EXPLORING THE INFORMATION SEEKING BEHAVIOUR OF MUSLIM MIGRANTS IN SCOTLAND

A GLASGOW CASE OF STUDY

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Declaration

‘This thesis is the result of the author’s original research. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.’

Signed:

Date: 11/09/2019

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Dedication

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Abstract

Introduction: Immigration is a global issue and the number of immigrants is rapidly increasing. Understanding the everyday information seeking behavior during the settlement period will facilitate the efforts to provide better relocation experience for, both, the newcomer and the host society. The purpose of this research is to understand the everyday information seeking behavior of Muslim migrants in Scotland, and the factors influencing their behaviours.

Design and methodology: This research has an interdisciplinary theoretical framework brings together Wilson's everyday information seeking behaviour model, Chatman's information poverty theory and social capital theory. Qualitative data is collected through in-depth semi-structure interviews with 19 Muslim individuals from both genders, who variously attended 10 Islamic community centres in the Greater Glasgow area. Participants were aged between 18 and 45 years old (avg. age 29) and had all moved to Glasgow from overseas within the last 5 years. The data is interpreted and analysed through the lens of the theoretical framework and utilizing thematic analysis and narrative analysis techniques.

Findings: the information needs of participants during their settlement periods in Scotland can be grouped into 13 needs categories across multiple topics placed into three groups, high occurrence needs (education, religion, and entertainment), medium occurrence needs (social norms, travel, health, and immigration), and low occurrence needs (shopping, employment, housing, financial support, driving licence, and technical support).

Participants variously discussed a number of information sources utilised, grouped into 8 categories, online and friends appear to be the most preferred information sources, followed by printed material, educational professionals and staff, health professionals and staff, family, and work colleagues. Preferences for information sources were mostly influenced by the tendency to seek experiential advice, to seek through authoritative sources, to seek second opinions, to seek through trusted sources.

This study provides evidence that the everyday information behaviours of the Muslim participants are largely influenced by the seekers' identity, their feelings of being stigmatised, and issues of trust. Mosques playing an important role as an information grounds and source of social capital.

Conclusion: this study provides insight into identity as a significant influencing factor in the information behaviours of Muslim migrants to Scotland, and the associated role of Mosques as important information grounds. Findings illustrate that identify has a positive trust related role when associated with experiential advice, and a negative role when associated with experiences and/or perceptions of stigma that can limit access to information. Recommendations are made for further investigation of issues of identity and stigma with further groups. Findings also have implications for the effective dissemination of important public information to Muslim migrants to Scotland (e.g. health, education, employment), and raise important questions regarding the role of Mosques. Again, recommendations are made for further research.

Keyword: Information behavior, information seeking, information need, Social capital, settlement period, Muslims

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1 Introduction

This research explores the information behaviours of Muslim migrants to Scotland during the settlement period. “Settlement period” is defined, for purposes of this study, as the first five years after arrival.

This research adopts a qualitative approach. The subjects of the study are Muslims, chosen from Islamic community centres and aged between 18 and 45 years old, who moved to Glasgow from overseas within the last 5 years. The data collection instrument is in-depth interviews.

This study contributes to Information behaviour literature by helping us to understand the everyday life information behaviour during the settlement period of newly relocated people, and how this behaviour may influence or be influenced by their social capital. Results will be distributed to service organisations, programs’ policy makers, relevant institutions, and City Councils to promote and provide access to the information needed to enable social inclusion and adaptation, which will in turn lead to a better relocation experience.

1.1 Problem statement / research context

This study aims to explore and better understand the relationships between information behaviours and social capital, and how these two phenomena influence

each other during the settlement period of Muslim migrants (exploring shared interdisciplinary concepts of access, participation, and engagement). The study provides an in-depth investigation of a specific demographic group.

Donald O. Case, a well-known scientist in the field of information behaviour, has conducted a comprehensive literature review of information behaviour (Case, 2016). In addition to the area's related theories, models and studies used to study the information behaviour (Case, 2016), Case grouped the studies in terms of seeker characteristics, examining information seekers by occupation, by role, and by demographics (Case, 2016).

Most of the studies were done to investigate the information needs and information seeking behaviour of users by occupation (particularly professionals); for example, academic scientists (Hemminger DihuiVaughan, K.T.L.Adams, Stephanie J., 2007) and paediatric nurse educators (Barta, 1995). Fewer studies were concerned with investigating the information behaviour of seekers by roles and demographics.

Only very limited research was focused on information seeking behaviour and information needs in relation to social capital as a factor (Johnson, 2007, 2010). One study elaborated a theory explaining the influential relationship between information behaviours and social capital (Widen-Wulff *et al.*, 2008). In another study investigating the role of social capital in the settlement period, the authors found that information needs were the top needs for which participants sought satisfaction. The study also found that social networks were the first source of information to be perused by the participants (George and Chaze, 2009).

Social capital has many definitions, but the one crafted by Putnam is relevant to this study and is the most appealing definition in its context. In Putnam's definition, social capital comprises "The features of social life − networks, norms, and trust − that enable participants to act together more effectively to pursue shared objectives. (Whether or not their shared objectives are praiseworthy is, of course, another matter.)" (Putnam, 1996).

This study, however, is an attempt to understand the influential relationship between information behaviour and social capital during a particular period of time. Moreover, the present study explores in depth how the change in either social capital or information behaviour will influence the other during a course of time. The study population is defined as people who have just moved to a new environment having a different economic, cultural, and social setup. During the settlement period, people will make an effort to understand the new environment by identifying their information needs, searching for the information that will satisfy these needs, and using the results to cope with the settlement situation at the end of the settlement period.

However, there is no fixed period of experience that can be attached to the concept of "settlement"; it depends on the context that encapsulates the settlement circumstances (Quirke, 2011). In this study, defining the "settlement period" is vital; the settlement period begins as the subject of the study arrives at the new location with an ultimate goal in mind. The end of the settlement period can be defined as the time of recognition of information needs directly related to one's ultimate goal. Further definition of

settlement as an element in setting the context (Courtright, 2007) of this research will come later in the study. For the purposes of this study, and acknowledging that the settlement period can be fluid and individual, a period of 5 years is adopted.

Further, there are limited studies examining the information behaviours of migrants during the settlement period, and to date none examining the needs and behaviours of Muslim migrants.

This study makes a contribution to Information behaviour literature by helping to explain how the information behaviour during the settlement period of newly relocated people influences or is influenced by their social capital. Beyond academic contribution, findings will be of interest to service organisations, programs' policy makers, relevant institutions, and City Councils, providing guidance to promote and provide access to the information needed to enable social inclusion and adaptation, which will in turn lead to a better relocation experience.

By learning the information needs and information-seeking behaviours of the participants, this research will be able to address constraints and barriers that prevent them from satisfying their information needs during the settlement period.

1.2 Research Goals

1. To explore the information needs of Muslim migrants in Scotland during the settlement period.

2. To explore the information sources of Muslim migrants in Scotland and identify the factors influencing the choice of information sources.
3. To identify the significant factors and barriers that shape the information seeking behaviours of the study subjects.
4. To propose and integrated conceptual framework to understand the relationship between the information behavior and the social capital of the Muslim migrants in Scotland during the settlement period.

1.3 Research Questions

1. What are the information needs of Muslim migrants to Scotland during the settlement period?
2. Where do they seek information to satisfy their information needs, and why?
3. What are the factors influencing the everyday information seeking behaviour of Muslim migrants to Scotland during the settlement period?
4. What is the relationship between the information behaviour and the social capital of Muslim migrants to Scotland during the settlement period?

1.4 Theoretical framework

Neither information behaviour nor social capital, as the two main disciplines of this study, has a theory focused on the relationships between information behaviour and social capital. To study the influential relationship, this interdisciplinary study will seek deep understanding of features, elements, and factors of both main disciplines − information behaviour and social capital – and then will apply an integratable model and/or theory to explain the causal phenomena. Putnam relates social capital "to features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating the coordinated actions" (Putnam, 1993, p. 167). This study focuses on the features that play a significant role in formulating and shaping participants' social capital through the lens of Putnam's definition. Deep analysis of trust and networks, as the two constructors of social capital phenomena, will result in better understanding of the nature of the social capital that the participants form, encounter, and manipulate in this research context. Understanding the context of the research, on the one hand, and exploring trust and social networks, on the other, will help to identify the appropriate approach for measuring social capital, given that the way social capital is conceived of depends on the contextual configurations (Baron, Field and Schuller, 2000, p. 29).

Before finding the influential relationship that this study is concerned with, the researcher must explore in depth and analyse the phenomenon of information behaviour. Chatman's small world concept within her theory of "Life in the round"

(Chatman, 1999) shares most of this study's context configuration, and therefore will be adapted to understand the contextual aspects of the information behaviour which the present study is investigating. "Worldview" is a concept derived from "Life is the round" theory (Chatman, 1999) to explain that the study participants share the same worldview. "This worldview includes language, values, meaning, symbols, and a context that holds the worldview within temporal boundaries" (Chatman, 1999). This study will identify, explain and analyse the behaviours of the information seeker through the perspectives of more than one theory. For example, Savolainen's "way of life" and "mastery of life" will explain how to distinguish the needs and the strategies. The situation of an information seeker who is newly arrived in a new life environment will be distinguished from the situation of a relocated person with an ultimate goal in mind. Moreover, Savolainen's theory will help to give a general idea of the influence that social capital exerts in the context of information behaviour (Savolainen, 2005).

To provide more and deeper analysis of the relationships between social capital and information behaviour, this study will consider Wilson's model "which may serve to integrate studies for the benefit of future research in a variety of fields" (Wilson, 1997). For instance, Social factors can be an intervening variable that is affected by a change in social capital.

1.5 Methodology (overview)

A systematic literature review will be conducted to define the key concepts, models, and theories within the two study disciplines − information behaviour and social capital; to review existing work; to identify appropriate approaches to the empirical component of this research; and to inform the design of part B of the research methodology.

The empirical component will be a qualitative study, as time is one of the dimensions (Case, 2016) within which to investigate the changes in information behaviour and social capital of the participants.

Data can be collected qualitatively by using in-depth interviews, as is recommended for researching small groups in the social sciences (Crouch McKenzie, 2006; Savolainen, 2006). Interviews will be conducted from the time of almost immediate entry to Scotland and within the first 5 years of settlement.

The research methodology is specific and discussed in depth in Chapter Two which follows.

2 Literature review methodology

The goals of conducting this intensive critical literature review are:

To define the key theoretical concepts and models within the two study disciplines, information behaviour and social capital, and the relations between them, the study will:

- Review existing work/studies.
- Identify key concepts.
- Identify key models and theories.
- Identify appropriate approaches to the empirical component of this research, informing the design of part B of the research methodology.
- To review the knowledge base of this study.

The structure of the literature review is determined by its goals and represents the focus of this study's questions. The review is structured in two main parts: information behaviour, and social capital. Topics to be discussed are:

- Key Concepts.
- Key models and Theories.
- Related studies.

Thus, the research question related to the relationship between social capital and information behaviour will be reflected in the last part of the literature review through a critical discussion of the body of work on the two phenomena.

2.1.1 Process

This critical literature review follows the spiral and iterative process described by Saunders, Lewis and Thornhill (2016), "The process can be linked to upward spiral, culminating in the final draft" (Saunders, Lewis and Thornhill, 2016, p. 72).

The process starts by analysing the research questions and the objectives. Next, it defines the search parameters. Parameters and keywords must reflect the goals of the review and therefore will focus on the questions and objectives of the study. Parameters and keywords are variables which are regularly reviewed and refined during the iterative process for control of scope, depth and breadth.

Next in the process is searching and locating the sources based on the predetermined parameters and generated keywords. The final step, in the first spiral iteration, is to evaluate and record the sources found in the search. The process will continue until the next cycle is entered, which consists of drafting the review, then refining the parameters and search terms. In the process of narrowing the search scope, the cycles become more focused on the review goals. The process ends by producing the final draft of the review body.

In order to systematically process the critical literature review, the researcher analysed the research questions and made a decision to initiate three processes for three main parts of the literature review, as follows:

- **Part A:** information behaviour review;
- **Part B:** social capital review; and
- **Part C:** information behaviour and social capital.

This decision to separate the parts was supported by the fact that this research is an interdisciplinary study aimed at finding the causal relationship between two phenomena. Structuring the process as Parts A and B, based on the disciplines, will develop better *cognitive decentring*, which is defined by Allen F. Repko as acquiring the skills to distinguish perspectives among disciplines, and "thus perceive reality more accurately" (2012, p. 55).

2.1.2 Parameters

In starting the process of the literature review the first steps are to define the parameters and generate the keywords. Parameters and keywords must reflect the goals of the review, and therefore must focus more on the questions of this study. Parameters and keywords are variables that are refined during the process iteratively for control of scope and breadth.

The parameters of this literature review are:

Languages: English as the language of the sources.

Disciplines: library and information science.

Geographic boundaries: no restrictions on the geographic origins of the sources.

Publication period: no restrictions on the publication date of the sources.

Types of sources:

Secondary: published books and e-books, refereed academic-journals.

Primary (grey): conference proceedings, governmental reports, third party reports.

2.1.3 Keywords

Keywords are grouped into two groups of relevant variations, used individually and/or in combination as part of the search process that was defined in a previous section.

Keywords relevant to *information behaviour* are:

- Information behaviour
- information sharing
- information-seeking
- Information practice
- Information behaviour
- information needs
- information use
- information seeking

- Information poverty
- Newcomer
- Settlement period
- Muslim migrants
- Muslim migrants to Scotland

Keywords relevant to *social capital* are:

- Social capital
- Social trust
- Social groups
- Bonding social capital
- Linking social capital
- Bridging social capital
- Social relationships
- Newcomer
- Settlement period
- Muslim migrants
- Muslim migrants to Scotland

2.1.4 The Search

The search is conducted by utilising the online and physical facilities of the University of Strathclyde Library. The searcher used Boolean operators between keywords and applied filters during the search to match the review strategy.

Search queries for each part can be constructed using the following general forms:

- **Part A:** Information behaviour
- **Part B:** Social capital
- **Part C:** Information behaviour AND Social capital

Boolean operator ‘OR’ is used between the keyword variations listed above.

The databases and catalogues used to search are a combination of: databases for disciplines related to library and information science, for instance, Library and Information Science Abstracts (LISA) and Emerald; databases for disciplines related to social science, for instance, Social Sciences Citation Index and Applied Social Sciences Index and Abstracts (ASSIA); and general databases to search the literature across disciplines, for instance, Google Scholar and Scopus.

Queries design and the filters available were used to apply the parameters of this literature review search strategy. As an example, to illustrate how query design is important for putting the strategy into practice: Information behaviour and social capital as two essential concepts were wrapped by quotations to narrow the results by searching the exact concepts as “information behaviour” or “social capital” instead of searching each word as a stand-alone term. In most cases, databases online accept long strings as a query to search all keywords in one try, such as searching LISA Database via ProQuest interface. The query used in this case was:

“("Information behaviour" OR "Information behavior" OR "Information practice" OR "information sharing" OR "information needs").

However, this particular query search resulted in 474 records, that is, after applying filters required by the parameters and limiting the search to the abstracts and keywords of the material.

The key words, Muslim migrant, Muslim migrants to Scotland, settlement period, and newcomer where also added to filter the results based on these topics.

Furthermore, varied combinations of information behaviour and social capital keyword groups were joined by the "AND" operator and applied to the databases to retrieve literature related to the relationship of the two disciplines, in order to critically review and identify themes. A basic example of such a search string in this case would be "information behaviour AND social capital".

3 Literature review

3.1 Information behaviour

The definition of information behaviour is associated with the assumption that the information seeker has an information need that is an "anomalous state of knowledge" needed to solve a problem related to a "context of performing a task" (Savolainen, 2008). Case (2016) defines information behaviour as that which "encompasses information seeking as well as the totality of other unintentional or passive (…), as well as purposive behaviour that does not involve seeking". Like Case (Case, 2016),

Wilson (2000) defines information behaviour as the totality of information seeking action, including its active and passive forms.

3.1.1 Key concepts

3.1.1.1 Information

Information "has been used to denote various overlapping concepts" (Case, 2012, p. 46). Information as a concept remains broad in meaning, difficult to explicitly define, and problematic. The word "information" may appear in different disciplines to operate different meanings (Case 2012, p. 49). Buckland expressed the view that "exploration of 'information' runs into immediate difficulties" and described the term "information" as "ambiguous and used in different ways" (Buckland, 1991). Case argues that "defining information in an absolute and final sense is not entirely necessary for the study of information phenomena to proceed" (Case, 2012, p. 69).

Case suggested two definitions that should be considered whenever there is a need to offer an explicit one. The first definition, coined by the anthropologist George Bateson (1972, p. 489) and reworded by Case (2012, p. 46), was "any difference that makes a difference to conscious, human mind". According to Case, this definition is a "broad one" and one "implying a change to the structure of a human mind" (Case, 2012, p.

74). The second definition that Case suggested is "the pattern of organization of matter and energy" (Parker, 1974).

Ruben grouped the information concept into three orders (1992). Ruben's first order of information is "environmental data, stimuli, messages, or cues". This information order, according to Ruben, lives in the "external environment" but has not yet been used. Second order information consists of "internalized appropriations and representation" (Ruben, 1992); information which is received and is in a usable form. Ruben explains that second order information "refers to both the short-term … and to the long-term". Second order information deals with information being transformed from its idle state in the first order to become activated at the individual level. However, in the third order of information, information has started to spread out among individuals within groups. Ruben defines his third order information as "socially/culturally constructed, negotiated, validated, and sanctioned appropriations, and artefacts".

Another categorisation within the concept of information is produced by Buckland (1991). In his work "*Information as Thing*", he grouped information, based on its uses, into: information-as-process, information-as-knowledge, and information-as-thing (Buckland, 1991).

In the first sense, information-as-process, it is obvious that, as agreed by both Ruben and Buckland, one use of information as a concept takes place "when someone is informed" (Buckland, 1991). Similarly, in Ruben's categorisation, the process can be seen from many aspects. A holistic view of Ruben's three information orders can be

easily mapped as a process of becoming informed, at both the individual and social levels. Also, process can be seen in Ruben's second information order feature of short-term transformation, which is a "construction of information" (Ruben, 1992); that is, a process of bringing the information to the living systems.

The second sense in the Buckland categorisation of information is information-as-knowledge, or "that of which someone is apprised or told" (Buckland, 1991). The last category is the central subject of the Buckland account, namely, information-as-thing. Buckland argues that the intangibility of information-as-knowledge will prevent the information from being communicated, and that therefore, information-as-thing will "have to be expressed, described, or represented in some physical way, as a signal, text, or communication" (Buckland, 1991).

Information conceptualisation can be another dimension that may affect access to the information itself; more than one categorisation of the information concept resulted from the "reviews of six research literatures that consider access from different vantage points to identify common aspects of the concept 'access information'" (McCreadie and Rice, 1999). McCreadie and Rice placed the information concept into four categories: information as commodity/resource, as data in the environment, as representation of knowledge, and as part of the communication process. It worth mentioning here that McCreadie and Rice offered a dissection of Buckland's information-as-thing. The dissection can be observed in their first three categories: information as commodity/resource, as data in the environment, and as representation

of knowledge. “It seems that McCreadie and Rice are trying to make finer distinctions than Buckland regarding possible embodiments of information” (Case, 2012, p. 51).

Case identified five types of assumption as problematic in defining the information concept (2012, p. 56). The types are: Utility, Physicality, Structure/Process, Intentionality, and Truth.

In the first type, Utility, as Case explained, information should have “some kind of effect” (Case, 2012, p. 56). The effect can be in the form of a change in certainty level and/or a change in power. Physicality (the second type) is represented by the argument that information must be in a physical state. This claim can be seen, to some extent, in Buckland’s information-as-thing, as well as in McCreadie and Rice’s dissection of the information concept. Structure/Process (third type) is asserted in the argument that information must “be composed of elements (…) or in some way consist of a complex ‘whole’” (Case, 2012, p. 57). Intentionality (the fourth type) is asserted in the statement about information that “it [is] necessary to assume that someone (or something) intends to communicate it to another entity” (Case, 2012, p. 57). Truth is the last type, requiring discussion of the assumption that information should (or, alternately, need not) be true (Case, 2012).

Information will remain a “broad concept” (Case, 2012, p. 73). “Almost every scientific discipline uses the concept of information within its own context and with regard to specific phenomena” (Capurro and Hjørland, 2005, p. 356). Within Library information science, Case argues that there is no need to attach an explicit definition

to the concept of information; rather, we should be "treating information as a primitive concept that is so basic to the human understanding" (Case, 2012, p. 74).

3.1.1.2 Information needs

The information needs concept "is the next fundamental, building on a primitive notion of 'information.'" (Case 2012, p.77). Information needs may be observed by recognising information seeking activity (Allen 1996, p.56). Allen's claim upheld Grunting's perspective that needs can be categorised as an "inner motivational state" which motivates the person to establish information seeking behaviour (1989, p.209).

Negotiating information needs can be framed into four levels, as elaborated by Taylor (1967, 2015) study of the question negotiation between library users and reference librarians, the visceral, conscious, formalized, and compromised needs. In visceral level, the need cannot be recognized and might not exist. In the conscious level, the need is mentally existing but ambiguous and the user unable to clearly express what he/she needs. In the formalized level, the user is aware about his/need and can express it. In the compromised level, need is formed to fit the inquiry system.

Taylor (1967, 2015) consider the information need as a primary need of which directly motivate the seeking. Unlike Taylor (1967, 2015), Wilson (1981b, 2000) argues that information need is not a primary need but rather a secondary, and context related, need. According to Wilson (1981b, 2000), information need is always associated with

more fundamental need. For example, a the need for information related to diagnose a health issue such as chest pain is a secondary need triggered by the need to treat the pain itself. Savolainen (2017) share both prospective about information needs being primary and secondary depends on how the information need motivates and/or derive the information seeking.

Needs also placed by Green (1990) into four conclusions. Green argues in his first conclusion that a need is always associated with a goal. Explaining Green's first conclusion as the situation in which somebody "needs to know" something because he/she desires to accomplish a goal, Case writes, "the key factor is that knowing it will put me at, or closer to, an end state that I want to achieve" (2012, p.78).

In his second conclusion, Green promotes contestability as an essential feature of need. According to Green, contestability in this sense consists of distinguishing "need" from "want", in that someone could continue to discuss, argue and "engage in rational conversation" about whether or not something is needed. However, this is not the case with "want" (1990, p.66).

In the third conclusion, Green suggests that "needs has a strong relationship with necessity". In order to meet a particular need, there is usually a necessity to satisfy another need. "Whether it should be depends not on the necessity . . . but on the desirability of the purpose". Case points out that associating need with necessity brings "more moral weight" to the claim, as of the use of the phrases "human need" and "basic need" to refer to a desirable life goal is acceptable (2012, p. 78).

Green's fourth conclusion offers the feature that "there is no necessary psychological element in a need" (1990, p. 66).

3.1.1.3 Information seeking

The concept of information seeking refers to the activity that the seeker undertakes to find information that will meet his/her information need. Information seeking is defined by Case as "a conscious effort to acquire information in response to a need or gap in your knowledge" (2012, p. 5). Case explains that information seeking is an activity associated with the process of making a decision such as whether to buy a house or answering a question that one has in mind during a predetermined time window. Tom Wilson defines information seeking as an activity triggered by the presence of information need, that is, "the purposive seeking for information as a consequence of a need to satisfy some goal" (Wilson, 2000, p. 49). The seeker enters a seeking mode to find the information needed to fill a knowledge gap by examining different information sources and search procedures such as surfing the web, asking a friend, and/or reading a book. Information seeking can be associated with a timeline, or can be motivated by the person's curiosity about information he/she has encountered and wishes to know more about (Case, 2012). Some researchers define information seeking as a process of "either discovering a pattern or filling in gaps in a pattern previously recognised" (Case, 2012, p. 90). An example is Zerbinos' definition of information seeking:

> *Information seeking takes place when a person has knowledge stored in long term memory that precipitates an interest in related information as well as the motivation to acquire it. It can also take place when a person recognizes a gap in their knowledge that may motivate information as well as the motivation to acquire it. It can also take place when a person recognizes a gap in their knowledge that may motivate that person to acquire new information. If information seeking is more when a person recognizes a gap in their knowledge that may motivate that person to acquire new information. (1990, p. 922)*

The information seeking concept is associated with a purposive activity engaged in to fulfil a recognised need, a definition which may contain a limitation or may include other activities such as obtaining information passively (e.g. Wilson, 1996); it may also refer to other behavioural features that influence the seeking. The next section will define the concept of information behaviour that incorporates information seeking and other factors.

3.1.2 Key models and theories

What is information seeking behaviour, in terms of its definition and its components for this study's purposes? Two key theorists can be identified as suitable for this study: Wilson (1997) and Chatman (1996).

