instinct was examined, and discussed in the context of the study and of the literature. A brief exercise on online sources of information intended to compliment the main study was discussed, and comparisons were drawn with the main findings and theories of online behaviour. Finally, the chapter discussed the findings relating to barriers to information seeking, and placed the barriers to information *provision* recognised in the wider context of national guidelines and restrictions.

Chapter 6: Conclusions and recommendations for future work

6.1 Chapter overview

This final chapter presents a brief summary of the findings of the current study (6.2), followed by the researcher's personal reflections on the research process (6.3), recommendations for future research (6.4), and finally the researcher's final thoughts and conclusions (6.5).

6.2 Summary of findings

6.2.1 Methodology and participants

- Despite appearing to be based in an area of multiple deprivation, the participant group was well-educated
- The drop-in nature of the group and the presence of infants necessitated flexibility and adaptability in the methodology
- The mothers were happy to share their experiences, and rich, narrative data was collected via group interviews in a situation where it was hard to maintain focus and attention

6.2.2 Information needs

- It was difficult for the mothers to untangle one information need from another, since problems they encountered often appeared interrelated
- The information gatekeepers broadly agreed with the list of needs reported by mothers, based on their experiences

6.2.3 Information sources

- Other mothers were identified as frequently consulted, important sources of useful information
- Family members were frequently consulted by many of the mothers, although some believed family possessed "old" or "out-of-date" information
- Online sources of peer support were popular with many, who valued the breadth of experience and opinions available, although some were wary of being "judged"
- Online information seeking was often on a "little and often" basis
- Healthcare professionals (HCPs) were viewed by many as important sources of information, who valued their "realistic" advice and availability, while others worried about being judged or patronised by HCPs

• Very few sought information from librarians and library assistants, and more than half "never" or "rarely" visited a library.

6.2.4 Barriers to information seeking

- The most frequently reported barriers or challenges were lack of time and receiving conflicting information
- Those asked did not believe that they had to make parenting decisions based on limited amounts of information, and did not report barriers related to deprivation or disadvantage
- There was a clear disconnect between the barriers identified by the mothers, and those identified by the information gatekeepers.

6.3 Personal reflections

As an inexperienced researcher, the researcher was very conscious of the potential complications that could arise due to her choice of research context, since she had been involved with one of the Parent Café groups prior to the study. She realised that care would have to be taken not to let her own positive experiences of social support and the friendships which developed there colour her status as an observer and interviewer.

Corbin Dwyer and Buckle (2009) describe the tensions that can arise when a researcher acts as an "insider-outsider" in qualitative research. They believe that it is an important feature of research which comes from a feminist perspective not to deliberately or artificially create boundaries between those being studied and the researcher. They conclude that where the insider-outsider conflict cannot be resolved, the solution is for the researcher to take a dialectical approach and work in the "space between" being an insider and an outsider (Corbin Dwyer & Buckle, 2009). Given the short timescale of the project, the researcher did indeed try to work in this "space between", and used her status as a former group member and a mother to quickly build a rapport with the mothers.

As described in the section 3.8, the researcher expected to have to be prepared to adapt her methodology and remain flexible. The study proved to be a lesson in quite *how* adaptable it can be necessary to be when working in an extremely unpredictable setting such as drop-in sessions with infants present.

As described in the literature review, there has been very little research in the information science field, which initially seemed to prove a major problem to setting the findings of the study in context. However the researcher was able to draw on research from other disciplines such as health and nursing studies, and incorporate it into her analysis which provided a lesson in "widening the net", and thinking more laterally in her literature search techniques.

On a more personal note, completing the study has been valuable to the researcher since it has helped mothers to express what they felt was valuable about the Parent Café, and make suggestions for how it could improve its services. She is going to attend a de-briefing meeting for members of staff from the Parent Café, in the hope that she can provide some useful feedback to the group.

6.4 Recommendations for future research

Suggested topics for areas of future research are made throughout the preceding chapter, and are summarised in the section which follows.