Models in information behaviour are used to plot factors and variables which shape the information seeker's journey to satisfy an information need (Talja, Keso and Pietiläinen, 1999).

According to Johnson, information behaviours are identified to predict seeker behaviours on a "theoretical basis" (Johnson, 1997, p. 104); therefore, models are effective tools for enhancing information seeking strategies.

In general, information behaviour relies on models to understand and explain the factors and variables involved in shaping the behaviour of the information seeker (Johnson, 1997, p. 104).

In this section, the researcher chooses to start with an overview and explanation of the models before presenting the related key theories, because models are simpler in scope. Moreover, models focus on a specific context to explain the seeker's behaviour, usually by a diagram that is easy to follow. However, models may refer to one or more theories on their diagrams or flow charts. "Both theories and models are a simplified version of the reality" (Case, 2012, p. 134).

Case claimed that models of information behaviour "vary as to their assumption, structure, purposes, scope, and intended uses" (Case, 2012, p. 135).

Case also noted two variations of information behaviour models: exposure and proactive. In the exposure models, it is assumed that the information seeker is exposed to the information so as to be able to recognise or reprioritise his/her information needs, and therefore initiates the seeking process to satisfy the recognised information

need. exposure models can be seen in in the fields of health, shopping, and marketing, and are popular when illustrating “topics in which other parties try to influence our behaviour” (Case, 2012, p. 136). Longo’s work provides an example of exposure models (Longo, 2005).

On the other hand, some models, which Case calls “proactive”, assume that the user has already recognised his/her information need and is willing to begin the process of seeking information.

The first variation, according to Case, depends on the scope of the context that the model is considering to explain the information behaviour within. Some models are considered general models; others are meant to be applicable to a specific context (Case, 2012, p. 135). Wilson’s (1997) model is an example of a general model. The information-seeking and communication model (ISCM) is an example of one that is meant to be applicable to the communication context and is developed by analysing other models of information behaviour, such as the Wilson model (Robson, 2013).

Models are usually represented by a diagram or flowchart. There are no standardised information behaviour modelling techniques or rules. Case noted that models vary in terms of their chart types; for instance, there are models based on information flow, information processing, and yes or no decisions (Case, 2016). Models have no unique dimension to centre on. But some models are centred on the contextual aspect of the topic, while others may be centred on factors and variables.

Another aspect that might serve as a basis on which to categorise models is measurability: that is, the ability to test and/or validate the model against the field.

Measurement can be quantitative; in contrast, some models are designed by a qualitative method, focusing on factors and variables that may not be measured. Thus, the quantitative or qualitative approach can be considered another basis on which to classify models of information behaviour. Yet, some models are based on factors and variables which cannot be measured or tested except through mixed methods.

The focus of this review is on reviewing key models and theories that centre their design around factors and variables derived from the process of seeking, rather than being designed to show/track the process. That should provide a sense of building influential relationships between factors, variables and the process itself.

3.1.2.1 Wilson Model

In 1981, Wilson proposed his first information behaviour model. The model is elaborated by analysing the needs concept; thus it assumes that the user has a need which encourages him/her to be involved in a set of activities. Wilson placed these sets of activities in a box called *information-seeking behaviour*, which can be a demand for other information sources or information systems (Wilson, 1981a).

Information systems, from Wilson's perspective, "must have access to various 'embodiments of knowledge' … such embodiments may be documents or living people" (Wilson, 1981a).

Wilson developed his latest information behaviour model through a series of studies (Wilson, 1981a, 1997, 1999). In designing it, he started by stressing the importance of the context of the information need, in order to overcome the need's subjectivity (Wilson, 1997).

Wilson's model uses theories from various fields as activating mechanisms; Case calls them motivators (2012, p. 155). In the diagram (Figure 1), there are two separate 'Activating mechanism' boxes, each one attached to one or more theories from various fields of study that explain and suggest motivation for the person's search process.

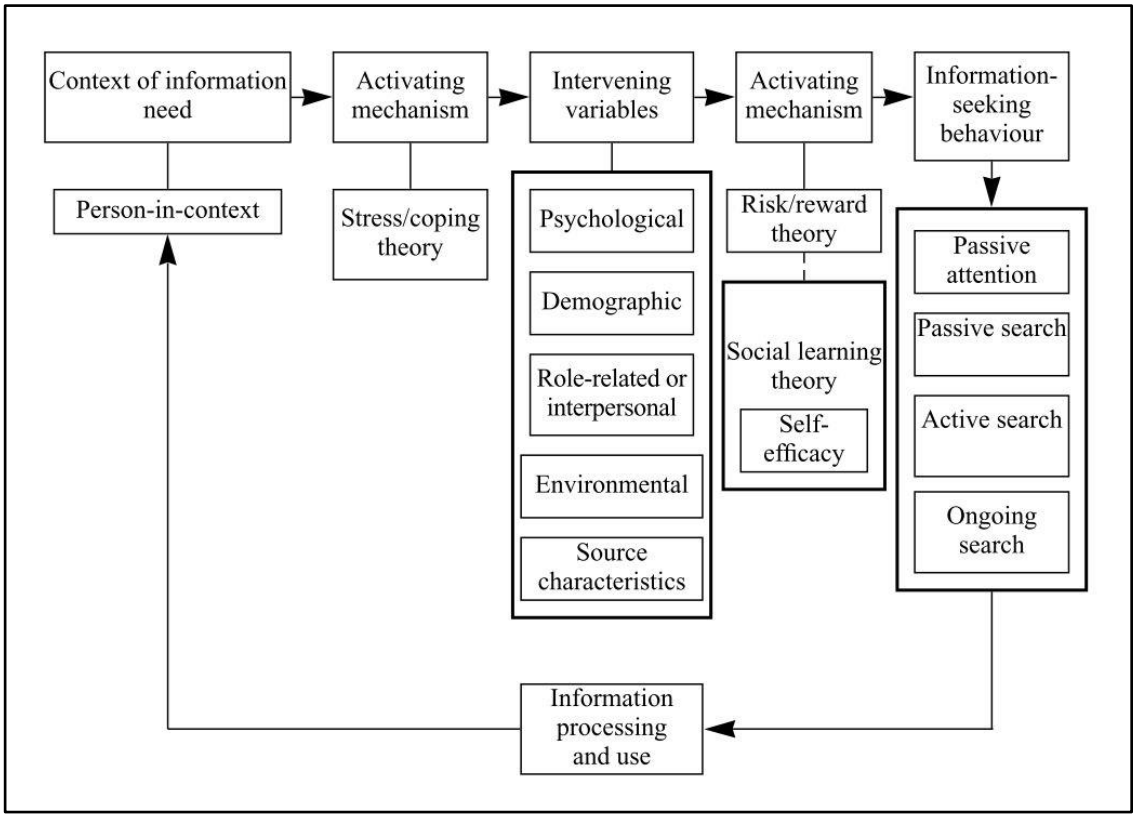

Figure 1: Wilson's second Model. Adapted from Wilson (1999).

The first ‘Activating mechanism’ is connected with ‘Stress/coping theory’, from psychology, to judge the need and explain the reasons for beginning this search for information (Case, 2012, p. 155). Adapted stress/coping theory explains the interpersonal effect on the decision made by a person to satisfy his/her information need.

Folkman (1984) defined *stress* as the “relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering his or her well-being”.

Coping is the person’s response to that relational situation and can be defined as “cognitive and behavioural effects to master, reduce or tolerate the internal and external demands that are created by the stressful situation” (Folkman and Lazarus, 1985). Krohne (1986) maintained that coping is a process resulting from the interaction between “demand and capacities”, whether at a personal or group level. Coping is a process that may predict the outcome of behaviour (Krohne, 1986).

In information behaviour, coping can be measured to indicate the person’s strategy for dealing with the stress produced by the information need. Among the measurement tools that can be used to measure coping, this study aims to utilise the frameworks and models presented by Krohne (1989) and the Miller Behavioural Style Scale (MBSS) (Miller and Mangan, 1983).

“Intervening variables”, represented by a box positioned between the first and the second “intervening mechanisms” (Figure 1), are variables which may affect the motivators. The model divided the intervening variables into five groups:

psychological variables, demographic variables, role-related interpersonal variables, environmental variables, and source characteristics.

The behavioural outcome, that is, the result of the coping strategy of the person who was stressed by the information need, is a variable that may affect the personal decision to search for information, if the decision was to find information. However, coping is not the only variable or factor that might interfere with the decision to search for information. Wilson's model (Figure 1) encapsulates the intervening variables in one box; nevertheless, these intervening variables may intervene in the stages before or after their order on the diagram (Wilson, 1997). Intervening variables were classified by Wilson, in his publication of 1997, as slightly different from those included in the diagram (Figure 1). Wilson (1997) classified intervening variables into groups and subgroups as follows:

- Personal characteristics.
    - Emotional variables.
    - Educational variables.
    - Demographic variables.
- Social/interpersonal variables.
- Environmental variables.
    - Economic variables.
    - Source characteristics.

The second “Activating mechanism” is connected to risk/reward theory drawn from consumer research to explain the selection of a source from among other information sources (Case, 2012, p. 155), and to self-efficacy theory, drawn from social learning theory in psychology, to explain the effect of a person’s efficacy on his/her search process.

Risk/reward theory is applicable when evaluating alternatives. Risk is an essential factor that may affect people’s decision on how to find relevant information (Stigler, 1961; Urbany, Dickson and Wilkie, 1989). Wilson (1997) considers risk/reward theory a general information seeking behaviour theory. In consumer research, as discussed by Wilson (1997), there is a positive relationship between risk and active information search. The same relationship can be observed in information seeking behaviour studies in the field of library and information science, “since, for example, exhaustive searches are common in relation to patent information or legal information, where the financial risk of failure to find the information may be high” (Wilson, 1997).

Self-efficacy is a concept elaborated by Bandura (1978). The concept refers to a person’s belief in his/her abilities to accomplish a task. In the area of information behaviour, a task would consist of a search for information with which to satisfy a need.

Wilson depicted (Figure 1) information seeking behaviour in his diagrammatic model designed to cover all types of information seeking, which Case calls modes of information seeking (Case, 2012, p. 156). The types are passive attention, passive search, active search and ongoing search. Wilson (1997) noted that his “formulation

of the information-seeking processes implicitly takes active searching as the principal mode as Ellis's behavioural model of information-seeking". Passive attention occurs when one acquires information without intending to search for it, for example while watching television or listening to the radio (Wilson, 1997). Passive search occurs when, during a search, one encounters information required to satisfy an information need that differs from the need motivating the current search session (Wilson, 1997). Active search occurs when the seeker attentively takes action to seek the information needed (Wilson, 1997). Ongoing search takes place when the search continues, even after the needed information is found, for the sake of expanding the seeker's knowledge.

According to Wilson's model, the process will continue through information processing and use to the start of another journey to satisfy information needs, whether the original information need that had not been satisfied, a recognised information need, or a new information need.

Wilson designed this model to be elastically capable of hosting theories from various fields of study (Wilson, 2005, p. 35). In addition, attention to its context can narrow down its scope from that of a general model to that of a context-related information behaviour model; this would not be possible without incorporating the relevant theories, either from information science or from another discipline. Wilson noted that one of the aims of his latest model is to "link theory to action", leading to a situation in which "more researchers use it as a basis for thinking about problems of human information behavior" (2005, p. 36).

3.1.2.2 Chatman's information poverty theory

Case associated the concept of *information poverty* with the concept of *knowledge gap* (2012, p. 113). He explained that knowledge gap can be observed when some people in the society lack the knowledge typically possessed by its members because of their characteristics; for example, in respect of education, location, language, and socio-economic variables (2012). Case suggested that information poverty exists "when some segment of the population seems to be permanently ignorant" (2012, p. 114). According to Childers and Post (1975), information poverty "culture" has three characteristics: low capabilities, societal isolation, and low self-efficacy.

In previous work, Chatman applied various social science theories, such as gratification theory (Chatman, 1991) and alienation theory (Chatman, 1990), "to understand better how ordinary people search for information" (Chatman, 1996).

In the most recent of these studies, "The impoverished life-world of outsiders", Chatman (1996) aimed to understand the information seeking and sharing behaviour of poor people. "An impoverished information world is one of which a person is unwilling or unable to solve a critical worry or concern" (Chatman, 1996). Chatman's information poverty theory was elaborated by developing a "conceptual framework that links the world of information poor − the outsiders – with the world of insiders" (Chatman, 1996).

Merton (1972) offers a detailed analysis of insiders and outsiders and points out that this cleavage in the society may result in a "*monopolistic access* to particular kinds of knowledge" (Merton, 1972) whereby some people prevent others from accessing the knowledge by gaining "privileged access for themselves". Moreover, monopolistic access and privileged access, in this context, encourage entitlement "to a larger share of power and control over their social and political environment" (Merton, 1972).

Chatman's theory of information poverty relies on the idea of dividing the population into insiders and outsiders. The insiders in the small world trust the information sources that are created within their world; meanwhile, outsiders do not seek information within the world of insiders, which is designed by norms and mores to foster distrust and rejection of information from outsiders, while protecting information within the small world from being revealed to the outsiders (Chatman, 1996).

Information poverty theory is based on six propositions and four concepts. The purpose of Chatman's six propositions (see Table 1 below) "is to describe the impoverished information world" (Chatman, 1996).

Proposition 1	People who are defined as information poor perceive themselves to be devoid of any sources that may help them.
Proposition 2	Information poverty is partially associated with class distinction. That is, the *condition* of information poverty is influenced by outsiders who withhold privileged access to information.
Proposition 3	Information poverty is determined by self-protective behaviours which are used in response to social norms.
Proposition 4	Both secrecy and deception are self-protecting mechanisms due to a sense of mistrust regarding the interest or ability of others to provide useful information.
Proposition 5	A decision to risk exposure about our trust problems is often not taken due to the perception that negative consequences outweigh benefits.
Proposition 6	New knowledge will be selectively introduced into the information world of poor people. A condition that influences this process is the relevance of that information in response to everyday problems and concerns.

Table 1: Six propositions of Chatman's information poverty theory adapted from Chatman (1996).

In addition to the six propositions, Information poverty theory is based on four concepts: *secrecy*, *risk-taking*, *deception,* and *situational relevance*. The concepts

"appear to act like 'DNA factors' for information poverty" (Chatman, 1996). Chatman (1996) uncovered the concepts through the recognition of specific anomalies that appeared in three of her studies (see Table 2 below).

#	Date	Work Title	Participants	Main theory applied
1	1987	Opinion Leadership, poverty, and information sharing	50 Single mothers enrolled in Comprehensive Employment and Training Act (CETA)	Opinion Leadership
2	1990	Alienation Theory Application of a conceptual framework to a study of information among Janitors	51 Janitors	Alienation Theory
3	1992	The information world of retired women	55 retired women	Social network theory

Table 2: Chatman's work that influenced her thinking towards elaboration of her Information poverty theory

According to Chatman (1996), "anomalies present intellectual dilemmas for scholars". Anomalies are unexpected results, in this case behaviour, that cannot be explained by the theories utilised in the studies (Chatman, 1996).

Secrecy, as one concept in Chatman's information poverty theory, is the insider's tendency, in the improvised (small world), to protect their information from being revealed to outsiders (Chatman, 1996). In the small world, it is observed by Chatman (1996) that critical information is not being sought; unlike the expectation in information seeking behaviour studies "that people will share critical information with

family, neighbours, and friends" (Chatman, 1996). In the CETA study (Chatman, 1987), workers do not share information; rather they keep it secret out of fear. In one instance, illustrated by Chatman (1996), a worker did not share information about other workers' bad attitudes and misbehaviour that might negatively impact on her and the quality of the program. She kept it secret because she feared that the program's official would not respond to her concerns (Chatman, 1996). Another example is found in the response of the only Latino woman in the CETA study sample (Chatman, 1987). She perceived herself as an *insider* living in a small world of Mexicans who shared the same values and norms. Explaining that her two boys had been deported after Americans reported them, the Latino woman went on to say that she did not maintain relationships with Americans (*outsiders*) but only with her work (Chatman, 1987). Chatman (1996) described the case as illustrating how "one encounters the world of others with utmost suspicion", and observed that "keep[ing] things secretive is reasonable when faced with a set of circumstances in which [you] view things from an outsider's perspective" (Chatman, 1996). The Latino woman was choosing the "insider's life as a means of self-protection" (Chatman, 1996). Chatman (1996) also observed secrecy in the janitors' information sharing behaviour (Chatman, 1990). One janitor was keeping her relationship with the supervisor secret in order to keep the job. Furthermore, secretive behaviour may be driven by the observed "distrust, and often distaste, of others, supposedly insiders" (Chatman, 1996). Similarly, in the study of ageing women (Chatman, 1992), fear, distrust and the wish to keep information confidential were motivating the secretive behaviour which hinders information sharing. Women were not sharing information about their declining health because

they wanted to “avoid ending in a nursing facility” (Chatman, 1996) and were concerned “not to be a bother” (Chatman, 1996).

To define *deception*, Chatman (1996) adapted Goffman’s definition (1974, p. 112), writing: “deception is falsehood intended by a person not taken in by their own fabrication” (Chatman, 1996). Chatman (1996) observed that people may deceive for many reasons, such as appearing to be a better person than one really is. This can be seen, for example, in the a janitor whom Chatman (1990) observed eating a plain sandwich alone in an isolated venue. Chatman (1996) explains that the woman was acting to hide a factual reality; she “was not deliberately shielding information but, rather, was deceptive in her behavior regarding lunch” (Chatman, 1996). Another factor observed by Chatman (1996) that might encourage deceptive behaviour is the wish to appear normal and successful. Chatman (1996) noticed this condition in one of the respondents in the CETA study. The respondent coped with the workers’ need to appear normal by “put[ting] on airs” (Chatman, 1987). Another factor that might cause people to reveal irrelevant, false information is the need to appear successful in dealing with the situation (Chatman, 1996). This was so in the case of the ageing women; they shared information about their sound, healthy medical conditions to show how successful they were at coping with the ageing process.

Chatman discussed the confusion between the two concepts of *deception* and *secrecy* (1996), an argument initiated by Bok (1983). Bok claimed “that while deception requires secrecy, all secrecy is not to meant to deceive” (Bok, 1983). Chatman (1996) emphasised the importance of Bok’s claim about the relationship between the two

concepts because it could result in reception of useless and irrelevant information. *Secrecy* and *deception* are practices aimed at protecting insiders' information; therefore, both consist of restricting the availability of information, and both constitute self-protective behaviour (Chatman, 1996). Moreover, according to Chatman (1996), membership of a social group can be a reason to use self-protective behaviour as a coping mechanism with which to protect the insider's world from the disclosure of information in response to information need.

Risk-taking, one of the four concepts in Chatman's information poverty theory, was adapted from the innovation field. In innovation, risk-taking is a factor that helps in understanding acceptance of the innovations (Chatman, 1996). Risk-taking contributes to the decisions made during the information seeking. An insider, in the improvised world, may or may not decide to take the risk of revealing information about his/her small world. Chatman notes that trust is an effective contributory factor in relation to the risk-taking concept. Insiders may agree to reveal information if he/she trusts the outsider (Chatman, 1996). In the CETA study (Chatman, 1987), Chatman (1996) ascertained that opinion leaders were not sharing information as expected according to the opinion leadership theory. Opinion leaders in this case were not taking the risk of sharing information which might, for example, lead to the chance of a better job and relative advantage, so that sharing it would be too risky (Chatman, 1996). Similarly, in an unexpected finding, janitors were not sharing information with outsiders even though the study showed that janitors had information needs (Chatman, 1990). Chatman (1996) explained that this discrepancy arose because janitors were

discouraged from sharing by the fear that the shared "information would be used against them" (Chatman, 1996). In this case, not only would janitors not take the risk of sharing information outside their information world; they did not even have enough trust to share information within their small world (Chatman, 1996). Chatman (1996) observed that risk-taking was shown to play a significant role in hindering information sharing in her study of ageing women (Chatman, 1992). For instance, the participating women would not take the risk of sharing information about their health problems because they thought they would be institutionalised (Chatman, 1996).

Situation relevance is the fourth concept in Chatman's information poverty theory. A member of a small world, as an insider, makes a considerable effort to determine whether the information will be accepted as information related to his/her situation, which involves an information need, or will be rejected due to the belief or judgement that it is not related to the current situation, or to the distrustfulness which is part of the insider's mind-set. Among related concepts that have been discussed by scientists and theorists and mentioned by Chatman (1996) are: Usefulness (Cuadra and Katter, 1993), applicability to individual concerns or interests (Wilson, 1973), growth of new knowledge (Swanson, 1977), and Cooper's use of usefulness to define his concept of "utility" (1973). Situational relevance, also, can be seen through the lens of Dervin's sense making theory (Dervin, 1977), to the effect that, basically, information is accepted if it makes sense to the members of the group or is rejected if it does not make sense. Chatman (1996) claimed that sources may be rejected either because the member of the small world fails to recognise the "value of the situation in searching

for these resources" or because he/she needs to do more to locate and retrieve the sources (Chatman, 1996). One respondent in the CETA study knew that she needed information related to improvement in her job and interpersonal skills, but did not search for it because she interpreted the messages received from co-workers as based on "racial barriers" (Chatman, 1996). Hence, "in her case, what would constitute relevant information is that which would break down the distrust and resistance she was experiencing" (Chatman, 1996).

Chatman (1996), in the study of the information behaviour of ageing women (Chatman, 1992), recognised three levels of relevance. At the first level is the general information needed to stay informed from day to day. At the second level is information related to the individual's personal needs such as medical problems. The third level contains very personal information that is protected, and therefore neither revealed nor accepted.

Now it is clear, from Wilson's (1997) model and Chatman's (1996) information poverty theory, that there are a number of factors affecting the information behaviour of a member of any group, which includes identifying his/her information needs, choosing the information source, and seeking the needed information. Among these variables and factors are, for example, trust and the member's social networks. This leads us to explore the relevant theories further so as to tackle the gaps between the group's interactions and the information behaviour. Exploring social networks and social capital in the next section will give greater insight into how these areas of information behaviour may relate to each other.

3.2 Social Capital

In this section the researcher will explore the concept of social capital within the field of social science. However, the concept of social capital was developed by many schools of thought across many disciplines. The first known appearance of the concept occurred in 1904 in Henry James's novel *The Golden Bowl*, on an individual level (Glaeser, 2001; Bjornskov and Sonderskov, 2013). Hanifan, in 1916, discussed social capital and its benefits at the community level "to make these substances count for most in the daily lives of a people, namely good will, fellowship, mutual sympathy and social intercourse among a group of individuals and families who make up a social community" (Hanifan, 1916). In 1961, the concept appeared at a community level as contributing to neighbourliness (Jacobs, 1961).

Social capital exists in the form of social networks which, it is claimed, are essential in enabling people to find jobs; moreover, social capital is more important than human capital (Putnam, 2000). As the common aphorism puts it, "it is not what you know. It is who you know". According to Putnam, social capital is a key factor in ensuring governmental stability and effectiveness (Putnam, 1993).

Social capital has sometimes been used as a concept under another name (Farr, 2004).

A number of key theorists have contributed to the elaboration and development of the concept of social capital. This literature review will review social capital from the perspectives of its key theorists: Pierre Bourdieu, James Coleman, and Robert Putnam.

3.2.1 Pierre Bourdieu

Bourdieu is a French sociologist whose perspective was influenced by Marxist sociology (Field, 2003). In discussing Bourdieu's definition of social capital, which is "made up of social obligations ('connections')" (Bourdieu, 1986), capital and other forms of capital such as economic and cultural capital must be introduced to understand the interconnected nature of the phenomena (Bourdieu, 1986). Capital, in its simplest definition, is the thing that is convertible to a form of money. Bourdieu argues that despite the strong association of capital with economic theory, it can be found in three forms: economic, cultural and social (Bourdieu, 1986).

Economic capital can be instantly monetised, while cultural and social capital, also, can be monetised but only in certain conditions. All forms of capital, economic, cultural and social, may be institutionalised into the form of property rights, educational qualifications, or a title of nobility, respectively.

According to Bourdieu (1986), cultural capital can be recognised in three states: the embodied, objectified, or institutionalised states. The embodied state of cultural capital, which is internalised/incorporated (Häuberer, 2010), consists of "long-lasting dispositions of the mind and body" (Bourdieu, 1986); for example, knowledge or skills. The objectified state of cultural capital, that is, cultural goods, can be observed in, for instance, books, drawings, dictionaries, instruments, machines, and so forth. The objectification of cultural capital "is a realization of theories or critiques of these

theories, problematics, etc." (Bourdieu, 1986). Objectified and embodied states of cultural capital may overlap: whereas the objectified state is a form of legal ownership of the object, it is also the embodiment of knowledge or the skills needed to understand the object, which is not selected to be transmitted but stands as an embodied culture (Bourdieu, 1986).

Finally, the institutionalised state of cultural capital is part of the objectification state, and can be observed, for example, in an educational degree gained by an agent (Bourdieu, 1986). Cultural capital, from Bourdieu's point of view, is a process of accumulation in which socialisation plays a significant role in enabling it to "be acquired, to a varying extent, depending on the period, the society and the social class" (Bourdieu, 1986).

Bourdieu defines social capital as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition" (1986). Bourdieu explains that, in social capital, a group supports its members through a power generated by "collectively-owned capital", and provides "a 'credential' which entitles them to credit" (1986).

The multiplier effect in social capital is the sum of the capitals collectively shared by group members who are connected within the same network. Because of the multiplier effect, agents motivate agents in another group to participate in other forms of capital (for instance, economic, cultural or symbolic) in order to "secure the profit of a membership" (Bourdieu, 1986).

In social capital, membership profit can consist of material benefits accruing from a fruitful relationship: for example, a recommendation that helps someone to get a new job, or useful information from a member of the group about huge merchant discounts nearby. Or it could be a symbolic profit, "such as those derived from association with a rare, prestigious group" (Bourdieu, 1986); for example, the privilege of being the first to hear about new updates because the agent is a member of a group.

From Bourdieu's (1986) perspective, relationships, or the network of connections in social capital, have their starting point in an "initial act of institution" or "characteristic of social formation" (Bourdieu, 1986). Exchange, both material and symbolic, takes place to maintain the backbone of social capital, namely relationships (Bourdieu, 1986). However, in order to keep relationships stronger and well maintained in such a group, agents, solely or together, and "consciously or unconsciously", invest in strategies to produce or reproduce the relationships and network connections, enabling them to be useful and competent to guarantee profits in the short and long run (Bourdieu, 1986). These investment strategies produce profits by "implying durable obligations subjectively felt …, or institutionally guaranteed (rights)" through "transforming contingent relations … into relationships that are once necessary and elective" (Bourdieu, 1986). Inviting a neighbour to attend a family wedding or inviting a family member to attend a friend's party are examples of investment strategies for transforming a relationship into one with stronger ties and new dimensions, such as a new feeling of gratitude, respect or friendship. Keeping relationships and connections productive in a group implies a mechanism for continuously reshaping the boundaries

of the group's characteristics and continuously exchanging acts of recognition between its members; this "expenditure of time and energy and so, directly or indirectly, of economic capital, is not profitable or even conceivable unless one invests in it a specific competence" (Bourdieu, 1986). Thus, in social capital, its competence and multiplier effects are essential factors in evaluating its productivity.

"Every group has its more or less institutionalization forms of delegation which enable it to concentrate the totality of the social capital" (Bourdieu, 1986). Power that is produced by delegation to represent the group's collective accumulation is an advantage to "ensure [and protect] the concentration of social capital" (Bourdieu, 1986). Power, also, can be a destructive property of social capital in the case of rising competition within the group to win this concentration; hence, the group needs to regulate delegation (Bourdieu, 1986). Furthermore, this power could be a condition of control in the case of the delegated agent being the creator of the group, or a source of corruption in the case of large and scattered groups (Bourdieu, 1986). To conclude this outline of Bourdieu's perspective, it is worth mentioning that he centred his social capital theory on the idea of the accumulation and transferability of capitals and the structures of social classes. Next to be considered is another perspective on social capital, that of James Coleman.

3.2.2 James Coleman

James Coleman is an American sociologist who was mainly interested in Education studies; his contributions to social capital theory are widely distributed, especially among English speakers (Field, 2008). He is the first to conceptualize Social capital systematically (Ostrom, 2003).

Coleman drew his ideas from the "individualist bias in neoclassical economics" that led economists like Williamson (1975, 1981) and Ben-porath (1980) and socialists like Lin, Ensel and Vaughn (1981), Baker (1984), Granovetter (1985), and Lin (Lin, 1990)to debate the role of social organisations in the functioning of economic systems (Coleman, 1990). Coleman's (1990) work on social capital emphasises the importance of "social-structure resources as a capital asset for the individual" (Coleman, 1990). Resources available through trust and networks are the main ingredients of social capital; furthermore, "the relations of authority and of trust and the norms … are forms of social capital" (Coleman, 1990). Coleman defines social capital "by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of a social structure, and they facilitate certain actions of individuals who are within the structure" (Coleman, 1990). In other words, access to the available resources by individuals within the social structure is a function derived from relationships, trust, norms and other derivatives, and operates to utilise these resources towards self-interest.

Social capital, human capital and physical capital can be compared in terms of tangibility and embodiment. Physical capital is tangible and easily recognisable, being embodied in physical assets like machines, buildings, and other physical goods. Human capital is less tangible, being embodied within the person's knowledge and skills. Social capital is even less tangible and is embodied within relations (1988a, 1990). Coleman described the relationship between human and social capital as complementary, whereby human capital lives in the individual while social capital is carried by the relations between those individuals.

The trust and trustworthiness associated with these relations between individuals are responsible for the fluctuation of collective actions as a product of social capital (1988a, 1990). Social capital is a concept centred around "the fact that it identifies certain aspects of social structure by their function" (Coleman, 1990); therefore, the agent can pursue a benefit by utilising the value of the function as a resource (Coleman, 1990). However, Coleman asserts that social capital, being defined by the function of an aspect of the social structure, helps to relocate the interest from the individual level to the group level, micro-to-macro (Coleman, 1990).

Social capital, from Coleman's perspective, can be seen in many forms, as follows: obligations and expectations, information potential, norms and effective sensations, and relations of authority (Coleman, 1990).

Obligation and expectation can be observed when an agent interacts in the expectation that his/her action will be returned, following the law of mutual relationships. The

operation of social capital is a form of investment in the relationships within an environment of trustworthiness.

Coleman (1990) drew an analogy between “credit slip” and obligation and expectations in social capital. A “credit slip” is held by one agent who expects the agent on the other end of the relationship to be obligated to repay it at any time, as long as the environment of trustworthiness is maintained.

Another image that may emphasise trust and trustworthiness in the expectations and obligations within social capital is that of “rotating credit associations”. As explained by Coleman (1990), a rotating credit association is an agreement among members of a group to pay a certain fixed amount at the end of each period, usually a month, each of them being entitled to receive the total amount at one time during the life of the association. It is obvious that without a high level of trust and trustworthiness, that is, of social capital, the association would not even exist (Coleman, 1990).

Many factors may affect the level of obligation in this form of social capital: factors such as trustworthiness (which is essential if the social capital is to exist), the nature of the need, other resources available that might be able to satisfy this particular need (for example, organisational services), relationship closure, and other factors. In addition to the level as a dimension through which to understand obligation, there is the further dimension of the density of obligation, which Coleman (1990) defines as the usefulness of the existing resources that can be offered by the mutual relationship within this aspect of social structure to satisfy an agent’s need.

Information potential is another form of social capital (Coleman, 1990). In this form, actors maintain the relationship to seek information that may facilitate an action. According to Coleman (1990), "one means by which information can be acquired is to use the social relations that are maintained for other purposes". By employing the "credit slip" analogy, Coleman (1990) drew the comparison that, in information potential social capital, the value of the relationship lies in the information which is needed by an actor, whereas in the case of obligations and expectations social capital, the obligations constitute the value of the relationships. Coleman (1990) noted that utilising the relationship aspect to satisfy a need incurs an obligation. However, information and obligations cannot replace each other as values of the relations; rather, information, as a value of the relations, exists as a value added to another value, such as the obligation to motivate the mutual relationship to transfer information as a benefit, thus configuring information as social capital. Moreover, the information transferred through the information capital was usually acquired by an agent who transfers it to serve another purpose, which, in the case of information acquired by leaders, is the purpose of maintaining the leadership position (Coleman, 1990). In conclusion, it is notable that Coleman's work did not deeply analyse the potential of information social capital.

Norms and effective sanctions social capital can exist to facilitate actions, by, for example, enabling women to go for a walk at night safely because of the society's norm of opposition to crime (Coleman, 1990). Also, this form of social capital can act

as a constraint preventing actors from behaving in a certain way, such as a strong norm that prevents kids from spending more time playing (Coleman, 1990).

The Authority relations form of social capital exists when an actor has control of the resources of others. This creates power through the ability to use the mass of resources provided by individuals within the group (Coleman, 1990).

Coleman discusses the idea that Appropriable social organisation, which consists of organisations that voluntarily serve a purpose, may encapsulate all possible forms of social capital. A clear example of Appropriable social organisation is the student organisations in universities. These, in Coleman's (1990) words, while "brought into existence for one set of purposes can also aid others, thus constituting social capital that is available for use". Coleman (1990) also classifies volunteer associations as social capital that exists to produce public good, supporting his argument that social capital is a public not a private good.

Coleman (1990) suggested a group of factors that may help, create or destroy social capital. These are: closure, stability, ideology, and other factors. Finally, Coleman (1990) mentioned that social capital needs to be maintained over time to extend its depreciation period.

3.2.3 Robert Putnam

Putnam coined his theory of social capital through his studies of the association of social capital with civil engagement and democracy. He believed that social capital was crucial for political success, and that the idea of the public good depended on mutual relationships. This can be observed in two famous studies: "Making democracy work" (Putnam, 1993), the study of social change and democracy in Italy through the lens of Putnam's social capital, and "Bowling alone: the collapse and revival of American community" (Putnam, 2000), the study of social change and decline of social capital in America. However, even though Putnam's perspective on social capital was elaborated and published after Bourdieu and Coleman, and showed similarities especially with Coleman's perspective, Putnam's social capital theory spread more widely and had a dramatic impact once it drew the attention of politicians in the United States. Robert Putnam was invited to meet the President at Camp David and was promoted in *People* magazine after publication of an interview with him about social capital in 1995 (Field, 2008). In the *American*'s eye-opening interview essay "Bowling alone: America's declining social capital", Putnam (1995) drew upon the work of Alexis de Tocqueville (1839), a French politician, who observed, after his visit to America in the 1830s, that the Americans' associational mentality might strengthen the nation's democracy. Ever since, Putnam argued, the high stock of social capital that Tocqueville observed had been working in harmony within the society to produce better democracy. However, according to Putnam, a decline in social capital

was taking place and threatening the nation's democracy. Putnam's ideas of social capital gained an even stronger reputation and greater impact after the publication of his book *Bowling alone: the collapse and revival of American community* (Putnam, 2000), which reinforced his claim with additional data showing how the decline in social capital could impact on the community, and thus on the nation, and went on to suggest some practical solutions.

Putnam followed Coleman's perspective concerning how, in social capital, relations have values, similar to the embodied values of physical and human capital (Coleman, 1988a, 1990; Putnam, 2000, p. 18). For Putnam, social capital refers "to features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating the coordinated actions" (Putnam, 1993, p. 167). Then the definition's interest shifted to a focus on social life instead of on social organisations, with social capital seen as an enabler of individual capabilities rather than as a means of improving the efficiency of the society (Baron, Field and Schuller, 2000, p. 9; Field, 2008, p. 35). Putnam (1996) defined social capital as "features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives". In 2000, social capital, according to Putnam (2000, pp. 18–19), affected the "productivity of individuals and groups", and unlike its characterisation in previous definitions, social capital required networks and norms; whereas "reciprocity and trustworthiness" were elements of norms (Field, 2008, p. 35). Putnam also compared social capital to social virtues, mentioning that they were nearly the same, but that social virtue was "more powerful when embedded in sense

network of reciprocal social relations"; also, social virtues needed to exist in groups to enrich social capital (2000, p. 19).

Depending on the dimension, Putnam (2002) distinguishes between many forms of social capital: formal versus informal, thick versus thin, and inward-looking versus outward-looking. Putnam, also, distinguishes between two forms of social capital: bonding and bridging.

Bonding social capital is the value of the network ties between actors in the same closed group; for example, between family members, close friends, lovers, and (relatively) neighbours. Bridging social capital is the value of the network ties between actors with weaker relationships than those that can be defined as bonding social capital. Examples of bridging social capital can be seen in the relationships between workmates in the workplace and between friends with loose relationships.

However, in response to criticism of Putnam's social capital types, Woolcock (2001) suggested "linking social capital" as a third type to be added to bonding and bridging social capital. Linking is defined as a type of social capital that utilizing the networks that featuring trust "between people who are interacting across explicit, formal or institutionalized power or authority gradients in society" (Szreter and Woolcock, 2004, p. 654).

Putnam (2002) emphasises the importance of Mark Granovetter's (1973) elaboration of strong and weak ties in understanding the form of social capital under investigation. Granovetter (1973) argued that weak ties are more important than strong ties. Strong ties are those between family members and close friends, whereas weak ties are the

relationships between people who, for instance, occasionally meet. Utilising the weak ties to satisfy a need will lead to unknown information, but use of the strong ties (e.g. close friendship) is likely to end up producing well-known information. Relationships in the bridging form of social capital are “fragile, but more likely also to foster social inclusion” (Baron, Field and Schuller, 2000).

Putnam agrees that social capital, like other forms of capital where it exists, is not always good. The possession of social capital within such a society might benefit its members to the detriment of others who possess a smaller stock of social capital (Putnam, 2002). Social capital plays a great role in feeding political and economic inequalities (Putnam, 2002).

Putnam (2002) argues that measurement of social capital should be qualitative because it is a multidimensional phenomenon to be found in many forms and subject to different understandings.

3.2.4 Other perspectives

Woolcock, a social scientist with the World Bank’s Development Research Group, along with Narayan, a lead social development specialist in the World Bank, associate social capital more with policy making and economic development (Woolcock, 1998; Woolcock and Narayan, 2000). They claimed that ongoing development is accumulating on the seminal work of Coleman (Coleman, 1988b, 1990, 1992) and

Putnam (Putnam, 1993, 1995, 2000, 2002). Woolcock defines social capital as “the norms and networks that facilitate the collective actions” (2001). According to Woolcock and Narayan, there are four different views of social capital: the communitarian view, the network view, the institutional view and the synergy view (2000). There are two propositions within the network view that characterise social capital. First, there is a mutual relationship that implies obligation and commitment between actors (Woolcock and Narayan, 2000). Although the mutual relationship has its benefits in one direction, it also has costs, possibly operating "with negative economic consequences" (Woolcock and Narayan, 2000), in the other direction. Second, to distinguish the sources of social capital from the benefits coming from those sources, because it is possible to have negative and expensive outcomes (Woolcock and Narayan, 2000), the network view of social capital focuses on explaining the outcome of the combination of bonding and bridging social capital (Woolcock and Narayan, 2000). This was also emphasised by Putnam (1993), who noted the productivity of the weak ties compared with the strong ties, as explained by Mark Granovetter (1973), especially for poor people (Woolcock and Narayan, 2000). However, information brokers are bridging social divides (Woolcock and Narayan, 2000). Later, Woolcock (2001) defined linking social capital as the relationships built to link formal institutions. Woolcock and Narayan’s network view, like Putnam’s (1993, 1995), emphasises that utilising the mutual relationship might impose unaffordable costs on the other side of the relationship, when a member of a group avoids seeking to meet his/her need through the available social capital (Woolcock and Narayan, 2000).

This research adapts Woolcock's (2001) definition of social capital. Social capital is social capital as "the norms and networks that facilitate the collective actions" (Woolcock, 2001). This definition features simplicity and the clarity to be "understood as a relational (i.e. sociological), rather than psychological or political variable" (Woolcock, 2001). It is mostly agreed upon, and can be integrated within interdisciplinary researches (Woolcock, 2001); which is the case with the present research. The definition is source-centred rather than consequences-centred, focusing "on what it *is* rather than what it does" (Woolcock, 2001). This definition, as Woolcock (2001) intended, allows researchers to offer different dimensions of social capital; bonding, bridging, and linking were proposed by both Putnam (1993, 1995, 2001) and Woolcock (1998, 2001; 2000) and have been widely used in research investigating social capital. Multidimensional availability brings the flexibility to better interpret and explain social capital observed in a combination of dimensions (Woolcock, 2001).

In summary, social capita is widely recognised as a strong predictor of individual health and wellbeing. Three forms of social capital are recognised. Bonding capital refers to the value of the network ties between actors in the same close groups like between members of family, close friends, lovers, and relatively neighbours. Bridging capital refers to the value of the network ties between actors with weaker relationships than what can be defined in the bonding social capital. Examples of bridging social capital can be seen in the relationships between workmates in the workplace and between friends with loose relationships. Linking capital refers to the values of the

networks between actors when utilizing the relationships associated with organization and institutions. Example, relationships with medical doctors, educational staff, and immigration officers.

Social capital, as a theory which originated within social science, and looks into social networks, groups, trust, and norms issues to explain factors such as social participation and information access, can be linked to information behaviour, particularly through Chatman's theory of information poverty and small worlds (see Section 3.1.2.2.). Moreover, the propositions and concepts within Chatman's information theories echo most social capital constructors. In fact, the converse is true, inasmuch as it is easy to recognise social capital's elements and components (for example: social networks, trust, or/and norms) in the core principles of Chatman's information poverty. However, in the limited number of information behaviour studies incorporating a social capital perspective, only one also makes reference to Chatman (all discussed below).

3.3 Information behaviour and social capital

The relationship between information behaviour and social capital has been empirically proven in different contexts: health information seeking (Chen *et al.*, 2014; Kim, Lim and Park, 2015), investment information search (Tan and Tan, 2012),

education and employment (Buchanan and Tuckerman, 2016), and everyday life information seeking (Johnson, 2004, 2007). In health information seeking, empirical studies report the effects of both bonding and bridging social capital (Kim, Lim and Park, 2015) on information seeking behaviour, and the effect of social capital on the volume and composition of the information source (Chen *et al.*, 2014).

In the context of investment information seeking, a study (Tan and Tan, 2012) found that investors with low stocks of social capital tend to use their bonding social capital to find information. Furthermore, the study reports that technological savvies and young investors tend to have higher social capital which they use to find information online.

In the context of everyday information seeking, Johnson (2004, 2007) has empirically examined the role that social capital plays in shaping the everyday information seeking behaviour of Mongolians. Both studies used Lin's (1999) network theory and its position generator to measure social capital.

Johnson (2004) investigated whether the least efforts principle was responsible for motivating people to pursue information by easier methods; however, through the lens of social capital, he found that people selectively chose which relationship was better to utilise in seeking information. He also found that the educational level of information sources significantly influenced the seeker's choice, in that people with higher levels of education were likely to be selected as sources (Johnson, 2004). Moreover, Johnson (2004) examined as independent factors the characteristics of the relationship with the information sources. The characteristics examined were: role

relationship, emotional closeness, duration of relationship, frequency of contact, and residential proximity (Johnson, 2004). He found that weak ties are significantly considered the relationships to be used to find information (Johnson, 2004). Johnson (2007) further found that choosing people as information sources increased the chances of a successful information search, mainly because "social capital strongly predicts the kind of source chosen in the information search" (Johnson, 2007).

Buchman and Tuckerman (2016) applied an integrative theoretical framework to study the relationship between information behaviour and social capital for disadvantaged groups. The study (Buchanan and Tuckerman, 2016) integrated Chatman's information poverty theory (Chatman, 1996) with social capital theory to understand the information behaviour of a group of UK 16-19 year olds who were not in education, employment or training. The study found that the group sought information internally, affirming the concepts and propositions of Chatman's information poverty theory, and utilised their bonding social capital (Buchanan and Tuckerman, 2016).

3.4 Information behaviour of newcomers during the settlement period

Khoir, Du and Koronios (2014) studied the behaviour of Asian immigrants in South Australia during the settlement period. Khoir Du and Koronios (2014) studied the

infromation behaviour of eight Asian participants how been moved recently (less than 5 years), most of the information needs reported in their study were needs related to employment, accommodation, transportation, local culture, driving, immigration, education, and financial needs (i.e. tax assistance, legal aid, and banking).

Current literature shows that immigrants and newly arrived international students prefer to seek information online and through their social networks (Shoham and Kaufman Strauss, 2007; Khoir, Du and Koronios, 2014; Oh, Butler and Lee, 2014).

Exchange of experiential advice between friends had been reported by previous information studies of immigrants during the settlement period (Khoir, Du and Koronios, 2014; Bronstein, 2017) and was described as an "important social source" of information (Anne Kennan et al., 2013, p. 134). Immigrants also shared experiential information through social media networks to exchange "practical experiences during the settlement" (Khoir, Du and Koronios, 2014). In addition, experience is acknowledged more widely as a factor influencing source preferences (e.g. Morrison, 1993; Xu, Tan and Yang, 2006; Locock and Brown, 2010; Mazanderani, Locock and Powell, 2013).

Martzoukou and Burnett (2018) explored the everyday life infromation behaviour infromation behaviour of families and individuals from Syria who recently moved to Scotland. they found that English language, social engagement, and health information needs are the most important needs for Syrians newcomers in Scotland.

4 Research Methodology

This research will investigate the relationship between everyday information behaviour and social capital, and shared concepts of access, participation, and engagement.

The goals of the study are to explore changes in social capital and everyday life information behaviour during the settlement period, to understand in depth the causal relationship between these two phenomena, and to identify the significant factors and barriers that shape these relationships between social capital and everyday life information behaviour. This research is an interdisciplinary study influenced by different scientific viewpoints; however, human behaviour is its central topic, to be observed and interpreted in order to be understood. Therefore, interpretivism is the epistemological assumption that guides this research in seeking the relationships between the two phenomena.

This research asks the following questions:

1) What are the information needs of the study subjects?
2) Where do they seek information to satisfy their information needs, and why?
3) Can causal relationships be identified between information behaviour and social capital, and if so, what are the factors that influence the identified relationships?

4.1.1 Theoretical framework

To answer the questions posed by this study's problem and emerging from the review of the literature on the relationships between information behaviour and social capital, the researcher will look at the issue both deductively and inductively in some aspects.

The examination will be deductive in its interpretation of the data through the lens of the group of theories gleaned from both disciplines (information science and social science): Wilson's everyday information behaviour model (1997), Chatman's information poverty theory (1996), and the theory of social capital (Bourdieu, 1986; Coleman, 1988a, 1990; Putnam, 1993, 1995, 2000; Woolcock, 1998, 2001; Woolcock and Narayan, 2000). However, these theories might fall short in some aspects of interpretation of the observed data; thus, the research approaches the interpretation inductively by adopting new theories, models, and/or concepts with which to analyse/interpret the data. The tendency of research to be both "deductive and inductive are strategies imposed by the relationship between the research and its theoretical framework" (Bryman, 2012, p. 24).

Wilson's model (1997) is an everyday information seeking behaviour model that is generic in nature and open to integration of additional factors and inclusion of more theories to explain the information behaviour. As explained previously in the literature review, Wilson's model (1997) contains features of all aspects of information behaviour to be investigated, beginning with understanding of the context of the

information need and the activating mechanism for seeking the needed information. During information seeking, Wilson's model (1997), also, offers to interpret the behaviour in such a way as to identify variables that either prevent the participant from seeking the information needed, or encourage him/her to do so. As the participant begins the search, the model (Wilson, 1997) offers a second "Activating mechanism" to explain the selection of an information source from among other sources and to explain the effect of the person's efficacy on the searching strategy (Wilson, 1999, p. 257; Case, 2012, p. 155). Therefore, it provides an opportunity for the researcher to examine how social capital might play a role in choosing to seek the information through social relationships. Finally, the model then offers to understand the searching strategy as constituting passive attention, passive search, active search, and/or ongoing search.

The model's features help in evaluating the information resulting from the searching process as well as the use of this information, which may generate related information needs that link back to the first stage of the model.

To build a bridge between social capital and information behaviour, this study's theoretical framework presents Chatman's information poverty theory as one that offers to understand information behaviour in the context of social groups. Chatman's poverty theory was developed on the concept of the "small world" and on Merton's concepts of insiders and outsiders (1972). Agents in a given small world perceive themselves as insiders, and therefore trust information sources created within their world; meanwhile, outsiders do not seek information within the world of insiders, who

have been conditioned by their norms and mores to distrust and reject information from outsiders and to protect information within the small world from being revealed to the outsiders (Chatman, 1996). Chatman's information poverty theory is based on six propositions and four concepts. Chatman (1996) describes the improvised information world by the following six propositions:

1. Members of an improvised information world agree that they lack the relevant information to satisfy their need;
2. Members are influenced by the insiders' (or outsiders') information interaction mechanisms which prevent them from looking at potential information or revealing information as a result of various issues, and mainly trust;
3. Self-protective behaviour, as a common social norm of the group's members, hinders the information seeking process, thus exacerbating information poverty;
4. Secrecy and deception are self-protective behaviours resulting from mistrust of members of other information worlds;
5. Members reject information seeking to avoid risk, "due to a perception that negative consequences outweigh benefits" (Chatman, 1996);
6. The group selectively introduces new knowledge into their information world due to the information relevance concept, which as a "condition influences this process" (Chatman, 1996).