Studies of information needs and practices

- How mothers' information needs and practices evolve as infants grow, or mothers give birth again
- The influence of the belief in "instinct" on mothers' information practices

Use of sources of social and/or informational support to inform provision

- A study of "non-users", and why new mothers may not engage with a support group
- Detailed data collection on socioeconomic status, for comparative study of information practices and use of services
- The use of libraries by mothers, and the relationship between attendance at activity sessions and the use of other services

Online and offline information practices

- How the concept of "judgement" can affect mothers' information practice online and offline
- The interaction of the online and offline information worlds of mothers, and the social capital provided by each
- An investigation of "female space" on line, and the possibility that it may perpetuate
 inequality

Relationships and information gatekeepers

- The information practices of fathers, and how they contribute to the information worlds of mothers
- How health visitor/mother relationships are changing in face of increased access to health and parenting information
- The influence of public policies and restrictions placed upon information gatekeepers on mothers' information practices

The suggestions outlined above stem from the findings of the current study, and reflect the second research objective to suggest how the study of this group may inform the practise of information providers. Groups like the Parent Café and the library's sessions appear to be successful in the short

term, but a study of how mothers' information needs evolve and change could inform how services could grow with them. Investigating issues around engagement and participation may inform services such as the library service, where there may be a disparity between the number of people who attend a Bookbug session for example, and the number of people who actually use the library as a source of information. Investigating the interplay between mothers' offline and online worlds could be applied to the task of increasing engagement and participation through the informed use of social media, for example. Finally, some information needs which may be experience by mothers (such as those involving infant formula) appear to be bound up in a complex web of values, restrictions and regulations which needs to be investigated more thoroughly.

6.5 Final thoughts and conclusions

The group of mothers which participated in the current study were well-educated, computer literate and actively engaged with a source of social and informational support within their community. Around half were also engaged to a greater or lesser degree with online communities which may afford them similar support. They appeared to face no significant material challenges to their information seeking practices, and seemed to know where to turn to meet their information needs.

However, their accounts of their information worlds contained reports of confusion, conflict, mistrust, judgement and misinformation. Clearly, easy access to information was not a quick fix to guide them through difficult decisions as they learned how to care for their infants. The influence of wider societal pressures such as that to be a "good mother", to breastfeed, and be responsible for learning how to care for an infant were clearly apparent in the mothers' accounts of their information practices.

This study was intended as an exploratory one with recognised methodological limitations, but it has provided some suggestions for future areas of research, and acted as a testbed for certain methodological approaches. The fact that the Parent Café has proven so popular with mothers that it is now being emulated by the library service suggests to the researcher that mothers clearly value whatever is "special" about such a mix of community, emotional, informational and practical support that warrants further investigation with a wider, more representative sample of mothers.

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Appendix 1: Participant Consent Form

Investigating the information needs of mothers with infants aged 0-1 year old.

Researcher: Katy Loudon

University: University of Strathclyde

Department: Department of Computer and Information Sciences

- I confirm that I have read the information sheet and understand what participation in this study involves, and that the researcher has answered any queries I may have.
- I understand that all aspects of the study are voluntary and that I am free to withdraw myself or my data from the research at any time without having to provide a reason for doing so.
- I understand that all information will remain confidential, and no personally identifiable information made publicly available.
- I consent to interviews being audio-recorded (if applicable)
- I consent to participating in this study.

I confirm that I have read and agree to the above and am willing to participate in the above project.

Name of participant (please print name):
Participant's signature:
Date:

Appendix 2: Demographic data questionnaire

All of the following information will be treated confidentially, and will be reported anonymously. Please ask if you have any questions. Thank you again for taking part in the study.

Your age:					
Age of your baby (in mon	ths):				
Is this your first baby? (plo	ease circle) yes/no				
If not, how old are your o	ther children?				
Have you completed; (ple	ase tick)				
School years S1-S School years S5 o A college course A university cours	r S6 □ □ (please give detai	ls)			
How often do you use the	internet to look for info	ormation? (P	Please tick)		
Never □	Rarely □	Weekly	Every few days	5	Daily
How much time do you sp	oend on the internet eve	ery day? (incl	luding Facebook, et	tc.)	
Not a dail	y user Less than an ho	our 1-2 ho	urs 2-3 hours	More tha	n 3 hours
How often do you visit the	e library?				
	Several times a week	Weekly	Every few weeks	Rarely	Never
How often do you take yo	ur baby to baby groups	or activities	?		
	Several times a week	Weekly	Every few weeks	Rarely	Never
How often do you meet w	rith other mothers outsi	de the baby	groups?		
	Several times a week	Weekly	Every few weeks	Rarely	Never

Appendix 3: Ratings scales, second session

Please circle to rate how often you look for information or advice from the following people or sources, if 1 is never and 5 is frequently.