In addition to these six propositions, information poverty theory is based on four concepts, as explained in the literature review: secrecy, risk-taking, deception, and situational relevance. The concepts "appear to act like a 'DNA factor' for information poverty" (Chatman, 1996).

Social capital is a theory elaborated through the accumulated work of many leaders in social science, including Bourdieu (1986), Coleman (1988a, 1990), Putnam (1993, 1995, 2000), and Woolcock (1998). Social capital can be defined as "the norms and networks that facilitate the collective actions" (2001). Social capital has inspired work in many fields such as: families and youth behaviour, schooling and education, community life, work and organisations, democracy and governance, collective action, public health and environment, crime and violence, and economic development (Woolcock and Narayan, 2000). Social capital operates to collectively reach an objective through a mutual relationship by utilising the common norms and the trustworthiness aspect of the relationship. Information may be sought through the social network, in recognition of the great role that social capital may play in affecting access to and exchange of information, and therefore, behaviour.

Three types of social capital may influence or be influenced by the information behaviour, namely: bonding, bridging, and linking social capital.

Bonding social capital is recognised when somebody seeks information by utilising immediately available strong ties, for instance, by asking a family member or a close friend for the information. Bridging social capital is the mutual relationship with others in more distant networks (normally: colleagues, friends…etc.). Lastly, linking

social capital can be recognised when the agent seeks information through "institutional connections via people in power positions" (Buchanan and Tuckerman, 2016).

4.1.2 Methods

Two main areas should be measured in order to answer the research questions: everyday information seeking behaviour and social capital, both of which are forms of human behaviour; thus, this research is approached qualitatively. Even though this study has developed a theoretical framework and will approach the relationship between the research and the theory mainly deductively, with an inductive element in some cases, quantitative methodology has been rejected given that this research relies on investigation of a social phenomenon which has not been deeply explored, and interpretation of the worldviews of individuals (Bryman, 2012, p. 36).

Qualitative interviews and focus groups are the main data collection methods associated with qualitative research and were used collect data to answer this study's questions.

Focus groups and interviews, both are instruments to collect qualitative data, are sharing similarities but the main distinction that focus groups method is based on enter viewing a group of participants (Usually more than four participants).

Alan Bryman (2012) suggested three reasons to differentiate focus groups from the interviews,

- focus group is a better then interviews to explore themes and topics more in depth.
- Focus group may save more time for the researcher.
- Participants within the focus group settings can discuss topics among them, whereas, the researcher is able to record their responses during the discussion.

The researcher of this research decided to omit the plan to use focus group to collect data for many reasons. The difficulties to recruit females for this research. Having a group of mix gender may impact the responses off either as the gender segregation is an essential issue well then Islam instructions. Moreover, the topics that meant to be discussed during the meetings such as, small words, trust, social capital, identity (i.e. gender and ethnicity), and information poverty concepts (i.e. secrecy, deception).

Using focus groups instrument in the case of this research may raise serious issues that may affect the data collected because participants will not have the healthy environment to freely talk about their experiences during the settlement periods which may involving difficult, hard, and emotional times.

Participant observation, also, is not considered in this research. is usually associated with ethnographic research conducted to observe human behaviour within a social setting. However, it is common for participation observation to be combined with qualitative interviews (Bryman, 2012, p. 383).

4.1.3 Gaining access

In qualitative research, it is a challenging step to gain access to the target participants' social space in order to begin recruitment and data collection (Bryman, 2012, p. 433). In this research, the target population consists of Muslim individuals of both genders who are associated with local communities in Glasgow. Access to this population can be accomplished by first gaining access to different Islamic centres.

Gaining access to the target groups was even more challenging in that this research assumes a level of information poverty within the target population, which implies a tendency of the target members to keep the information within their group and to see the researcher as an outsider. To overcome this difficulty and ease the process of gaining access and recruiting participants, the researcher focused mainly on gaining access through an increase in social networking and development of trustworthiness in the eyes of the target groups. Strategically, the researcher uses Muslim friends to build relationships with someone inside the target worlds, with the goal of knowing someone who will act as a champion, and/or somebody from among the communities' leaders to act as a gatekeeper or informant and help to build trust. Moreover, explaining the aims and methods of the study to the communities' management and answering all questions about the research are helpful strategies for building the level of trust required to gain access to the communities. Lastly, being conducted by a Muslim individual as a researcher is a plus, as Bryman (2012, p. 438) notes, stressing the importance of being aware of details such as what behaviour is accepted and what

kind of dress is appropriate. Furthermore, being socially and/or culturally attached to the investigated group may raise some contingencies which may hinder the researcher from gaining access to the participant himself/herself; Bryman (2012, p. 439) refers to this type of access as ongoing access. According to Bryman (2012, p. 439), people may be unwilling to reveal information about themselves because of not wanting other members of the community to know about it; they may decline to participate because of mistrusting the researcher and perceiving him as an agent assigned by the authorities to monitor them; or they may participate but deceive the researcher by giving misinformation which could falsify the interpretation of the data later on. To overcome these issues of ongoing access, Bryman suggests presenting the researcher's credentials, such as a letter from the supervisor, the ethical approval document, and a detailed information sheet; and being careful to avoid passing information between participants Bryman (Bryman, 2012, p. 439).

The researcher assumes the overt role strategy of disclosing his identity as a researcher in the social space of the target participants (Bryman, 2012, p. 433). Choosing to play the overt role strategy rather than the covert one (hiding the person's identity as a researcher) has its advantages. It may help to avoid ethical issues, such as deception, that may arise from adoption of the covert role; it gives the researcher more freedom to take effective fields notes in various forms, if needed, such as text and audio recordings, during the attempt to gain access and recruit participants; it enables the researcher to invite participants to enrol by another method, such as joining in a focus group to validate the data; it allows the researcher to introduce qualitative interviews

as a data collection instrument; and lastly, adopting the overt role gives the researcher the ability to adopt a hanging-around strategy (Bryman, 2012, p. 436).

4.1.4 Interviews

Interviews constitute the main data collection instrument in this research. The key types of interviews are:

- Structured interviews: these consist of pre-coded, closed-ended questions. Known also as standardised interviews and designed to aggregate the collected data, structured interviews are "a typical form of interview in a survey research" (Bryman, 2012, p. 213).
- Unstructured interviews: these resemble informal discussions between the researcher and the participant, guided by a list of topics. Unstructured interviews are also known as intensive interviews (Bryman, 2012, p. 471).
- Semi-structured interviews: these consist of a series of questions representing a list of specific topics and guided by a pre-designed "interview guide" (Bryman, 2012, p. 471).

Both unstructured and semi-structured interviews could be in-depth interviews and/or qualitative interviews. Lately, in-depth interviews have been commonly used in qualitative research (Bryman, 2012, p. 213). Similarly, qualitative interviews encapsulate both the unstructured and semi-structured types (Bryman, 2012, p. 471).

In addition to being in-depth qualitative interviews, the interviews in this research have the character of focused interviews (Bryman, 2012, p. 210) because of the researcher's intention to incorporate the critical incident technique.

In the critical incident technique, the interviewer asks questions focused on a specific incident to encourage the interviewee to describe all aspects of the incident. Flanagan explains that the question should "refer briefly to the general aim of the activity", following which the interviewer should encourage the interviewee to continue describing the activity without interruption (1954). In information behaviour studies, critical incident technique can be used to focus on the information seeking behaviours of participants in relation to specific and/or important events or needs (Savolainen, 1995; Johnson, 2004; Buchanan and Tuckerman, 2016).

This study adopts a semi-structured approach. Questions is structured to explore the demographic information, needs and information sources, and difficulties during seeking. (See Section 9.4 (Appendix D) for a complete interview guide) including an example of the help list was used to prompt the discussion.

4.1.5 Sampling

The qualitative research sampling approach is not centred around the idea of probability sampling. Instead, the notion of purposive sampling is used (Bryman, 2012, p. 416). Purposive sampling is used by researchers to ensure recruiting

participants within the predetermined inclusion criteria with "research goals in mind" (Bryman, 2012, p. 418). Researcher in this research selected nine Islamic community centres in Glasgow to be the recruiting sites (see Figure 2**Error! Reference source not found.**).

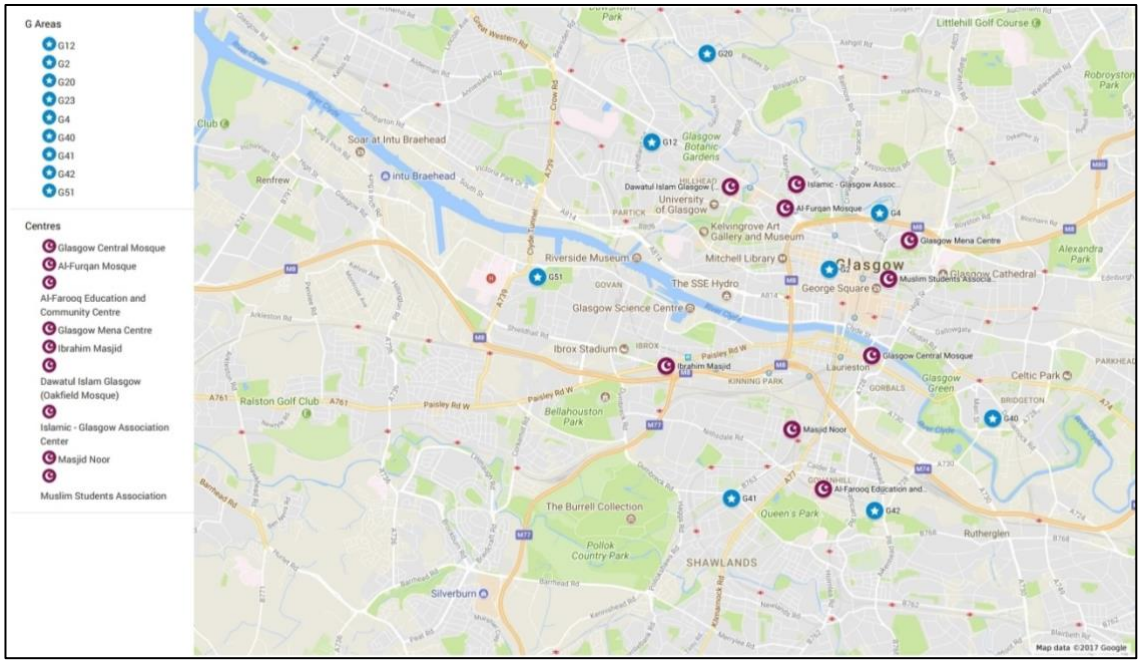

Figure 2: Map of the 9 Islamic centres as sampling sites.

A flyer was designed to attract potential participants who are visiting the centres, after gaining permission from the office of the centre the flyers were posted on the entrance of the centre (see Section 9.1 Appendix A:). However, the flyers elicited a low response with only two volunteers. In response, the researcher then visited the centres to talk in person with potential participants and further distribute information sheets, flyers, and researcher contact details. Researcher also reach some informants and asked to spread the message through his/her social networks to recruit more participants. This research also used snowballing to recruit participants, snowballing

is a type of purposive sampling (Bryman, 2012, p. 419). The researcher always asked the potential participants at the end of the conversation, and asked the participants after each interview, to use his/her social network to encourage others to contact the participant to participate.

4.1.6 Ethical issues

Ethical approval for this research was reviewed and approved by the ethical committee in the department of computer and information science in the University of Strathclyde and in accordance with the institutional code of practice on investigations involving human beings. Further guidance was provided via ethical principals in social research (Diener and Crandall, 1978), cited in (Bryman, 2012, p. 135).

The research does not harm the participants in any mean such as physical or psychological. The researcher is aware that recalling important information needs had occurred during the settlement period may cause some stress and/or may go emotional, therefore, the researcher will ensure that the interviews are conducted at the most relaxing and safe environment and the participants are happy and relaxed. The data collected will protected and will be destroyed (6 months post completion). The participant's information will be kept anonyms so participants cannot be identified. All participant information has been anonymised to protect participant identities.

No aspects of this research were covert. Prior to commencement and as part of informed consent protocols, potential participants were provided with an information sheet summarising key points regarding study participation. The informed consent was written to outline the purpose and the scope of the research and how data is managed and used. It made clearly that participating in the research is completely voluntarily with approximate time commitment provided. It made clear that participants are not obliged to answer all questions asked by the interviewer during the interview, and participants can withdraw at any time (see Section 9.3 Appendix C: Informed consent).

The data collected will be private and protected and will be destroyed after the study is finished. The informed consent provides information about what participation is involved, allowing the participant to decline participation on privacy. For volunteer participants, anonymity and confidentiality of personal information is also respect privacy.

The purpose, and potential beneficiaries of this research is communicated to the participants via the informed consent including the expectations of participants, and how data is managed and used. It makes clear that while steps and safeguards will be taken to ensure the anonymity and confidentiality.

4.1.7 Data Analysis

To analyse the data, thematic and narrative analysis were utilized. Thematic data analysis is wildly used to analyse qualitative data. The approach is based on identifying the themes and the subthemes by reading the collected thoroughly (Bryman, 2012, p. 578). In this research it combined with the narrative analysis to preserve the temporal sequence of the data (Bryman, 2012, p. 582) which is important when looking into the process of everyday information seeking behaviour.

The process of analysing the data, in this research, is iterative and in line with the research questions. During the coding process, the researcher followed the Bryman's (2012, p. 576) steps and consideration in coding, and also consider the strategy of this research methodology as an iterative (deductive and inductive) which "involves a weaving back and forth between data and theory" (Bryman, 2012, p. 26). Initially, the researcher prepared a starting list of concepts to start coding. These concepts were derived from the research theoretical framework (see Section **Error! Reference source not found. Error! Reference source not found.**). The starting list were including the concepts from Wilson model, Chatman's concepts, and social capital features and types.

The process starts immediately after the interview to prepare the transcript including translating, if the interview was in Arabic, and transcribing the recording. And Then read the data and coding. During the actual coding, there were two aspect, the

deductive aspect was starting coding based on the initial starting list, for example, bonding and bridging social capital. the other aspect was the inductive aspect where the codes emerged from data itself, for example, types of needs, seeking preferences, and other emerged codes including Mosques as an information grounds, identity, stigma and experiential advice. With each question in mind, the researcher is going through the data and code the relevant occurrences, report the codes, and then review and discuss the report with the supervisor. The process is repeated until both of the researcher and the supervisor are agreed to report the final themes. The researcher uses computer-assisted qualitative data analysis software (Nvivo) during all phases of the coding process.

5 Findings

The researcher interviewed a total of 25 participants; 19 participants were included, and 6 were excluded because they had lived in the UK/Glasgow for over 10 years.

5.1 Participants' Demographics

The first section of the interviews consisted of asking the participants for their demographic details. The responses reported in this section include details of the Islamic community centres that the participants preferred to attend and the frequency of attendance; participants' gender, age, educational level, main occupation, and nationality; how long the participants had been living in Glasgow and which postcodes they were living in.

5.1.1 Islamic community centres (Mosques)

All participants confirmed that they were actively practising Muslims attending one or more Islamic centres. This section reports only the preferred (first choice) Islamic centre (Figure 3).

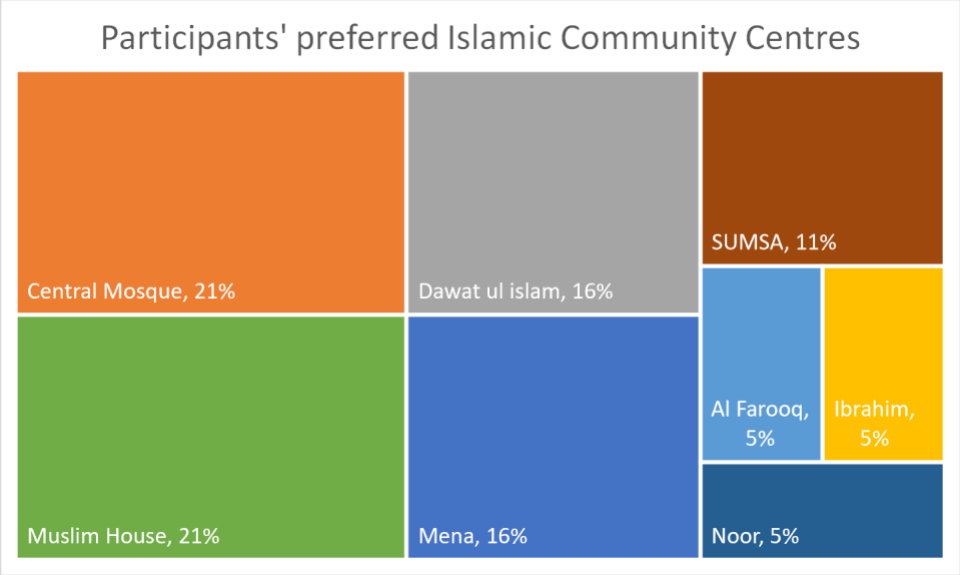

Figure 3: Islamic community centres confirmed as the first choice to attend.

Four of the 19 participants (21 percent) preferred to visit the central mosque in Glasgow, and the same number preferred to visit Muslim House. Three of the 19 participants (16 percent) preferred Dawat ul islam Islamic centre; similarly, Mena Islamic community centre was chosen by three participants (16 percent). Strathclyde University Muslim Student Association, widely known among Muslims in Glasgow as an Islamic community centre and referred to as "SUMSA" was chosen by two participants (11 percent). Three community centres, Al-Farooq, Ibrahim, and Noor were preferred by one participant (5 percent) each.

5.1.2 Frequency of attendance

The researcher asked the participants how frequently each one visited (attended) his/her preferred Islamic community centre; the responses varied widely, from attending more than once a day to rarely showing up. The response categories were merged into three categories attendance on a daily, weekly, or monthly basis (Figure 4).

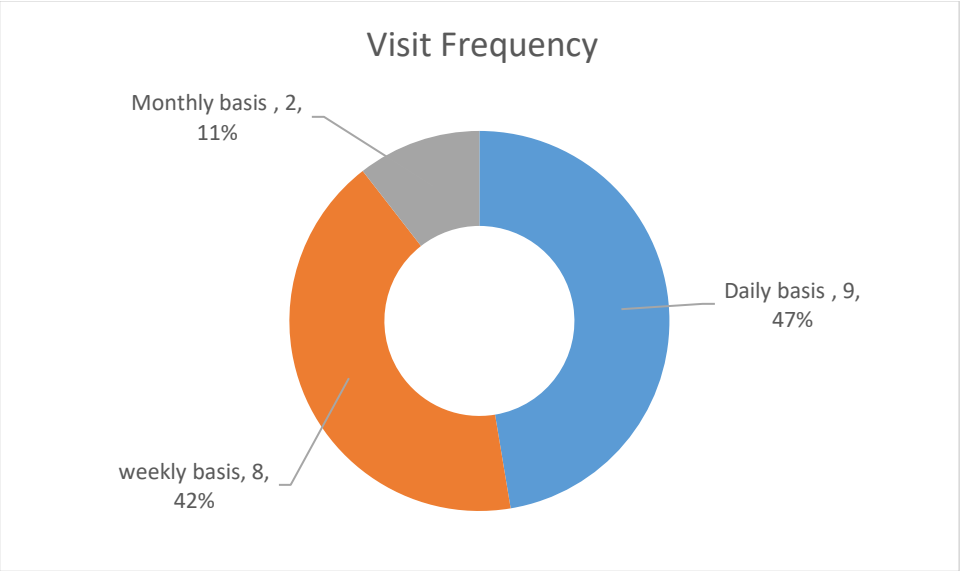

Figure 4: Participants' frequency of visits to their chosen Islamic centre.

Nine participants out of 19, representing 47 percent of the sample, attend the Islamic centre on a daily basis; eight participants (42 percent) attend on a weekly basis; and two participants (11 percent) attend on a monthly basis.

5.1.3 Gender

Participants comprised 12 Males (63 percent) and 7 Females (37 percent); see Figure 5.

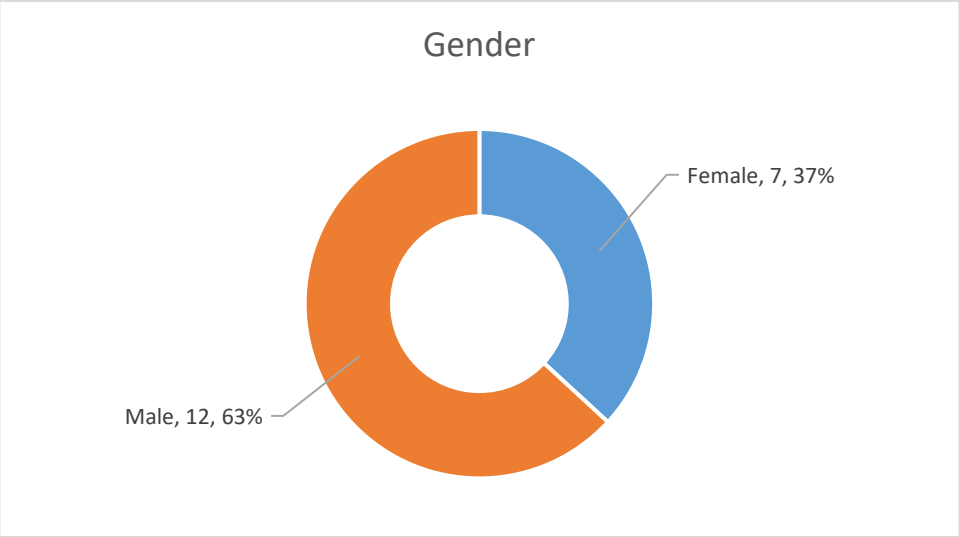

Figure 5: Participants by gender

5.1.4 Age

The youngest participant was 18 years old; the oldest was 52. The average age was 29 years. The majority of the participants were adults (7 out of 19) between 26 and 35 years old, representing 47 percent of the total number, 19. Four of the participants (21 percent) were younger adults, aged between 18 and 25. Two participants were aged between 31 and 35, with another two aged between 36 and 40, representing 10.5 percent for each age group. Three participants (16 percent) were aged between 41 and 45, and only one participant's age was 52, so that the age group from 45 to under 65 represented 5 percent of the study sample (Figure 6).

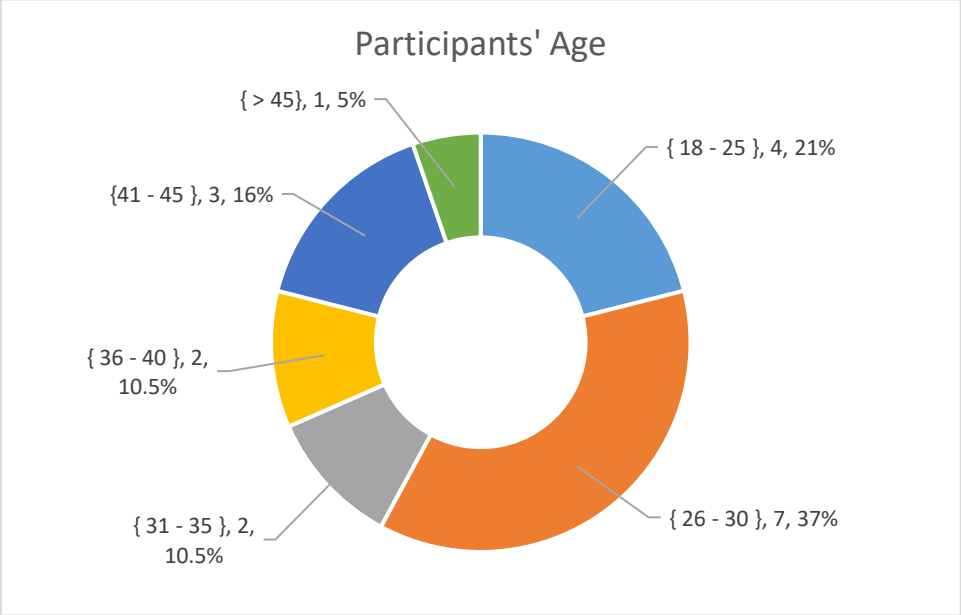

Figure 6: Participants' age

5.1.5 Education level

Figure 7 below shows that 7 of the 19 participants (37 percent) held a postgraduate degree. Four of the 19 participants (21 percent) completed graduate level education, 6 out of 19 (32 percent) completed high school, and 2 out of 19 (10 percent) did not complete high school level education.

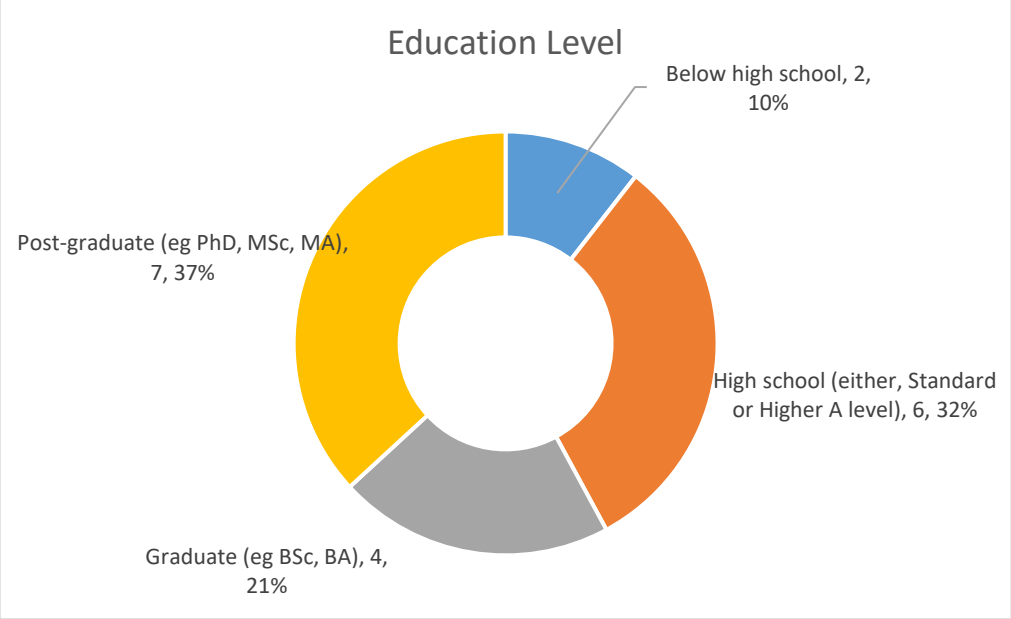

Figure 7: Participants' Education Level.

5.1.6 Main occupation

Figure 8 below shows that the majority of the participants were students (52 percent), several were employed (31 percent) and some were unemployed (16 percent).

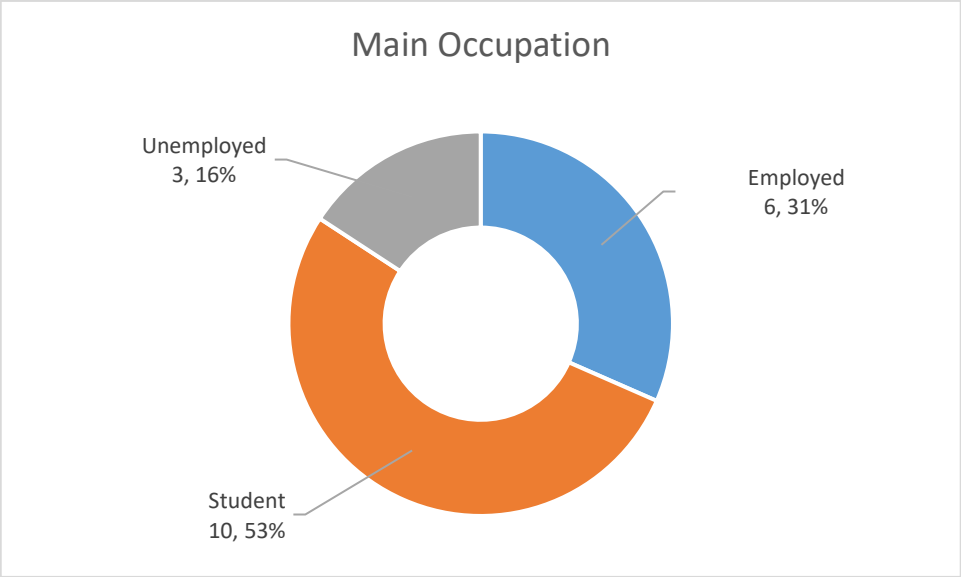

Figure 8: Participants' main occupation

5.1.7 Education and main occupations

Participants with a postgraduate degree (7 out of 19) consisted of 5 PhD students; one participant was unemployed, and one was employed. Participants with a graduate degree (4 out of 19) comprised 3 employed and one master's student. Participants with a high school level education (6 out of 19) consisted of 3 Bachelor's students, two employed, and one unemployed (Figure 9).

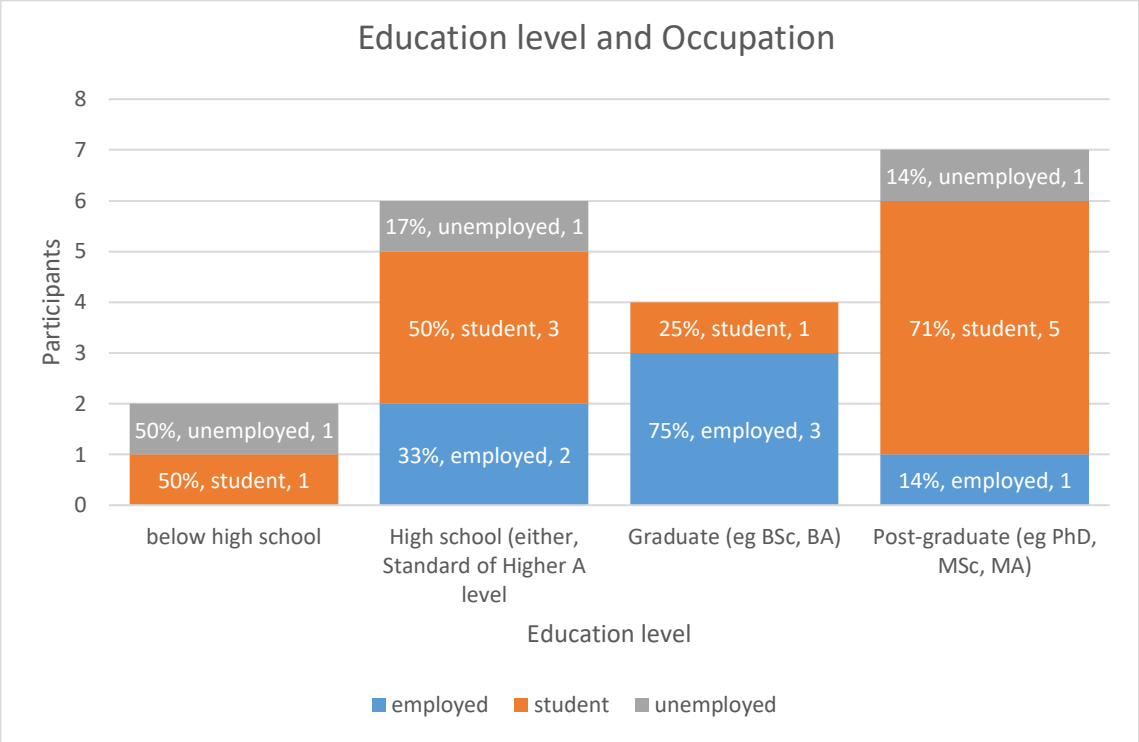

Figure 9: Participants' occupation by education level

5.1.8 Nationalities

Figure 10 below shows that several participants (6 out of 19) were from Syria (32 percent); some (3 out of 19) were from Bangladesh (16 percent); a small number of participants (2 out of 19) were either from Nigeria (11 percent) or from Palestine (11 percent); and there was one participant from each of the following countries: Egypt, Libya, Malaysia, Pakistan, Saudi, Somalia, making 5 percent of participants who were from each.

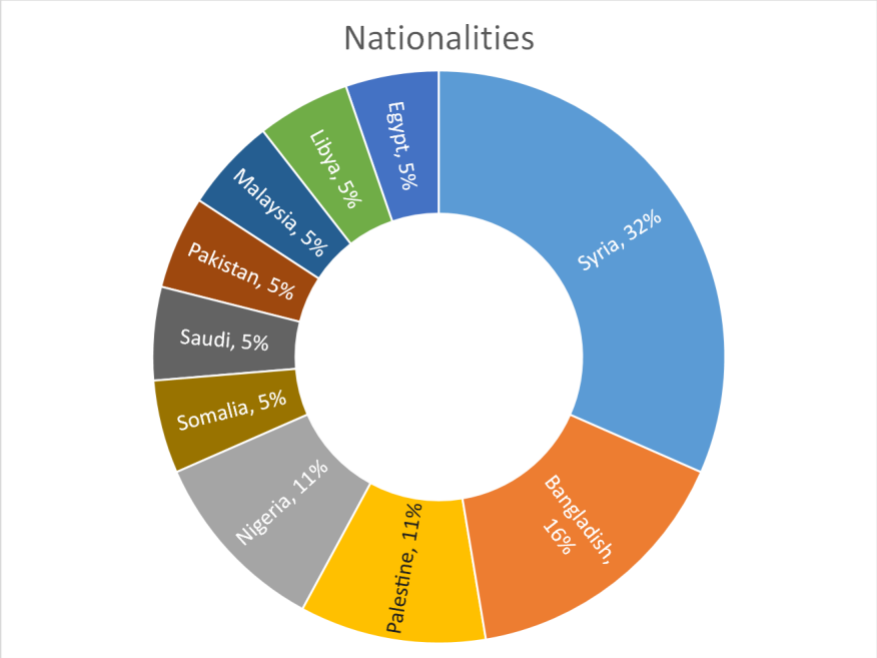

Figure 10: Participants' nationalities

5.1.9 Recognised Communities

Figure 11 below shows the participants' responses when they were asked to recognise a community in Glasgow that they feel part of and can relate themselves to.

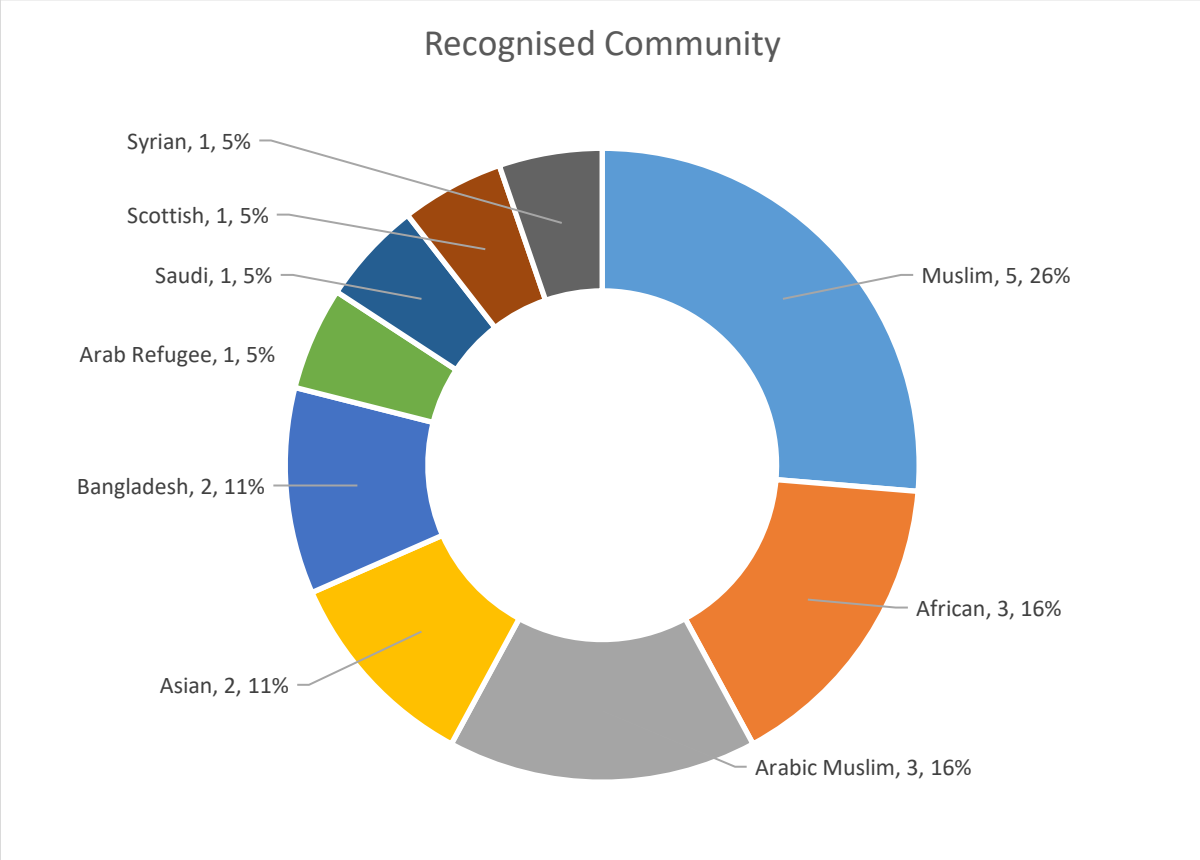

Figure 11: How participants related themselves to communities in Glasgow

Five of the 19 participants (26 percent) recognised the Muslim group as one that they could relate themselves to in Glasgow. Three of the 19 participants (16 percent) identified themselves as part of the African community. The same number (3) of the 19 participants (16 percent) related themselves to the Arab Muslim community in Glasgow. Two of the 19 participants (11 percent) felt part of the Bangladeshi

community in Glasgow and another two participants felt part of the Asian community in Glasgow. The Syrian community, the Saudi community, the Arab refugee community, and the Scottish community (the host society) were each recognised once by one participant (5 percent for each community).

5.1.10 How long the participants had lived in Glasgow

The researcher asked the participants about the total time that they had lived in the UK and/or in Glasgow; however, all 19 (100 percent) of the participants, at the time of the study, were resident in Glasgow. Figure 12 shows that a majority, 7 out of 19 (63 percent) of the participants, had lived in the UK and/or Glasgow for 3 to 4 years. One of the 19 participants (5 percent) had been in Glasgow for one year. The average time lived in Glasgow across all 19 participants was 4 years.

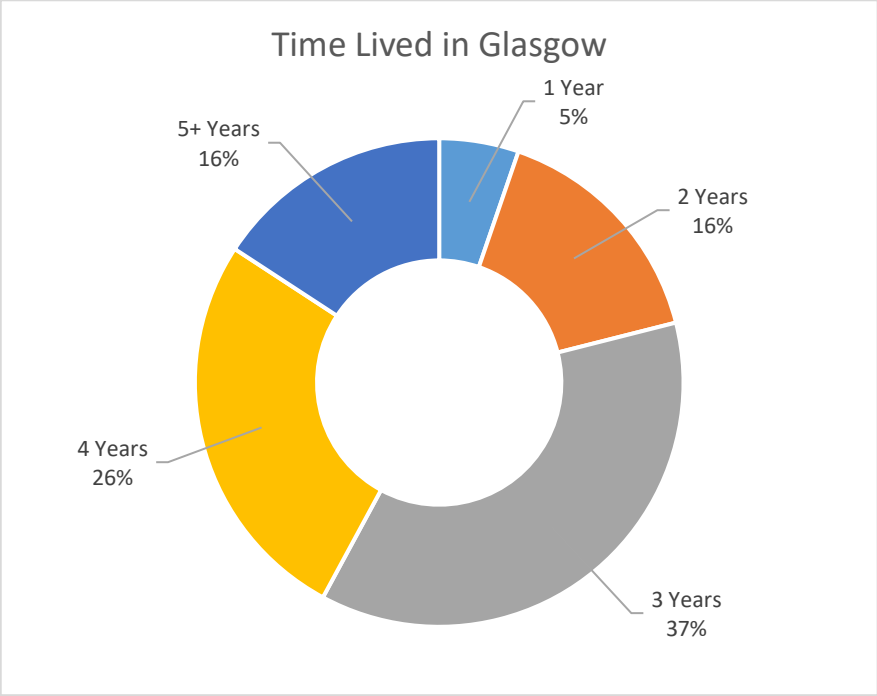

Figure 12: Time participants had lived in Glasgow

In a further breakdown, Glasgow was the first UK destination for 14 of the 19 participants (70 percent). Only 5 of the 19 participants (26 percent) had lived somewhere else in the UK before moving to Glasgow. The average time lived in

Glasgow (including the UK) was 4 years and 3 months. 6 (30 percent) of the participants' first destination was another UK city prior to moving to Glasgow. The average time that participants lived in the UK (including before and after moving to Glasgow) was 4 years and 5 months.

5.1.11 Summary

This section will present participants' demographics. The researcher included 19 participants, all of whom are active practising Muslims visiting 8 Islamic centres (Mosques) in Glasgow. Nearly half (47 percent) of the participants visited the mosque on a daily basis, 42 percent on a weekly basis, and 11 percent on a monthly basis. Most were Males (63 percent), Females comprising 37 percent. The youngest participant was 18 years old, the oldest was 52. 21 percent of the participants were aged between 18 and 25. Many participants were aged between 26 and 30 years old (37 percent), 2 percent were between 31 and 35, another 2 percent were between 36 and 40, 16 percent were between 41 and 45, and one participant (representing 5 percent) was over 45. The overall average age is 29 years. 37 percent of the participants held a postgraduate degree, 21 percent held a bachelor's degree, 32 percent had completed high school level, and a couple of participants (10 percent) were below the high school level of education. The majority of the participants (53 percent) were students, 31 percent were employed, and 16 percent were unemployed. Many of the participants (26 percent) were Syrian, 16 percent were Bangladeshi, 11

percent were from Nigeria, 11 percent were from Palestine, and there was one participant (representing 5 percent) from each of the following countries: Egypt, Libya, Malaysia, Pakistan, Saudi, and Somalia. Participants identified themselves as related to a broad range of communities in Glasgow. Many of them (26 percent) said that they were Muslims and 16 percent were more specific, identifying themselves as Arabic Muslims. 16 percent identified themselves as African, a couple (11 percent) identified themselves as Asian, another couple (11 percent) identified themselves as Bangladeshi, and one participant each (representing 5 percent) claimed identification with the following communities: Arab refugees, Saudi, Scottish, and Syrian. Participants had lived in Glasgow for a period between 1 and 10 years (as limited by the inclusion criteria of this research). The average time lived in Glasgow across all 19 participants was 4 years.

5.2 Information needs

Participants discussed number of needs, categorised as follows: Education, Religion, Entertainment, Social norms, Travel, Health, Immigration and legal status, Shopping, Employment, Housing, Financial support, Driving licence, and Technical support. Table 3 below presents a list of information needs categories, the number of participants who discussed each category, and the number of times each category was discussed. The needs in Table 3 are listed in descending order according to the number of participants who discussed this need and the number of times it was discussed. However, whilst the table provided some indication of the needs' importance, the author would caution against over-analysis, as the table could simply reflect what participants chose to discuss at that point in time. It is also important to note that it was not the intention of this study to comprehensively capture all possible needs, but to explore needs as part of a wider exploration of information seeking behaviour (or its absence). The needs are discussed below.

Category	Participants (n = 19)	Incidence
Education	8	12
Religion	6	6
Entertainment	5	6
Social norms	4	5
Travel	4	5
Health	4	4
Immigration	3	3
Shopping	2	4
Employment	2	3
Housing	2	3
Financial support	2	2
Driving licence	2	2
Technical support	2	2

Table 3: Information needs categories frequency by participants and incidence

5.2.1 Education

Information needs related to education were discussed 12 times by 8 participants. Some discussions were about finding information related to future studies, with some evidence of uncertainty. For example, one participant, who is employed and recalls a need from the past, wants to apply for a medical major and comments:

Where I am going to choose what I am going to study? (2f).

In another discussion, the same participant (2f) reveals an information need regarding future plans for her studies:

I am thinking about going back to the university as a post-graduate student. I am not sure exactly what I want to do for my post-graduate. (2f)

And another participant commented:

I am trying to know what is the best major for me. (6f)

Some participants mentioned needs related to study abroad as a future formal education plan, with a level of uncertainty about their future choices. For example, participant 12m expressed his need to study abroad but still needed to know more about this as a future opportunity:

I need to study outside. That was one of the events that triggered me to search for what I need to know, more about this study! (12m)

And another example:

What course shall I do? This was a big question, a big step in my life. (14m)

Some participants discussed the need for information related to specific tasks or course work. For example, one commented:

I am searching about the software which called 'RevMan' and also searching about articles and journals to prepare references. (10m)

Another participant needed to know how to access the university library:

I went to borrow some books. So, I didn't know about the library. (5f)

Some needs were unmet by the refugee training program. For example, participant 17m needed to find more advanced study programs than those available to him:

> *I first tried to study advanced course because the courses that are given to the refugees are basics. Because I finished the high school, I have to take something higher. I applied to the college and it rejected me. This motivated me to search for more information. (17m)*

And the same participant expressed another need, namely finding English language courses:

> *During the early days, I was trying to find places that teach English because my English was zero. (17m)*

5.2.2 Religion

Information needs related to religion were discussed 6 times by 6 participants. 4 participants discussed, 5 times, the need to find mosques in which to pray; for example:

> *I thought, why not finding a Mosque to pray? (m361)*

And in another example:

> *This situation happened to me at the first period of time when I came to the city of Glasgow, when I was trying find a mosque to pray in. At that time I was a new arrival to the city. (f221)*

A further example is:

> *When I came here I don't have any opportunity to pray Salah [Salah is an Arabic word means a prayer] in the mosque (…) I kept searching where the mosque is. (m111)*

Participant 8m needed to know whether Islamic law permitted him to apply for a student loan with interest:

> *The information about student loan is the most important to me (…). Is it an interest and I have no right to take it, or it is halal [permitted by Islamic law] and I can take it as I am a student and I need money for my study. (8m)*

Another participant, 18m, needed to know how to introduce Islam as a religious message to people:

> *I want people not to believe that Islam is the religion of terrorism (…). The question that concerns me now is how to convey this view to these people because we are responsible for them. (18m)*

5.2.3 Entertainment

Information needs related to the entertainment category were discussed 6 times by 5 participants. For example, participant 11m needed to find a place in Glasgow to go to that would be entertaining for his kids:

> *We are looking for things for children. Fun house! (…) Like an indoor games for children. (11m)*

Two participants discussed the need to find a restaurant where they could dine out; for example:

> *Many times a person gets bored from staying at home; that is why he decides to go out to eat in restaurants. I know a number of restaurants through the Internet (…) but sometimes you want to try something new. (13m)*

Some participants needed information related to a subject they were interested in. For example, 3f wanted to keep up-to-date with news about celebrities back in her country, Malaysia:

> *I love sometimes to search about the gossip that happens within celebrities' communities in Malaysia. (3f)*

In another example, 16m discussed his hobby of following the news about cars:

> *I am interested in cars of all kinds. (16m)*

5.2.4 Social norms

Social norms were discussed 5 times by 4 participants. Participant 3f discussed a need to find more information about sexuality after she noticed two men kissing each other in public:

> *The information I am looking for, recently, it is more about trans-gendering issues. I started to look into this since I first came here. When I saw, at the first time, guy with another guy kissing each*

other on the street and people not taking this really serious, but, for me, I took it serious. (3f)

Some participants discussed needs related to relationships; for example, 2f needed information about the relationships in her partner's family:

I need to find what kind of person they are and they like, in terms of, are they serious about their religion or they are not. And are they practising? What do they do? What kind of friends they have. (2f)

Participant 4f needed information about the level of trust among people in Glasgow. She was trying to make sense of the way people in Glasgow keep their doors locked, unlike what she was used to in Africa, her country of origin:

I could not really understand why somebody would lock their door. (4f)

5.2.5 Travel

Information needs related to transportation were discussed 5 times by 4 participants.

Some participants discussed the need to understand travel within Glasgow. One participant needed information about the most efficient route to a destination:

I have to go to Livingstone [a building name located in Glasgow city centre]. I had to find out what is the best way of getting there and the quickest way? (2f)

And another participant needed information to understand the directions and the streets:

> *I did not know the right directions and I had no idea about the streets. I was turning my head left and right in order to recognise the directions. I didn't know where I was supposed to go. (1f)*

Some needs were about understanding the public transportation systems in Glasgow. For example, 14m needed to know more about the next bus:

> *I was waiting for the bus and the bus didn't appear there, and I couldn't ask anybody where the bus is. (14m)*

One participant discussed her need to find information about travelling overseas for a vacation:

> *I am looking to travel; I look for places to go. (3f)*

5.2.6 Health

Information needs related to health issues were discussed 4 times by 4 participants.

The participants mentioned health information needs in various ways; for example, 3f sought advice on using a new form of vitamin supplement:

> *I am more concerned about getting vitamin C injection. (3f)*

Another participant needed to know what might be causing his chest pain:

I had issue with my chest. I didn't know what's wrong with my chest. Is it because I used to smoke for five years? Is it because of lung problem? Is it something new? (14m)

Another participant wanted more information about what health services were freely available:

There were some people who said that they took medicines for free and I did not know the details. (18m)

5.2.7 Immigration and legal status

Information needs related to immigration and legal status were discussed 3 times by 3 participants. For example, 11m needed to keep up to date with the immigration regulations:

I wanted to know if that immigration rule [has] changed. (11m)

Another participant needed to know why a particular ethnic group (Arabs in this case) were not staying longer in the UK:

I was wondering why the Arabs are not many in this country. There are a lot of Pakistanis here and they are the most Islamic community in the UK. I was wondering why the Arabs do not stay for a long time. (18m)

5.2.8 Shopping

Information needs related to shopping and new products were mentioned 4 times by 2 participants.