	Never			F	requently
Family members	1	2	3	4	5
Other mums face-to-face	1	2	3	4	5
Other mums online (Facebook, etc.)	1	2	3	4	5
Friends without children	1	2	3	4	5
Health visitor	1	2	3	4	5
G.P.	1	2	3	4	5
Librarian or library assistant	1	2	3	4	5
Other professional (e.g. social worker)	1	2	3	4	5
Staff or volunteer at baby group	1	2	3	4	5
Websites (e.g. Babycentre, parenting.com)	1	2	3	4	5
Books	1	2	3	4	5
Other printed material (leaflets, etc.)	1	2	3	4	5
Other (please specify)	1	2	3	4	5

Please circle to rate how important the following sources of information and advice are to you, if 1 is not important and 5 is crucial.

	Not important				Crucial
Family members	1	2	3	4	5
Other mums face-to-face	1	2	3	4	5
Other mums online (Facebook, etc.)	1	2	3	4	5
Friends without children	1	2	3	4	5
Health visitor	1	2	3	4	5
G.P.	1	2	3	4	5
Librarian or library assistant	1	2	3	4	5
Other professional (e.g. social worker)	1	2	3	4	5
Staff or volunteer at baby group	1	2	3	4	5
Websites (e.g. Babycentre, parenting.com)	1	2	3	4	5
Books	1	2	3	4	5
Other printed material (leaflets, etc.)	1	2	3	4	5
Other (please specify)	1	2	3	4	5

Please circle to rate how useful the information which you receive from these people and sources is, if 1 is not at all useful and 5 is extremely useful.

	Not at all useful				Extremely useful
Family members	1	2	3	4	5
Other mums face-to-face	1	2	3	4	5
Other mums online (Facebook, etc.)	1	2	3	4	5
Friends without children	1	2	3	4	5
Health visitor	1	2	3	4	5
G.P.	1	2	3	4	5
Librarian or library assistant	1	2	3	4	5
Other professional (e.g. social worker)	1	2	3	4	5
Staff or volunteer at baby group	1	2	3	4	5
Websites (e.g. Babycentre, parenting.com)	1	2	3	4	5
Books	1	2	3	4	5
Other printed material (leaflets, etc.)	1	2	3	4	5
Other (please specify)	1	2	3	4	5

Appendix 3: Ratings scales, third session

Here are some statements about how easy you find it to get the information you need to look after your baby. Please read each one, and then circle to show how much you agree or disagree which the statement. Thank you again for your time and your help.

	Strongly disagree			•,	Strongly agree	
I have family members or friends who can answer my questions	1	2	33	4	5	
There are opportunities to meet other mums near my home	1	2	3	4	2	
I am comfortable speaking to other mums face-to-face	1	2	3	4	5	
There are questions I would be uncomfortable asking other mums	1	2	3	4	2	
I am worried that other mums may judge my parenting choices or problems	1	2	3	4	5	
I know about groups to take my baby to near my home	1	2	3	4	2	
I can travel to baby groups, the library or the health clinic easily	1	2	3	4	2	
There are information sessions (breastfeeding groups, weaning fairs) near my home	1	2	3	4	2	
My health visitor provides me with helpful information	1	2	3	4	2	
There are questions I would be uncomfortable asking my health visitor or G.P.	1	2	3	4	2	
I have access to the internet at home	1	2	3	4	2	
I know where to find parenting information on the internet	1	2	3	4	2	
It's time-consuming to find parenting information on the internet	1	2	3	4	2	

	Strongly disagree				Strongly agree
There isn't much information about parenting on the television or the radio	1	2	8	4	2
I know where to access books or magazines about parenting if I wanted them	1	2	3	4	2
Books and magazines about parenting are expensive	1	2	3	4	2
Parenting information in books and magazines can be hard to read	1	2	3	4	5
I receive unwanted advice about parenting from friends or family	1	2	3	4	2
Too much information about parenting can stress me out	1	2	3	4	2
I have to make parenting choices based on limited information	1	2	3	4	2
I have to make parenting choices based on conflicting information	1	2	3	4	2
Having more information would help me make parenting choices more easily	1	2	3	4	2
I find it straightforward to find information I trust	1	2	3	4	2
I don't need any more parenting information – I rely on my instincts	1	2	က	4	2