For example, 13m got bored with using public transportation and needed to speed up his travel by buying a car:

> *I needed to buy a car and it was something that I extremely needed. (13m)*

As another example, 2f needed more information to enable her to buy the same makeup product that she had noticed someone else using:

> *I am looking for a specific shade of lipstick and I saw someone with it. (2f)*

5.2.9 Employment

Information needs related to employment were mentioned 3 times by 2 participants.

Some needs related to employment were about the preparation and procedure for applying for a new job. For example, 8m needed to know the procedure for applying for a new job in the UK:

> *When I applied for a job, I needed it badly and I did not know the system here. (8m)*

In another example, 2f needed information about the best practices at her new job:

> *When I started, I am not sure about what I am trying to achieve and where I am trying to get to? Because you should have obviously targets when you start a job. What do you need to do in order to be successful in that job? (2f)*

5.2.10 Housing

Information needs related to housing were mentioned 3 times by 2 participants. For example, 12m needed to find a place to stay before he arrived in Glasgow:

> *I can give you some different story (...). It's about accommodation. (…) Before first coming into Glasgow (…) I contacted one of my senior colleagues who used to live in Manchester. (12m)*

A further example is that of 19m, who described his need for a more affordable place to rent.

> *I had rented my private house in Glasgow; it was so expensive as well as beyond my budget especially for a postgraduate student. (19m)*

Later, 19m came across information about housing associations that offered more affordable prices.

5.2.11 Other categories

Participants also discussed other needs, in the following additional 3 categories: Financial support, Driving licence, and Technical support. (Please refer to Table 3).

Information needs related to financial support were discussed 2 times by 2 participants, who both needed this support to fund higher education. For example:

> *PhD is giving me a lot of stress in terms of getting funding (…) how to get funding. (4f)*

Information needs related to driving licences were discussed 2 times by 2 participants, both needs being about the procedure for applying for a new UK driving licence. For example:

> *I [am] looking for driver licence (…) I don't have any idea how I can get it, especially here in the UK. (5f)*

Information needs related to technical problems were discussed 2 times by 2 participants, each of whom was having a technical problem and needed information to help find a specialist to solve the problem. For example:

> *I wanted to know how you can put that Lingos [computer software] back in the computer. (11m)*

5.2.12 Summary

Participants discussed multiple needs across 13 categories (Table 3). Education, Religion, and Entertainment were the most frequently discussed needs. They were followed by the need's categories of Social norms, Travel, Health, and Immigration. Other needs categories that were discussed were related to Shopping, Employment, Housing, Financial support, Driving licence, and Technical support. There is clear evidence of uncertainty in the participants' responses concerning their education needs.

5.3 Information sources

Participants discussed multiple sources of information categorised as follows (Table 4), Online, Friend, Printed material, Educational professionals and staff, Health professionals and staff, Family, Work colleagues, and other. Table 4 below presents a list of information source categories, the number of participants who discussed each category, and the number of times each category was discussed during the interviews. The categories in Table 4 are listed in descending order according to the number of participants who discussed this source, and the number of times it was discussed. The categories are discussed below.

Category	Participants (n = 19)	Incidence
Online	17	40
Friend	16	29
Printed material	5	6
Educational professionals and staff	4	7
Health professionals and staff	4	4
Family	4	4
Work colleagues	3	5
Other	3	3
Total	-	98

Table 4. List of information source categories

The participants discussed reasons, in 87 of the 98 incidents, to explain why they chose this information source during the seeking process (Table 5).

Category	Participants (n = 19)	Incidence
Experiential information	19	25
Second opinion	20	25
Authoritative Source	14	18
Trust	6	6
Total	-	74

Table 5: List of reasons for choosing the sources

Reasons are discussed below along with each one's associated information source.

5.3.1 Online source

The majority of participants (17 out of 19) said that they looked online. The total number of incidents was 40, with an average of 2 to 3 times for each of the 17

participants. Moreover, the online source could be the only information source or could be combined with other sources during the seeking process.

It is prominent that several participants (8 out of 17) described searching online as the starting point of seeking information. Participants mentioned this pattern 13 times. For example, participant 10m went online to find out how to use a software package called Revman that he needed for his research. He went online as the first point of seeking:

> *First thing I do is going to Google and have general search on the topic. (10m)*

Another participant (12m) was uncertain about his study abroad and needed more information about the exams required to become qualified to study. He went online as a first point of seeking to gather the information he needed:

> *I don't even know what was the process or the procedures of sitting for the exam. I started to look for what are the procedures of this exam. There are various sources of information. First one is obviously internet, googling it and searching for information. (12m)*

Another participant (17m) was dissatisfied with the level of the courses he was offered through the Refugee Council and sought more advanced courses. He started his search online. When asked what he did to find the information, he responded:

> *Google and YouTube; I start on YouTube. (17m)*

In another incident, Participant 17m needed instructions on cooking a particular dish. He began the search for it online, using Google and YouTube:

I went to the YouTube. Google and YouTube, I usually go to Google to read the instructions and then go to the YouTube to play a short video to see how they cook the dish and the main steps, then I start to imitate. (17m)

Another participant, 19m, needed information about his chances of finding a less expensive place to stay. He suggested that online was the first point at which to gather information:

Certainly, I have explored other ways of searching so that I can gather as much information as possible; then my picture of the matter would be completed. In my opinion, it is better to start searching through the Internet. (19m)

The online category was divided into two subcategories: websites and social media.

Websites included Google search, websites, and online maps. Social media included all social media platforms (for example Facebook, Instagram, Twitter, and YouTube). Participants sought information online for many reasons. In this section (Online source), all the reasons will be discussed, with examples, within two subsections: Website and Social media.

5.3.1.1 Website

Nearly all participants (16 out of 19) discussed websites as an online information source (31 times). On average, each participant (of the 16) discussed websites as an information source more than twice.

The majority of participants mentioned times when they sought information online through websites because they expected to find rich details there, thus obtaining a second opinion that might satisfy their needs. For example, Participant 2f was uncertain about which major she was qualified for and what the university's requirements were. She went online and looked up the University of Strathclyde's admission requirements:

> *I looked and I found that out on the website from the Strathclyde University website; they give you the entry requirements. (2f)*

In another example, Participant 5f discussed her need to find information related to PhD studies. She used her phone to find detailed information on the subject, especially numbers and statistics:

> *The biggest story in my life, PhD. So when I want any information I look in phone, go to Google Scholar (…) If I want some results, like statistics results, or database, I go to Google Scholar, find statistical studies. I'm looking for especially numbers. So, that's it. (5f)*

Another participant (12m) needed information to help him find accommodation and went online to search for available flats on the market before contacting estate agents:

> *Then I started searching myself on the website. You know they have a website renting an accommodation so I searched that website and eventually I checked some of the houses and I contacted one agency and they arranged one visit for me for one house. Eventually I entered into an agreement for that apartment. (12m)*

Another participant (16m) has a hobby of chasing up everything new about cars. He searches the internet to support his obsession:

> *I search the internet for cars. I have known everything about the new series of cars. First, I searched in Arabic, and then I started searching in English to know the most accurate details about cars. (16m)*

Another participant (17m) needed to find English courses. He prefers searching via the internet and believes that more information is gained from searching online than from asking a friend:

> *Most of the time Google is the best to answer. During the early days, I was trying to find places that teach English because my English was zero. I used Google and I found a lot of addresses and websites and I take the address and go to it to ask. I get a lot of information on the internet and also I ask friends, but the information that I get through the internet is usually more. (17m)*

Participant 2f needed to find the best way to get to our building at the University of Strathclyde to attend her interview. She used Google maps to look up different route options:

> *I looked to Google maps. I put the location from home and where I am going and see what the quickest way is. (2f)*

Another participant (10m) was struggling to find the mosque that was nearest to his university (University of Glasgow). He used Google maps, along with other sources, to locate the mosque:

First I don't have any access to the internet. When I go out I just scared; without internet it is kind of you are in a planet without anything, yah, lost! I found it very hard to find Dawat ul Islam [the mosque's name] first time. Then I searched Google maps, where I am and where is South Avenue, then I just run down this street for 5 minutes and I thought 'waw' where is Dawat ul Islam. Suddenly, I saw a small leaflet; it cannot even be seen. So I pushed the door and it was opened and I was afraid; I didn't even know that there is a ground floor with a big hall. (10m)

A few participants used online sources simply because it was easy. For example, Participant 3f wanted to know whether or not vitamin C injections were safe. She preferred online sources to asking a doctor because going online was easier for her:

I don't want to consult medical practitioners. And then, I found the information in the internet; it is easy and you can get millions of information about that. (3f)

A couple of participants went to websites for their information needs because they trusted the websites as a source of information.

Participant 4f described Google search as a Shaikh, which is an Arabic term for an Islamic scholar, thus implying that Google is a trusted source of information:

Because of a lot of things on the internet, you find that Shaikh Google is there; you find almost everything on the internet. (4f)

Participant 11m needed information related to immigration status and procedures. He went to the UK Visa and Immigration (UKVI) website to find out. However, even

though he still could not find the information, he was sure that it was there and that it would just be a matter of time before he found it.

> *I did not get that exact answer yet, even on the internet. (…) Basically, it is related with the UKVI. But, there is the information, what I need [is] to give more time. (11m)*

Participant 2f was looking for a job and went online because the list was always up to date:

> *I have to keep looking to the website every day or every week at least to the same website because they update it. As the jobs become available so I have to keep looking. (2f)*

Online sources suited Participant 3f because she was looking for sensitive information about sexuality:

> *… Because it is kind of sensitive issue. I guess the internet is much better to look about this. (3f)*

The mobile app was convenient for Participant 15m in searching for the location of the nearest mosque:

> *I have an application on my phone, I opened the GPS, its name "SALATCOM" or something like that. I opened the GPS and I followed it, followed it. When I arrived at the Mosque door, I know it is the Mosque when I recognised somebody exiting from it. I went in. This is the story; I used the phone without asking anybody and the area was new. (15m)*

5.3.1.2 Social media

Several participants (7 out of 19) discussed social media as an online information source (10 times).

Some participants utilised social media as an information source because these media allowed them to gather second opinions about the information they needed. For example, Participant 5f discussed her strategy of using social media platforms to gather different opinions about studying abroad. In her response below, she suggests that Google search is conducted when seeking to confirm something, but social media are used to collect different perspectives:

> *If I want the confirmation, usually I go and Google it. And I can see it in social media, or something like this. Because, (…) I believe about different perspectives. So, I can look for all different perspectives from people, but I believe in my side. (5f)*

Another participant (10m) likes to search for technologies that grab his attention, such as artificial intelligence. He explained that searching on different social media platforms may serve different purposes:

> *This what I have said: firstly, I search Google. And find what it is. Or, in Wikipedia there are so many opinions as well, and usually I use YouTube where there are so many new tutorials I can go with. (10m)*

A couple of participants utilised online sources to look for experiential information by consulting people who had experienced the same need in the past. This can be done

online by using social media. For example, Participant 4f was uncertain about continuing her studies. One of the sources she used to gain information was YouTube videos about people who had experienced the same need:

> *…and also watching a lot of people who have done it on YouTube. (4f)*

And another participant (13m) used online sources to find information about various needs that newcomers might face after arrival. In the following response he explained how someone might seek experiential information through online systems:

> *As soon as I came here I started to look for a part-time job. I am registered on their list at the time being now as one who deserves benefits. They are paying my house rental charge and they allocate a salary for me too, and I work on part-time basis. Now, how could these procedures happen? First of all, a person poses a question on a social media site such as Facebook. Then the experienced people start to answer him that if he was able to find a job with a certain number of working hours accordingly his right of taking a salary from a government turned to be not authorised, but you still have to pay the rental charge of the house where you live in. A huge number of discussions usually held between followers on the social media till a Full data about the subject would visibly appear. It could be about housing, or about benefits, about education or anything else, but most of the information is usually to be found and collected through discussions on social media such as Facebook or other sites. (13m)*

One participant (3f) discussed occasions when she sought information about entertainment through social media, because she was looking for more detailed information on the personal life of a celebrity:

> *I addicted sometimes to that information, like I want to know about this singer; I don't like her but I just addicted to know more about her life so I just go search online. Most of the time I use Instagram to spot her. Because I don't really want information about her. I just want to feel pleasure in my side; I just want to look at something that is safe. (3f)*

Social media could also be the source of expert information. Participant 8m needed information regarding the Islamic opinion on student loans carrying an interest rate. He went online to find an expert on this matter whom he could ask about it:

> *I searched online on YouTube about a Sheikh [an Arabic word meaning Islamic scholar] in Birmingham in the UK and he said that the loan was haram [prohibited in Islam], so I decided to avoid it. (8m)*

5.3.2 Friends

Most of the participants asked friends about their needs. Sixteen participants discussed friends as an information source 32 times (see Table 4. List of information source

categories). On average, participants discussed friends as information sources twice during their seeking process.

Most of the participants (13 out of 16) asked their friends because they were seeking experiential information (18 times); that is, information based on the source's past experience. For example, Participant 2f needed to know how she might fix her damaged hair. She noticed that her friend's hair was well maintained and asked her about her experience in this area and what she had done to fix her hair:

> *Participant: She said that she was using coconut oil and no heat. I asked her and she told me.*
>
> *Interviewer: did you know her before?*
>
> *Participant: Yes, I know her before; she is my friend.*
>
> *Interviewer: Was it easy to ask her?*
>
> *Participant: Yes, because she is also from Africa, so her hair is similar so what worked with her could work with me as well. So I said to her, this is the problem and what did you do to fix it?*
>
> *She said, she had that problem as well and her friend told her what to do. (2f)*

It will be observed that this incident of seeking information from a friend was pursued for two reasons: the experiential reason and the ethnicity (identity) reason, both friends being African women. This example is evidence of both reasons.

Another participant (4f) was looking for information about her chances of continuing her education; among other sources, she asked her friend who had done it before:

I was going back to my professors for example and going back to people who have done a PhD. That was with [her Friend's name] and we had an extensive discussion. (…) People tell you where to put your foot just to break the ice with you getting something done. (4f)

And another participant (6f) was uncertain about her future studies. She chose to ask friends who had the same issue:

I always ask people who are talking about this issue. (6f)

Participant 8m wanted to find out the Islamic opinion on student loans with interest. He asked friends who had gone through the student loan experience:

Yes, I asked more than one person, as well as my friends who applied for the loan before me. (8m)

The response of another participant (13m) provides a further example of the reasons for seeking experiential information to meet a person's information need. He needed information about which car he should buy and asked one of his friends who had just bought a car:

I have also received some useful information through the experiences of my former colleagues, who provide me with information about their purchasing experience. It is often to meet a friend who was working hard for a period of time, then you find that he has bought a new car. At first you are supposed to congratulate him for the new car, then you start to ask him how did he buy his car? What is the value of the insurance for his motor? And so on...? (13m)

In another incident, the same participant (13m) gave this response regarding experiential information:

> *Yes, of course. The first thing you do is asking your friend who passed through the experience, how he started. And could you work on this subject? His answers in the first place are very important as I mentioned before, because the answers that he will give me are answers that are coming from the experienced person who gained his experience by passing through the same circumstances. He will give me the summary of his experience. (13m)*

And another participant (19m) needed information about how to maintain and fix his flat. He asked one of his friends how he had coped with the same issues:

> *I went to one of my companions who is working in this mosque. The reason behind asking this person's help in particular? Because he was the person in charge of the maintenance works of the mosque; besides, he certainly had a great deal of good relations and experience. At the same time, he is really someone who likes to provide services to others and help them. (19m)*

A couple of participants sought the information they needed by asking friends who were experts on the topic; this has emerged several times in the participants' responses. For example: Participant 9m needed information about continuing his education and applying to do a Master's degree. He struggled to find out the process for submitting his application. During a meeting related to his work as a community service volunteer, he chose one of the organisers, as he was known to them and had met the person before, and asked for help. The person (a lady) advised him to attend

a specific course offered by the community organisation, which helped him to gain all the information he needed. He summarised as follows his journey to find the information he needed by asking an expert:

> *Some people have a monthly meeting called the Breakfast. I met periodically with them every Friday. There was a person I met there and he suggested getting a course entitled The Activate Course related to dealing with community development. After passing this course, I was able to meet people at the University of Glasgow and they were the first ones who told me how to apply for the Master. I applied and got an offer to join the University the following year. (9m)*

And another participant (11m) needed instructions on installing a computer software package. He chose to ask a friend who is an expert on computers:

> *I asked my friend (…) because he is a specialist in computers. (11m)*

Participant 1f needed information about halal food restaurants in Glasgow. She asked her friends because this kind of information is commonly circulated within her group:

> *I asked one of my friends about the places where Halal food is served. My friend helped me to know more information about places which is serving Halal food and we went together to visit this place (…) and as you know a piece of information could be circulated between us about whether this town has places to offer Halal food. I asked about the places. I mean where these restaurants were located. One of my friends told me that she would go with me to one of these restaurants. Actually, she guided*

me to the restaurant and I went with her to that restaurant which was offering Halal meat. (1f)

A couple of participants asked their friends for the information they needed because they trusted them. For example, Participant 2f asked her friend about her hair. 2f trusted the information because the results were obvious, as they could be seen on the friend's hair; also, because she trusted the person herself:

I asked her. (…) we are friends and we see each other almost every week at least once or twice so have known her about five years now. She is a good friend (…) I can see her hair and I can see what is done with her hair so I can trust is good information and I know the other friend as well so I trust her as well. (2f)

Another participant (5f) asked her friend how to access the university library. In the following quote, 5f described the solid relationship she had with her friend:

When I went to borrow some books. So, I didn't know about the library. So, I ask my friend how we can access the online library and google it for some books. (…) We have close relationship, together like sisters. So, she is pretty nice person, help me a lot. And support me a lot. But, unfortunately, she's a last year, so she will go, and I will ... I know, I don't have a [inaudible]. So, for my personality, I don't like a group, to work with them. I like some person. That's why I trust her first and I feel comfortable when I talk with her (...) If there are any private information. (5f)

A couple of participants relied on social relationships as a reason for asking friends about their information needs. For example, Participant 2f needed more information

about her fiancé's relationships and family. She asked a friend because this friend had a relationship with her fiancé:

> *I asked people (…) for example, people know the person, who knows the family. (2f)*

And another participant (8m) sought information about the opinion of Islamic law on student loans with interest. 8m asked his friend to use his relationship with an Islamic scholar to ask him about the loan issue. In this case, 8m used his friend's social relationship with the scholar to gain information:

> *I asked a friend who asked a Sheikh [Islamic scholar] in a mosque. This Sheikh told him that it was haram [prohibited in Islam]. Although this Sheikh was well-educated, he was an expatriate in the country, so he was unaware of the issue. (8m)*

Participant 2f, an African lady, needed to know how she might fix her damaged hair. She noticed that her friend's hair was well maintained and asked her because the friend was also African.

> *… because she is also from Africa, so her hair is similar so what worked with her could work with me as well. So I said to her this is the problem and what did you do to fix it?*
>
> *She said, she had that problem as well and her friend told her what to do. (2f)*

Participant 1f needed to find an address and was walking with her friend who was trying to locate the same place:

I searched the address with some of my friends. It took us a long time in looking for the place, from 9:00 o'clock till 11:30 o'clock through the centre itself, and we asked other people. Although one of the people described the place for us, we had difficulty in finding the place accurately. (m221)

Participant 3f needed information about sexuality issues. After searching the internet, she asked friends to clarify the information she had collected online. Note also, from the participant's response below, that she chose local friends for another reason: she thought that locals would answer her question about this sensitive issue as it was an acceptable social norm within the host society:

Yeah, directly because it is kind of sensitive issue. I guess the internet is much better for looking about this but whenever I found something in the internet I try to clarify things so I started to consult my friends, which is my local friends because they get used to it. And they share something about it; it is actually like this and that is transgendering. (3f)

5.3.3 Printed material

Some participants (4) discussed printed material. Several participants searched for the information in printed material because they were looking for more detailed information to meet their needs. For example, Participant 1f needed information about various requirements when she came to Glasgow. In her response (below) she reports having found the needed information in a printed booklet.

I also got help when I first came to the city of Glasgow. When a new arrival comes to the city, he is supposed to be helped by getting guidance booklets about nearby hospitals, places of service or guidance on studying language services. These booklets help the arrivals a lot. (1f)

And another participant (3f) mentioned that books may provide more information.

I went to the library to find the book and I tried to look if it is true what the internet said. I started with friend and then I go to the internet and then if I really want more about that I go to find the book. (3f)

One participant (5f) chose printed material because she trusts the source.

I can look for something I trust (…) like a study, like book, something like this. (5f)

5.3.4 Educational professionals and staff

Some participants (4 out of 19) discussed educational professionals and staff as information sources. Participants preferred these sources mainly because they were authoritative. For example, Participant 5f needed information about the university library service. She called the librarian in charge and asked about the information she needed:

When I want a specific thesis from Library University. So, I called to the library, and I ask them, the staff there, to help me to get it

from British Library. And they show me how I can enter and go online to access this British Library, to bring for me this thesis. (5f)

Another participant (2f) was uncertain about which major to study. She made an appointment and met the guidance teacher at her school, who was an expert in this matter, and asked her about her choices and the requirements for doing the majors:

We had guidance teachers at school (…) the lady is quite experienced in that field, so was able to say to me if the information sounds right or wrong, and explain it to me if I did not understand. (2f)

Participant 15m had an interview in one of the colleges and on his way out he needed to know whether there was a place to pray. He asked the receptionist because she was in charge of providing such information.

I finished my interview; on my way out, I asked the lady at the reception, is there a prayer room here? I was confident that she will reply yes because I have been dealing with the country here and I know that there is a prayer space in proximity every college. That way I went to her loaded with confidence and ask her where is the prayer room? That was the first time enter the building and asked her where the prayer room is? She replied: oh yah sure! And she called a person and he took me to the 5th floor and the prayer room was there. (15m)

On one occasion a participant asked people in educational institutions because he was seeking information based on their expertise. In another example of this, Participant 2f was uncertain about her major study, and went to ask the school advisor about her need.

I am having a meeting next week as well with an advisor in the physical sciences because I want to go into the Medical engineering through the NHS. I will speak with her to see what she says. (2f)

5.3.5 Health professionals and staff

Several participants (4 out of 19) discussed information sources such as people associated with health institutions (e.g. doctors and health visitors). For example, Participant 3f needed information about vitamin C injections at some point, and asked a specialist about it.

Interviewer: Did you ask the specialist?

Participant: I did. But I am afraid, even if it is that same information in the internet but it is something related to your health (…) I did not decide yet because it is too expensive. (3f)

One participant who sought the needed information by consulting employees of a health institution did so because it was their professional responsibility to respond to her need. For example, Participant 4f needed information on how to engage more with the new community in Glasgow. She met her need through a discussion with the health visitor.

… nobody giving me any answers and I thought there should be a bigger community with a collection of ladies somewhere. I remember that when I was pregnant, the lady was asking me very

funny questions about domestic violence; the midwife asking me, prominent that a lot of minority women don't ask about domestic abuse. I remember how [she] handing me a card that wrote domestic abuse contact Muslim women resource centre that to me was funny. I took the card and I just kept it until I had a baby. (4f)

5.3.6 Family

Several participants (4 out of 19) asked family members about their needs. Four participants 4 times discussed family as an information source. For example, Participant 3f was seeking information about vitamin C injections. She asked her family member because she had taken the vitamin before and had gone through the experience. This time, 3f preferred to obtain the experiential information from a family member rather than by asking a doctor (on the basis of expertise):

Did not consult a practitioner, but I just asked my family members. I ask my family members most of the time because one of them, she did it. She told the process but I want to confirm more; I don't want to consult medical practitioners. (3f)

Later, Participant 3f asked a doctor about vitamin C injections. The information she got from the doctor was the same as what she had gathered from other sources. However, she rejected the idea of taking the injection because she was afraid to make a decision about her health and because the injection was too expensive.

Interviewer: Did you ask the specialist?

Participant: I did. But I am afraid, even if it is that same information in the internet but it is something related to your health (…) I did not decide yet because it is too expensive. (3f)

Another participant (17m) needed instructions on cooking a dish. He asked his mother because she had cooked this particular dish for him before:

I call my mother sometimes to take some instruction about how to make that specific dish in a way that she was making, to get the same results like what I have at home in the past; same taste, Palestinian taste. (17m)

Participant 5f asked her sister about her uncertainty over whether to study abroad. She had previously asked her parents because of their encouragement. 5f trusted her sister to deliver the information she needed:

But I ask my biggest, yeah, older sister, and she encouraged me to go there, and continue my study. Because you know, about feeling from sister, different from parents. (5f)

One participant, relying on his family's relationships with others, asked them to retrieve the information he needed. Participant 8m needed to find information about the Islamic legal opinion on student loans with interest. He asked his mother because she could ask someone she knew who could answer the question.

I told my mother to ask someone else. We have religious people in the family. (8m)

5.3.7 Work colleagues

A couple of participants (2 out of 19) asked work colleagues about their needs. Two participants discussed work colleagues as information sources twice (see Table 4). For example, Participant 2f was new in her job and asked her supervisor to explain the new responsibilities. She asked her supervisor because she worked at the same job and had experienced the same process.

> *I asked my supervisor, and she told me this is what you need to do and make sure this is done and make sure you don't do this and you should not do that, and if you have any problems I am the source of information; if you want to ask, I will be the one to ask. I said OK, thank you. (2f)*

5.3.8 Other

Two participants discussed seeking information by asking staff at commercial institutions (shops and bus stations). For example, Participant 2f needed information about a particular colour of lipstick that she noticed one of her friends putting on. She went to the makeup shop and described the colour to a member of staff.

> *If I am looking for specific shade and lipstick and I saw someone with it I can ask the person I see where did you get that from? Or if*

get to the shop and describe the colour they can tell me if they have it. (2f)

Participant 14m was at the bus station and missed his bus. He went to the information desk and asked the member of staff in charge about his bus:

Once I was traveling to London, and in the ... I went to the Stance 22. I was waiting for the bus and the bus didn't appear there, and I couldn't ask anybody where the bus is. When I missed the bus, I've missed opportunity. Then I went to the information and I say, "Where is my bus?" and they say, "You missed the bus." (14m)

Participant 1f mentioned that the refugee affairs office was in charge of welcoming newcomers and providing the information she would need to become settled after arrival, such as details of nearby hospitals, places offering services, and/or guidance on studying English. She visited the centre and experienced its facilities.

The association in charge is the refugee's affairs office. When I first came here as a refugee I went to the refugee office, which is a large building with a reception hall. When the newcomer goes to them, they usually welcome him and help him too. Whatever his language or his delicate is. They also provide him with an interpreter to help him expressing himself. (…) this was actually happened with me when I first came to Glasgow, where I met an official employee who provide me with assistance in the refugee office. (1f)

5.3.9 Summary

The research participants (19) discussed 8 categories of information sources in 98 incidents (Table 4. List of information source categories); 74 of the 98 could explain the choice of the source (Table 5: List of reasons for choosing the sources).

The majority of the participants searched online for the information they needed. Among the participants who looked online, some preferred to go to online sources as an initial starting point in the seeking process. Online sources were combined with other information sources during this process. Most of the participants reported searching online twice or more (on average). Most of the participants who went online sought to retrieve information from a website. Their main reason for searching on a website was to access a second opinion. Several participants discussed social media as another online information source, mainly because it provided the opportunity to access a second opinion.

A majority of the participants consulted friends during their information seeking process. Participants who asked questions of friends discussed various reasons why they sought information by this method. Most of them asked friends in order to access experiential information from a person who had felt the same information need previously and had gone through the same experience of seeking the information. A few participants discussed the ability to access expert information as the reason for asking a friend. A few other participants asked friends because the information they

were seeking was commonly known as information circulating within the seeker's social group. A few participants reported asking a friend to take advantage of his/her social network.

Some participants sought the information that they needed through printed material (books, articles, and brochures). The main reason for this was to access a second opinion.

Some participants asked educational professionals and/or staff mainly because it was the responsibility of that source (which was an authoritative source) to deliver the needed information.

Some participants sought the information they needed by asking health professionals and staff, mainly because that allowed them to access expert information.

Some participants discussed seeking information by asking the family, mainly in order to obtain experiential information.

Some participants discussed seeking information by consulting work colleagues, again mainly for the purpose of accessing experiential information.

Participants also discussed other information sources such as staff at commercial institutions or immigration advisors. Their reasons are consistent, in that participants sought the information this way because they wanted to access expert information and the source was in charge of delivering the information.

5.4 Influencing factors

This section presents the findings in relation to factors influencing interactions, which are categorised as (Table 6): identity, language, stigma, trust, and other factors.

Factor Category	Participants (n=19)	Incidence
Identity	15	28
Language	8	10
Stigma	7	11
Trust	7	7
Total	-	56

Table 6: List of influential factors

5.4.1 Identity:

Identity appears to be a significant factor influencing the seeking behaviour, particularly in relation to gender, ethnicity, and religion. Most of the time, participants referred to various combinations of identity aspects as factors that influenced their information behaviour. For example, ethnic, gender, and religious identities were factors that influenced 4f's seeking behaviour. 4f is an African female from Nigeria who had been in Glasgow for 9 years. When she was newly arrived in Glasgow, she sought information on social activities. At the mosque she met a lady who invited her to participate in and engage with a Muslim women's society:

I don't know her, but the only thing that she was an African woman she is an African woman. [Lady's Name] I think was Somali or Sudan. (4f)

In 4f's response, note the similar ethnic and gender identities, in addition to her religious identity, because the conversation happened to be at the mosque.

In another example, 6f, a Syrian female who had been in Glasgow for 4 years, considered the religious and gender identities of a Muslim woman when approaching somebody to ask:

Muslim women have to be careful and really picky when choosing whom to ask the question (…) men are facing fewer difficulties than women because Muslim women can be easily identified and can't defend herself like men. (6f)

In another example, 7f, a Syrian female who had been in Glasgow for 4 years, needed to find a driving instructor. She considered gender identity as a criterion when choosing the instructor:

Confusing to choose man or woman to be the instructor. (7f)

In another example, 14m, a male from Pakistan who had been in Glasgow for 3 years, needed to find a mosque to pray in, and even though the prayer time window was due to end soon, he did not ask non-Muslim persons but preferred to wait patiently and seek passively:

The time is very critical, so I was waiting for the right person and looking at the people. Because the majority of them were non-

Muslims, I couldn't ask them. I couldn't ask the non-Muslims if there is any masjid, so I waited. (14m)

Later, 14m found a Muslim lady and asked her:

I found a lady, a Muslim lady, walking, and I told her, "Is there a masjid?" and she pointed out to me, "Yes, the masjid is there." I would say, I waited for half an hour, and I couldn't ask anyone else. (14m)

The Muslim lady referred to in the above quote did not give him a complete answer; hence, 14m waited a while longer to find someone matching his identity to ask:

Until I find someone from the same religion; of the same mentality. (14m)

14m, at the bus station, doubted that non-Muslims would know where the mosque was so he did not ask.

First of all, the things that are coming to my mind was, they might not know the masjid. What is masjid? Because some of the non-Muslims, they don't have the information about Islam, so they don't differentiate between the temple, between the mosque, between the synagogue. Everything they see people worship, they say it's a church. (14m)

In another example, 16m, a male from Syria who had been in Glasgow for 3 years, was seeking information about English courses. He activated the search process when he met someone who shared his origin-based identity (Syrian):

Once I met a Syrian person in the university. I asked him if he could recommend me an English course for beginners. (16m)

In a similar example, 17m, a Palestinian male who had been in Glasgow for 3 years, asked a Sudanese friend who shared the same Arabian identity with him:

> *I remember when I arrived, I was in the office and I met a Sudanese friend and asked him. He said "Here they give a course" and he gave me a couple of addresses. (17m)*

In another example, 19m, a Libyan male who had been in Glasgow for 2 of the 4 years in total that he had lived in the UK, discussed his need with his friends from Libya:

> *I have known this information through the discussions with my Libyan friends. (19m)*

When Participant 19m was looking for information on maintaining his flat, he asked his friend who was working at the mosque:

> *I went to one of my companions [friend] who is working in this mosque. The reason behind asking this person's help in particular? Because he was the person in charge of the maintenance works of the mosque; besides, he certainly had a great deal of good relations and experience. At the same time he is really someone who like to provide services to others and help them. (19m)*

In another example, 19m was looking for information about his eligibility for funding from the housing association. He considered himself part of the expatriates' group while other people were British citizens. 19m thought that this social identity had influenced his seeking behaviour:

> *I was not quite sure that all that information was actually written on the association website would accept my request as an expatriate*

or if they might accept my request because I am not a British citizen, and you know such things, like funds or aids are mostly intended for citizens and not for expatriates. (19m)

In another example, 19m discussed cultural differences as a factor influencing the way people communicate:

Sometimes there are cultural gaps and differences in the cultural background between groups. I find it difficult to communicate with Muslims who are coming from Pakistan. There are things and behaviours I may not understand from their culture. (19m)

A Palestinian male, 15m, who had been in Glasgow for 3 of the 4 years he had lived in the UK, described himself as a foreigner:

In my opinion, there is a general society but I may consider myself part of the foreign people in Glasgow, or from the refugees' society. Because I dissect the society into Scottish and non-Scottish, foreigners, I consider myself as a foreigner. (15m)

In another example, Participant 1f, an African female from Somalia who been in Glasgow for 4 years, was seeking information about halal food (food that meets the Islamic standards) in Glasgow. She asked her friends inside her group who had usually experienced the same need previously:

And as you know a piece of information could be circulated between us [Muslims] about whether this town has places to offer halal food. I asked about the places. I mean where these restaurants were located. One of my friends told me that she would go with me to one of these restaurants. Actually, she guided

me to the restaurant and I went with her to that restaurant which was offering halal meat. (1f)

1f continued the discussion and explained the importance of asking people who had experienced the same need:

I see that knowledge of people is the most important thing when I am searching for information. The most important source of getting information is by asking the person who has already experienced the experience before. (1f)

In addition to identity, some participants discussed the importance of the source's experiential knowledge during their seeking process. Experiential knowledge seems to be associated with identity in many incidents. For example, 5f, a Saudi Arabian female who had been in Glasgow for 3 of the 4 years she had lived in the UK, was uncertain about her study abroad, so she asked her brother, sister, and parents who already shared many aspects of her identity. 5f explained that she had decided to ask them because they might have had more experience and deeper understanding of her need:

They [family members] maybe have more experience. Maybe another one have deeper information about another issue, but not have for my issue, exactly. So, everyone I can understand well. And I can know which one is suitable for my issue, or my answer that I am looking for. (5f)

In another example, 19m, a Libyan male who had been in Glasgow for 2 of the 4 years he had lived in the UK, could not complete the procedure to apply for housing. 19m asked his Libyan friend, who had done it before, to help him:

At first I felt that the matter was difficult; besides, I could not complete the procedure by my own at the beginning. That is why I asked him if he is sure that it would be working in my condition? But [person's name] assured me that I can complete the procedures and said that he has done the same procedures as me before. (19m)

Also, 19m mentioned that online groups were important by enabling him to gather experiential information about common needs that newcomers may face:

We [Libyans] have a web site called "AL-MOFAD" which help in inquiries of expatriates. As it is very useful to know about the experiences of others from different countries of the world in order to know what these experiences, to be benefited from their experiments. It was one of the main reasons behind joining the group of expatriates in UK. Through joining this group I collected so many different information, I got a reasonable idea about the costs of living as well as housing rental charges. (19m)

In another example, 13m is a Syrian male who has been in Glasgow for 3 years and a volunteer in a Syrian group formed to help all Syrians in Glasgow. He discussed using social media − mainly their Facebook group (https://www.facebook.com/pg/syrian.network.glasgow) − to create forums on which to exchange experiences among Syrians in Glasgow.

First of all, a person poses a question on a social media site such as Facebook. Then the experienced people start to answer him that, if he was able to find a job with a certain number of working hours, accordingly his right of taking a salary from a government turned to be not authorised, but you still have to pay the rental

charge of the house where you live in. A huge number of discussions usually held between followers on the social media till a Full data about the subject would visibly appear; it could be about housing, or about benefits, about education or anything else, but most of the information is usually to be found and collected through discussions on social media such as Facebook or other sites. (13m)

5.4.2 Stigma

Stigma appears to be a significant factor influencing the seeking behaviour of the participants. For example: 4f, an African female from Nigeria who had been in Glasgow for 9 years, mentioned that wearing a hijab and/or being a black person may affect how other people react during a conversation:

Sometimes because you [are] wearing the hijab, if you wear the hijab, and you are black. If the person wants really [to] listen then you see that thing breaking down, but sometimes that what her going to say but I am not that person and I don't look at all these things. I don't wait to see those things whether not you have your perception, that's left to you; we are here to do something let's get to it and do it. I don't wait to think about what you are thinking. (4f)

In another example, 6f, a Syrian female who had been in Glasgow for 4 years, thought the hijab might cause difficulties for her:

Men are facing fewer difficulties than women because Muslim women can be easily identified and can't defend herself like men. (6f)

Participant 7f, a Syrian female who had been in Glasgow for 4 years, thought that wearing a hijab, along with her gender, encouraged people to react negatively when she asked questions of pedestrians in the street.

Sometimes people in the street ignore ladies when asking and continue walking; it is happening but it is normal with no problems. At the end we are human but yes we put hijab there is no need to [she is referring to people's negative reaction]. (7f)

In another example, 14m, a male from Pakistan who had been in Glasgow for 3 years, was at the bus station waiting for the next bus. He did not ask for information although he had missed the bus. When he was asked, in the interview, what had prevented him from asking, he ascribed his hesitation to his beard and clothing, which represented his religious identity, and explained how these might be perceived negatively by others:

I was waiting for the bus and the bus didn't appear there, and I couldn't ask anybody where the bus is (…) I was feeling shy by the beard and by the clothes, you know … You are more likely to be perceived as a troublemaker. (14m)

Participant 14m, in another example, thought that people perceived him as a dangerous person:

There were a few people standing in front of me, waiting for the bus, but what they did when the bus came, all of them didn't take

the bus. I was the only one who took the bus, and they waited for another bus. They thought; well, that's my perception; they thought, this bus might blow up, so why shall we get into this bus. They were waiting for the bus maybe 5-10 minutes, and when the bus came, they didn't get into the bus. (14m)

In a further example, 18m, an Egyptian male who had been in Glasgow for two years and worked as an Imam (preacher) at the mosque, described how Muslims are stigmatised because of their religion and perceived as terrorists and extremists. Thus 18m's information need was about how to convey the Islamic massage to people in Glasgow:

Some media has a stereotyped mental image that Islam is the religion of terrorism and extremism. This image causes me troubles and everywhere I go, I want to show those people that Islam is different, and that it can deal with Muslim and non-Muslim. (18m)

5.4.3 Language

English language appears to be a significant factor affecting the seeking behaviour of the participants. For example, the lack of English language skills influenced 1f's search process. Participant 1f, an African female from Somalia who been in Glasgow for 4 years, was out on the street and had a piece of paper containing an address which

was written in English. She needed someone to read the address and tell her where it was located.

> *Whenever I tried to go to ask someone about the contents which had been written in the paper to find out what is the information in it, people were escaping from me and refusing to give me any help. (1f)*

In another example, 13m, a Syrian male who been in Glasgow for 3 years, needed to buy a car and wanted information about the options and the process of applying for a driving licence. 13m went through a process of seeking the information online and consulting his friends. He discussed the lack of English language skills as a barrier:

> *For me here is a new country and a language is a new language. So you often have many obstacles and difficulties. If you have this kind of problem that you do not have a good command in English language, this would be a major problem. Because mastering the language is very important. (13m)*

Participant 16m, a male from Syria who been in Glasgow for 3 years, needed information about cars. His low level of English language influenced his information seeking process. The following quote is 16m's response during the interview to a question about the difficulties he faced during his search:

> *Frankly, this thing [referring to the difficulties] is related to English. When I first came to Britain, I could not speak English very well and I had to ask about the meaning of everything in English (…) The English language is essential here. (16m)*

Another time, 16m mentioned that learning English was a priority in order to meet his need for information about opportunities for study:

> *The most important thing for me was how to start my study. When I came to this country, I was not good in English (…) this was the most difficulty I faced. (16m)*

In another example, 16m continued to discuss language as a barrier in everyday life tasks:

> *I knew that English is basically in everything here and this was the first difficulty I faced. The simplest example is that when you want to fill in an application form, you need the language to do that. (16m)*

Participant 4f, an African female from Nigeria who had been in Glasgow for 9 years, volunteers at a Muslim women's association and usually interacts a lot with Muslim women in Glasgow. In her response to the question about the major difficulties that Muslim women faced when seeking information, 4f discussed language as a barrier:

> *That's what I'm saying, that language, there's a big problem, language! (4f)*

In another example, 18m, an Egyptian male who had been in Glasgow for two years and worked as an Imam (preacher) at the mosque, discussed English language as a barrier:

> *I had difficulties with English language because I wanted to be perfect so that I could communicate with all people. I am not the*

only person who suffers from this problem, but it is the problem of many people. (18m)

When asked during the interview to remember any other difficulties that he faced during the process of seeking information, 18m replied:

It is the only difficulty, but I contact with all people and there is no other difficulty in this place because all other things are available. The only problem for me is the language. (18m)

5.4.4 Trust

Trust appears to be a factor that influences the seeking behaviour of the participants. For example, participant 2f, an African female from Nigeria who had been in Glasgow for 10 years, needed information related to the tasks involved in her new job. Besides directly asking her work colleagues, she observed the way they performed the same tasks. When asked, in the interview, about her reason for combining the two seeking strategies, 2f explained that that was her way of judging the trustworthiness of her work colleagues before accepting the information they provided:

When you ask them, what they tell you [about to do or not to do such a task] "should not" but what they do is different. So sometimes you have to observe and see. And also you know that if the person you can trust to ask information from next time. Because if what they doing is not the same as what they doing,

then how you can trust them and ask them about information I need. (2f)

In another example, 5f, a Saudi Arabian female who been in Glasgow for 3 of the 4 years she had lived in the UK, was seeking information online about the driving licence, but expressed difficulties related to trust in online communities as a source of information:

The community online make everything easier, and faster, so I can get it easy; but sometimes confused because a lot of information you don't know [if] trust anyone with this information. You can't trust it. (5f)

5f, also, mentioned that she would ask people whom she trusts:

People that I know. Not social media (…) I don't mean any people; no. People I trust. (5f)

In another example, 9m, a Syrian male who had lived in Glasgow for 5 years, asked a lady he knew through his community volunteering activity. The lady was working at the Housing Association. 9m needed information about finding a Master's degree program for himself, and trusted the lady to answer his question:

I was confident by 100% that she would help me. I was sure that if she had the ability to help me, she would not hesitate to do that. I knew her a long time ago and she worked and had a lot of experience in this field, but I was not sure that she could help me. (9m)

Another example is that of 12m, a male from Bangladesh who had been in Glasgow for 3 of the 4 years he had lived in the UK. Trust was an essential factor in his decision

to accept or reject the information he was seeking. 12m discussed how the issue of trust created difficulties during his seeking process:

> *What difficulties? Difficulties [the participant thinking]. I think, personally, I think this goes back to my own personality. I always try to check the information, whatever information, even today by myself. Even though you are very close to me, I know you very well and I trust you, everything is there, you give me the right information, but I cross-check the information for myself. (12m)*

In another example, 19m, a Libyan male who been in Glasgow for 2 of the 4 years he had lived in the UK, was looking for information on maintaining his flat. He asked his friend who was working at the mosque. 19m discussed the relationship with him and described him as a trusted person:

> *I knew him for a period of no more than 8 months. I know his character as well as his possibilities and qualifications. (19m)*

5.4.5 Other factors

Time pressure, internet access, experiential knowledge, confidence, and curiosity appear to be other factors that influence information behaviour. Some participants discussed incidents that arose when time was a factor affecting their information seeking process. For example, 2f, an African female from Nigeria who had been in Glasgow for 10 years, needed information about the colour of a lipstick that she noticed one of her friends putting on. When asked about the difficulties that she faced

in finding out what colour it was, 2f mentioned time as a factor, because the passage of time might make it harder to remember the colour:

> *Time, if it is been a long time between when you saw it and when you got speak to the person very busy or see him some time later and it is a matter of remember. (2f)*

In another example, 11m, a male from Bangladesh who had been in Glasgow for 2 of the 6 years he had lived in the UK, was working as an Imam (preacher) at the mosque. He needed information about his immigration status and procedures. He went to the UK visa and immigration (UKVI) website to find out. However, he still did not find the information; but he was sure that the information was there and that it was just a matter of time before he found it:

> *It is somewhere. Basically, lack of time and lack of knowledge. I need to start early, then I'll get it. (11m)*

Some participants discussed incidents in which internet access was a factor influencing the information behaviour. For example, 1f, an African female from Somalia who had been in Glasgow for 4 years, was seeking more information about a course she was already registered in. She had the address written in English. With weak English, f1 went out onto the street, trying to ask pedestrians to help her find the place by reading the address on the paper. 1f explained that the reason she had chosen to ask people on the street was that this was the only source available to her, as she didn't have access to the internet to enable her to search for the information there:

> *I could only get the answer by asking people who are passing on the street. It was the reasonable way for me because I didn't have*

any mobile phone to search on or internet access, and that was the only way in front of me to inquire about the address. (1f)

Some participants discussed experiential information as a factor that influenced their seeking process. For example, 13m, a Syrian male who had been in Glasgow for 3 years, needed information about cars because he was planning to buy one but did not know which car to choose. 13m collected more information about cars every time one of his friends bought a new one:

But besides searching on the internet websites, I have also received some useful information through the experiences of my former colleagues, who provide me with information about their purchasing experience. (13m)

In another example, 13m described his preferred seeking strategy of looking for experiential information:

The best options here are to ask an experienced person. (13m)

Confidence can be a factor affecting the seeking behaviour of some participants. For example, 15m, a Palestinian male who had been in Glasgow for 3 of the 4 years he had lived in the UK, had an interview at a college and on his way out he needed to know whether there was a place to pray (he calls it 'Mosala' in the quote below). 15m explained how in this case confidence was a factor which influenced his seeking behaviour:

I finished the interview and on my way out, I asked the receptionist "Is there a place to pray here?" and I was confident that there is one because I know this country; nearly every college has a place

to pray. I went to her with full confidence and asked her "Where is the Mosala?" (Mosala is a special room operated for Muslims to perform prayers.) This is my first time to enter that building and first time to meet her; she said "Sure!" (15m)

One participant discussed curiosity as a factor that influenced his information behaviour. 10m needed to find information on subjects that he was interested in. He kept searching because he was curious:

I am search something I am feeling curious of. So, when I am feeling so much curious of something, I just search it as long I am interested in it (…) if I am curious, I keep searching in various ways. (10m)

Differences between cultures appear to influence the information behaviour of the participants. For example, 3f, a Malaysian female who had been in Glasgow for 4 years, needed information about sexuality to explain a social norm she had noticed when she saw two gays kissing in public. 3f went through the process of seeking the information by looking online and asking friends, but when she was asked during the interview about the difficulties she faced in the process, she discussed how the differences between her own culture and that of Glasgow was a factor that influenced her seeking behaviour:

I think the difficulty is about my acceptance,
this because I didn't get used to some information because it is not in my culture because my culture say it is wrong and sometimes I tries to look for information that I can accept and tend to stay away from information that I don't want it. It is more about biased thing. (3f)

5.5 Social capital

Social capital exists and utilised by most participants, mostly bonding social capital. For example, 16m, a male from Syria, who needed information about education as he arrived in Glasgow. 16m met his old friend 'Akram' and asked him for help. 16m described his relationship with 'Akram' as follow,

> *"Then I have found Akram who I knew since I was a child. His mother is my mother's friend and I consider him as my brother" (16m).*

Mentioning that 16m was able to find the information needed by utilising his relationship with his friend.

In another example, 15m, male from Palestine, he was a frequent visitor to the mosque, and he initiated his social capital stack when he met a group of Sudanese and ask them for help to get to know the area in Glasgow,

> *"I went to the masjid prayed and met folks from Sudan. They are living close; I went to visit them and they visited me" (15m)*

The group of the Sudanese and 15m developed a good relationship and exchanged visits. The trust level between them started to elevate, "I knew them and they knew me" (15m). later, they sought their needs mutually from 15m, "I even started to tell where to go if they ask me about something they need" (15m)

In another example, 4f, an African female, visited the mosque seeking for answer to her questions about finding a community to engage with. She was approached by a

lady at the mosque as 4f started to develop a stack of social capital their within a community that she trust. The lady advised 4f to contact Muslim women organisation,

> *"it was in the mosque, I meet a lady called [Lady's name] so she called me and she started to talk to me about the Muslim women organisation and I said ok, I will look it up." (4f)*

Interestingly, 4f, did not respond to the same information that she encountered at the hospital, when a mid-wife gave her the same advice to contact the organization, 4f kept the card but did not proceed with her search until she got the same advise at the mosque,

> *"I remember that when I was pregnant, the lady was asking me very funny questions about domestic violence, the midwife asking me, dominant that a lot of minority women don't ask about domestic abuse. I remember how handing me a card that wrote domestic abuse contact Muslim women resource centre that to me was funny." (4f)*

At the mosque, 4f, realised that she had the same information and proceed to seek the information she needed, 4f commented about the organisation's business card, "I have seen it somewhere and somebody gave it to me in the hospital. So, I went online" (4f).

More interpretations about the 4f's incident related to "information poverty" in the next section.

5.6 Information poverty

Some respondents discussed incidents when they behaved in way that may interpreted toward the information poverty and its notions (i.e. world views).

In the example of the participant 4f mentioned in the previous section (Social capital). 4f was advised by the Mid-wife at the hospital to contact Muslim women organisation. The Mid-wife hand the contact information in a form of the organisation's business card. Even though, 4f accepted the card she deceived and acted toward normalcy but did not proceed to find the information she needed (to find opportunities for social engagement). 4f contacted the organisation after having the same advice from a lady at the mosque. Lady that she described as an African, the same ethnicity she is,

> *"I don't know her. but the only thing that she was an African woman she is an African woman. Asma I think was Somali or Sudan" (4f)*

In this example, 4f, felt an outsider when she received the card from the mid-wife, lacking trust and being from different ethnic group motivated the participant to act this way and did not accept the information from an outsider (the Mid-wife). On the other hand, 4f respond normally when she accepted the information from the lady at the mosque when she felt trust and an insider because they (4f and the lady at the mosque) have norms, values, and identity in common.

In another example, 14m, male from Pakistan, was at the bus station and needed information about the bus he supposed to catch up. The participant remain silent and kept his need secret until he missed the bus as result of the secrecy behaviour. 14m commented,

> *"I was sitting in a quiet place, not moving too much, not doing any activity, just waiting for the bus to show to the people that I'm okay. I'm not ... any wrongdoer" (14m)*

It seems that 14m acted in secrecy about his information need and behaved in a deceptive manner caused by his feeling of self-protective. 14m did not want to expose his identity to the outsiders,

> *"I waited another two hours in the same bus station. That's because of, I think (…) Nowadays, it's general opinion that most of the troublemakers are Muslims" (14m)*

In another example, 1f, female from Africa, discussed that how information about places to offer halal food is already being shared within the community, she commented,

> *A piece of information should be circulated between us about whether this town has places to offer halal food. (1f)*

5.7 Summary

Participants discussed several factors which influenced their information behaviour. The factors are identity, stigma, language, trust.

Gender identity, religious identity, and ethnic identity were the identity aspects that influenced information seeking behaviour. Moreover, a combination of more than one identity aspect may further influence the seeking process. Participants consider identity along with valuing the source's experience as associated factors affecting the choice of the information source. There is evidence that stigma influenced the information seeking behaviour, and was also associated with the seeker's identity. Participants discussed feeling stigmatised by their gender, religious, and/or ethnic identities. Lack of English language skills was another factor that influenced the information behaviour. English language could be associated with negative reactions from people when some participants tried to ask about their need. Trust also appeared to influence the information behaviour of the participants. Participants discussed trust as influencing their behaviour positively and negatively.

To a lesser degree, some participants also discussed other factors which influenced their seeking process, such as lack of internet access, curiosity, experiential knowledge and confidence.

5.8 Chapter summary

The findings chapter consists of four sections: participants' demographics, information needs, information sources, and influencing factors.

Participants were active practising Muslims who were variously attending 8 Islamic centres (Mosques). Participants consisted of 12 (47 percent) Males and 7 (37 percent) Females. The average age of the 19 participants was 29 years. The majority of the participants were High school and University educated. Most of the participants were students; that is, 10 participants (53 percent). The average time lived in Glasgow across all 19 participants was 4 years.

Participants have multiple needs across 13 categories (Table 3: Information needs categories frequency by participants and incidence). Education, Religion, and Entertainment were the most frequently discussed needs. They were followed by the categories of needs related to Social norms, Travel, Health, and Immigration. Other needs categories, also discussed, were related to Shopping, Employment, Housing, Financial support, Driving licence, and Technical support.

Online material and asking friends were the most used information sources. They were followed by printed material (Books, articles, and brochures) in which some participants sought information, Educational professionals and staff, Health professionals and staff, Family, and Work colleagues. Following these were other

information sources discussed by several participants, such as asking staff at a commercial institution or consulting an immigration advisor.

Participants discussed factors which influenced their information behaviour. Identity was the most influential factor, followed by Language, Stigma, and Trust.

Gender identity, religious identity, and ethnic identity were the identity aspects that influenced information-seeking behaviour. Moreover, a combination of more than one aspect could influence the seeking process. Participants considered identity along with valuing the source's experience as associated factors that influenced the choice of the information source. There is evidence that stigma influenced the information seeking behaviour. Participants discussed feeling stigmatised by gender, religious, and/or ethnic identities. Lack of English language skills was another factor affecting the information behaviour. In addition, language was associated with negative reactions from people whom some participants tried to ask about their information need. Trust appeared to influence the information behaviour of the participants. They discussed trust as influencing their behaviour positively and negatively. Also, participants discussed other factors which influenced their behaviour, such as: time pressure, internet access, experiential knowledge, confidence, and curiosity.

6 Discussion

This chapter discusses the findings presented in the previous chapter and is structured on the basis of the research questions. The chapter discusses the identified information needs of Muslim newcomers to the UK during the settlement period, their seeking preferences, and the factors that influence their information behaviour.

6.1 The information behaviour of Muslim newcomers to Scotland during the settlement period

6.1.1 The information needs of Muslim newcomers to Scotland during the settlement period

Participants discussed various needs that were grouped into 13 categories. Table 3 (see Section 0) illustrates the rate of occurrence by number of participants and times discussed. However, whilst providing some indication of the needs' importance, the author would caution against over-analysis, as this list could simply reflect what participants chose to discuss at that point in time. It is also important to note that it was not the intention of this study to comprehensively capture all possible needs, but

to explore needs as part of a wider exploration of information seeking behaviours (or their absence). Needs categories can be divided into high occurrence needs (education, religion, and entertainment), medium occurrence needs (social norms, travel, health, and immigration), and low occurrence needs (shopping, employment, housing, financial support, driving licence, and technical support).

Education needs were of high occurrence and were the needs most frequently discussed by the largest number of participants. Education needs involved education choices and current course materials. For example, one participant who was considering returning to education to complete a postgraduate degree stated, "I am not sure exactly what I want to do for my postgraduate" (2f). Another participant needed to know more about using a particular software (i.e. RevMan) for his current study and commented, "I am searching about the software which called "RevMan" and also searching about articles and journals to prepare references" (10m).

After education, religion is the needs category showing the next high occurrence. The need to find a mosque was the most discussed need within the category of religion. For example, one participant wanted to find a mosque while he was waiting to meet his friend, and expressed the thought: "Why not finding a mosque to pray" (15m).

Other needs frequently discussed were related to entertainment. Entertainment needs included the need to find leisure sites in Glasgow and updates on subjects that participants were interested in. One participant, for instance, commented, "I know [a] number of restaurants… but sometimes you want to try something new" (13m). Another participant commented on the importance of following celebrity news from

her home country: “I love sometimes to search about the gossip that happen within celebrities’ communities in Malaysia” (3f).

Social norms came first in the medium occurrence needs category. These included the need to find information about sexuality, social identity, and personal safety in Glasgow. For example, one participant wanted to find out more about sexual identity and transgender issues after she noticed two men kissing one another. Her comment was: “I started to look into this since I first came here. When I saw, at the first time, guy with another guy are kissing each other on the street and people not taking this really serious” (3f). Another participant was investigating the social identity of her future partner’s family, stating: “I need to find what kind of person they are, and [what] they like, in terms of, are they serious about their religion or they are not. And are they practising? What do they do? What kind of friends they have?” (2f). Another participant needed to find out and evaluate the appropriate level of personal safety in Glasgow and commented, “I could not really understand why somebody would lock their door” (4f).

After social norms, travel was another medium occurrence need discussed by participants. Information needs in this category included finding locations, using public transport, and planning overseas travel. For example, one participant was struggling to understand the directions: “I did not know the right directions, and I had no idea about the streets” (1f). Another participant needed to know about overseas travel destinations: “I am looking to travel, I look the places to go” (3f).

Health is the third category of medium occurrence needs. Information needs in this category included the need to know about supplements, medical diagnoses, and health services. One participant needed to find about his chest pain and commented, “I had issue with my chest. I didn't know what's wrong with my chest” (14m). Another participant needed information about freely available health services and noted, “There were some people who said that they took medicines for free and I did not know the details” (18m).

Immigration is a medium occurrence needs category. These information needs included the need to keep up-to-date with relevant regulations and procedures. For example, one participant commented as follows, “I wanted to know if that immigration rules [had] changed” (11m). Another participant needed information as to why Arabs spent less time in the UK compared with other ethnic groups, stating “I was wondering why the Arabs do not stay for long time” (18m).

Needs of low occurrence amongst participants were shopping, employment, housing, financial support, driving licences, and technical support. Shopping needs included information about products such as makeup or cars. One participant was looking for a specific shade of lipstick that she had noticed on a friend, commenting, “I am looking for specific shade of lipstick and I saw someone with it” (2f).

Employment needs included finding employment and, once employed, learning the procedures and best practices at work. One participant needed to know about procedures and common practices in the UK when applying for a new job: “When I applied for a job, I needed it badly and I did not know the system here” (8m).

Other low occurrence needs discussed by participants were those related to housing. Information needs in the housing category included finding affordable accommodation. One participant commented, “I had rented my private house in Glasgow; it was so expensive as well as beyond my budget, especially for a postgraduate student” (19m).

Other needs of low occurrence included: financial support, driving licences, and technical support. Financial support included needs related to educational funding. One participant discussed the importance of finding PhD funding: “PhD is giving me a lot of stress in terms of getting funding ... how to get funding” (4f). Driving licence needs included how to apply for a new driving licence. For example, one participant commented, “I [am] looking for driver licence ... I don't have any idea how I can get it” (5f). Technical support needs included finding information on solving a technical problem. For instance, one participant needed to install translation software (i.e. Lingos), explaining “I wanted to know how you can put that Lingos [computer software] back in the computer” (11m).

The needs identified and discussed above support various previous studies related to typical migrant needs during the settlement period. For example, Khoir, Du and Koronios (2014) studied the behaviour of Asian immigrants in South Australia during the settlement period. Most of the information needs reported in their study (Khoir, Du and Koronios, 2014) were needs discussed by the participants in this research, such as employment, accommodation, transportation, local culture, driving, immigration, and education. However, some needs were inconsistent with the needs categories in

this research (tax assistance, legal aid, and banking), while other needs were consistent but were coded differently (health insurance and English literacy). Shoham and Kaufman Strauss (2007) investigated the information needs of North American immigrants in Israel and found that they mentioned information needs also discussed by this study's participants and those in other studies. These information needs included housing, schooling, health, financing, and driving licences (Shoham and Kaufman Strauss, 2007). The variance can be explained by individual situational factors. For example, information needs related to education were reported as high occurrence needs in this study and in a number of existing empirical studies that have investigated the everyday life information seeking behaviour of international students (Yi, 2007; Mehra and Bilal, 2008; Oh, Butler and Lee, 2014).

The findings support those of previous studies on immigrants of ethno-groups during the settlement period, such as Asian immigrants to South Australia (Khoir, Du and Koronios, 2015) and North American immigrants to Israel (Shoham and Strauss, 2008). The importance of education has also been highlighted in previous studies concerning international students (Yi, 2007; Mehra and Bilal, 2008; Oh, Butler and Lee, 2014).

The religious needs findings support previous studies concerning immigrants (Su and Conaway, 1995; Jeong, 2004) and international students (Oh, Butler and Lee, 2014). Jeong (2004) investigated the information behaviour of one ethnic group (Koreans) and reported the role that churches play in satisfying group needs. Similarly, Su and Conaway (1995) reported a need to find out about religious places among elderly

Chinese immigrants. Moreover, international students (most of whom were Asians) in the United States also showed an interest in finding information about religious places (Oh, Butler and Lee, 2014).

However, whilst identifying similar needs across migrant groups, Muslim groups have been relatively under-researched. The field of everyday information seeking behaviour lacks empirical studies of Muslim groups.

Some insight can be provided by studies from other disciplines. For example, a tourism study by Shakona et al. (2015) examined the effect of Islam on leisure and travel behaviour by interviewing Muslim men and women of different nationalities. This study highlighted the importance of finding mosques. The results reported by Shakona et al. (2015) corroborate the results gathered in this research. Most of the sub-needs within the religious need's category involved finding mosques. Most of the participants who discussed finding mosques were men, which may be attributed to the fact that Islam encourages Muslims men to perform five prayers a day at the mosques according to a pre-scheduled timetable. The same factor can explain why participants were specific and clear about their need to find mosques. However, it was not only men participants who discussed the need to find mosques; women also discussed the same needs. Muslim men and women alike needed to find out about mosques because "going to the Masjid [Mosque] for prayer is a way of meeting other Muslims to discuss everyday concerns and solve problems faced by their communities" (Shakona *et al.*, 2015). For example, one African participant from this study stated:

> *When we go to SAMSA [the mosque] you meet people from all over so we kept in touch for some time; people from Eritrea, people from Kenya, from Sudan, from Saudi, from Syria, from Egypt, Nigerians, Ghana. (2f)*

Findings provide evidence of the mosque as an important information ground as defined by Fisher et al. (2004), and as a source of social capital as defined by Putnam (2000). Both these concepts are discussed further (see Section 3 in this chapter) as factors that influenced the information behaviour of this study's participants.

6.1.2 The information sources utilised by Muslim newcomers to Scotland during the settlement period

Participants variously discussed a number of information sources, grouped into 8 categories (in descending order of frequency of discussion): online (websites and social media), friends, printed material, educational professionals and staff, health professionals and staff, family, and work colleagues. Table 4 (in Section 5.3) illustrates the participants' discussions in descending order according to the number of participants who discussed each categorised source, and the number of times it was discussed. Each is discussed below.

Four main factors appear to influence the choice of source: experiential, second opinion, authoritative, and trust.

Participants' preferences in choosing these information sources were derived from different factors grouped into 4 categories, listed in Table 5 (in Section 5.3). Preferences for information sources were mostly influenced by the tendency to seek experiential advice, to seek from authoritative sources (i.e. Educational and health professionals and/or staff), to seek a second opinion, and/or to seek from a trusted source.

Several participants discussed online sources as a starting point in the seeking process. For example, one participant commented, "First thing I do is going to Google and have general search on the topic" (10m). Online sources could also be combined with other

information sources during the seeking process. For example, Participant 9m started to seek information online about obtaining financial support to study for a Master's degree, but the search was unsuccessful because of his lack of experience with the topic. Participant 9m commented on his online searching experience,

> *I searched the internet more than once, but I could not get any results. I could not understand the matter or know the starting point ... I searched through the internet, but I did not reach a result because of lack of experience. Therefore, I could not apply for the Master. (9m)*

Later, 9m found the information by asking a friend, who suggested that he attend a course on finding scholarships. He commented, "Without her help, I would not have learned about the course". (9m)

Another participant (11m) was looking for indoor places where his kids could play. He said, "Basically I searched the internet and I asked my friends" (11m). Most of the participants who went online went to retrieve information from a website (official websites or search engines). Several participants discussed social media as another online information source (Twitter, Facebook, YouTube, and Wikipedia).

Most of the participants sought information on websites mainly because they offer access to second opinions, or because they are easier to search, or because the participants needed sensitive information (the reasons were listed on Table 5: List of reasons for choosing the sources in Section 5.3). The majority of participants who sought information via a website chose to do so because they felt that websites offered them access to a greater wealth of information. For example, 17m, who was seeking

English courses, commented, “I take a lot of information on the internet” (17m). Several participants discussed the ease of using websites to find the needed information. For example, one participant who was looking for information about his studies commented, “Firstly I use the Google Scholar because it is easy to use” (10m). One participant mentioned that she chose to search on websites because the information was considered sensitive: “Because it is kind of sensitive issue, I guess the internet is much better to look about this” (3f). Participants also discussed several other reasons to search on websites, including trusting the information on the websites, accessing up-to-date information, and the convenience of searching online.

Several participants sought information through social media networks because they were looking for a second opinion or experiential advice. For example, one participant examined different social media networks to gather different perspectives on a subject he was interested in:

> *This what I have said, firstly, I search Google. And find what it is. Or, in Wikipedia there are so many opinions as well, and usually I use YouTube where there are so many new tutorials I can go with. (10m)*

Another participant who needed information about education went to YouTube to watch videos by people who had come through the same experience. She commented, “… and also watching a lot of people who have done it in YouTube” (4f). Another participant from Syria discussed forming a Facebook page for Syrians in Glasgow to exchange experiential information:

> *First of all, a person poses a question on a social media site such as Facebook. Then the experienced people start to answer him ... a huge number of discussions usually held between followers on the social media till a Full data about the subject would visibly appear. It could be about housing, or about benefits, about education or anything else, but most of the information is usually to be found and collected through discussions on social media such as Facebook or other sites. (13m)*

Participants also searched on social media for second opinions and authoritative advice.

The majority of participants also consulted friends in order to meet their information needs. Participants who sought information through a friend discussed various reasons why they did so. The main reason, which was discussed the most, was to access experiential advice by asking a person who had been through a similar experience. For example, one participant reflected on gaining experiential information from a friend, stating,

> *The first thing you do is asking your friend who passed through the experience, how he started. And could you work on this subject? His answers in the first place is very important as I mentioned before, because the answers that he will give me are answers that are coming from the experienced person who gained his experience by passing through the same circumstances. He will give me the summary of his experience. (13m)*

Most of the participants who discussed asking a friend about their information needs also sought the same information from online sources.

Some participants discussed trust as a factor that influenced their information source preferences. One participant explained that she asked for information from a friend whom she trusted because of their close relationship: “We have close relationship, together like sisters. So, she is pretty nice person, help me a lot ... that why I trust her first and I feel comfortable when I talk with her” (5f). Another participant asked her friend about her hair style because she trusted the friend’s information and also trusted her as a person: “I can see her hair and I can see what [she] is done with her hair, so I can trust is good information, and I know the other friend as well so I trust her as well” (2f). The same participant (2f) also discussed being from the same ethnic group (African) as another reason to ask her friend about her hair style: “Because she is also from Africa” (2f).

Some participants sought the information from printed material (books, articles, and brochures). Their main reason for doing this was to get a second opinion by accessing the more detailed, in-depth information that was available in the printed sources. For example, one participant who needed information about sexuality recommended finding a book in which to seek more detailed information, commenting, “If I really want more about that I go to find the book” (3f). One other participant mentioned trusting books as a source of the information she needed. She stated, “I can look for something I trust ... like a study, like book, something like this” (5f).

Some participants sought information by asking professionals (educational, health, and/or commercial professionals and/or staff). Professionals were recognised by participants as authoritative sources. For example, participant 2f was uncertain about

her major course of study. She went to the school advisor to ask about her need and reported, “I am having a meeting next week as well with an advisor in the physical sciences because I want to go into the Medical engineering through the NHS. I will speak with her to see what she says” (2f). Another participant who needed information about vitamin C injections asked a specialist: “I did [ask a specialist]. But I am afraid” (3f).

Several participants sought information through family. Experiential advice was discussed by half of the participants who sought their needed information in this way. For instance, one participant needed instructions on cooking a dish. He asked his mother, “I call my mother sometimes to take some instruction about how to make that specific dish” (17m).

Some participants sought information through work colleagues, again seeking experiential information. One participant asked her supervisor about the job’s responsibilities because the supervisor had done the same job before:

> *I asked my supervisor, and she told me this is what you need to do and make sure this is done and make sure you don’t do this and you should not do that, and if you have any problems I am the source of information. If you want to ask, I will be the one to ask. I said OK, thank you. (2f)*

In relation to the limited previous everyday information seeking behaviour studies that involved Muslim migrants, the information sources identified and discussed above support these studies in terms of the information sources utilised by migrants during the settlement period. This study provides evidence that online facilities and friends

were the information sources discussed by the majority of participants, which supports earlier studies showing that immigrants and newly arrived international students prefer to seek information online and through their social networks (Shoham and Kaufman Strauss, 2007; Khoir, Du and Koronios, 2014; Oh, Butler and Lee, 2014). Furthermore, this study provides evidence that online sources were used as the starting point of the seeking process by most participants. This result contributes to the results reported by Khoir, Du and Koronios (2014) that immigrant and international students used "Internet in their initial information searches" to seek information they needed during the settlement period.

6.1.3 Factors influencing choice of sources

Experiential advice was the most frequently discussed factor influencing the participants' source preferences (see Table 5: List of reasons for choosing the sources in Section 5.3). The majority of participants who discussed this factor sought information through a friend. Some participants also discussed seeking information through family, social media or a co-worker because they wanted to access experiential advice. Exchange of experiential advice between friends had been reported by previous information studies of immigrants during the settlement period (Khoir, Du and Koronios, 2014; Bronstein, 2017) and was described as an "important social source" of information (Anne Kennan *et al.*, 2013, p. 134). Immigrants also shared experiential information through social media networks to exchange "practical

experiences during the settlement" (Khoir, Du and Koronios, 2014). In addition, experience is acknowledged more widely as a factor influencing source preferences (e.g. Morrison, 1993; Xu, Tan and Yang, 2006; Locock and Brown, 2010; Mazanderani, Locock and Powell, 2013).

Trust appeared as another significant factor influencing source preferences, as discussed by several participants who sought information through family, friends, printed material and websites. This finding confirms those reported by Fisher *et al.* (2004) Fisher *et al.* (2004), that trustworthiness is among the factors influencing source preferences; trust as an influential factor will be further discussed in a later section.

Mosques appeared to be an important information ground as defined by Fisher, Durrance and Hinton (2004). Although the main purpose of visiting the mosque is to perform prayers, we found that participants also visited it to meet and share everyday life information. For example, 17m commented, in relation to sharing information at the mosque:

> *We talk and chat. Ask each other about things in the life. For example, somebody need help or I need help, this is life. We stand for each other, we help each other, and we share things with each other. (17m)*

Another participant went to the mosque to meet new people who became his friends, and who answered many questions related to his basic needs:

> *I went to the masjid [an Arabic word meaning mosque] prayed and met folks from Sudan. They are living close; I went to visit them and they visited me, I knew them and they knew me and then they took me to the area we are living in. Then I become to know everything around like markets and other places and even more than them even though they were there before me. I even started to tell where to go if they ask me about something they need. They were surprised and say "We are before you but we don't know like you". (m15)*

These findings corroborate previous research which found that seeking information through information grounds can be active or passive (serendipitous) (Fisher, Durrance and Hinton, 2004), and reported the existence of information grounds within the social setting of different populations, such as immigrants during the settlement period (Fisher *et al.*, 2004), Asian immigrants in South Australia (Khoir, Du and Koronios, 2014), and college students (Fisher, Landry and Naumer, 2007). Places of worship (e.g. church, synagogue or temple) also have been reported as information grounds in previous studies (Fisher, Landry and Naumer, 2007).

Some participants discussed online social settings for sharing information on everyday life topics. For example, one participant discussed using social media, mainly the person's Facebook group (https,//www.facebook.com/pg/syrian.network.glasgow) to create forums in which to exchange experiences among Syrians in Glasgow.

> *First of all, a person poses a question on a social media site such as Facebook. Then the experienced people start to answer him that if he was able to find a job with a certain number of working hours accordingly his right of taking a salary from a government*

turned to be not authorised, but you still have to pay the rental charge of the house where you live in. A huge number of discussions usually held between followers on the social media till a Full data about the subject would visibly appear. It could be about housing, or about benefits, about education or anything else, but most of the information is usually to be found and collected through discussions on social media such as Facebook or other sites. (13m)

Also, 19m mentioned that online groups were important to him by enabling him to gather experiential information about common needs that the newcomers might face:

We [Libyans] have a web site called "AL-MOFAD" which help in inquiries of expatriates. As it is very useful to know about the experiences of others from different countries of the world in order to know what these experiences to be benefited from their experiments. It was one of the main reasons behind joining the group of expatriates in UK. Through joining this group I collected so many different information; I got a reasonable idea about the costs of living as well as housing rental charges. (19m)

These online groups can also be considered information grounds, confirming the work of Counts and Fisher (2010) and corroborating the results of the study of Asian immigrants during settlement by Khoir, Du and Koronios (2014).

In summary, participants demonstrate a behavioural preference to seek through online and interpersonal sources, with experience and trust being significant influencing factors, in addition to the factors discussed in the next section (6.1.4). This study also identifies Mosques as important information grounds for Muslim migrants,

contributing to our understanding of how Muslim communities provide important social networks for Muslim migrants through which to meet their everyday information needs.

6.1.4 The factors influencing the information seeking behaviours of Muslim newcomers to Scotland during the settlement period

Participants discussed factors which influenced their information behaviour. Key factors categories listed on Table 6: List of influential factors (in Section 0) are, identity, stigma, language, and trust.

With regard to identity, everyday information seeking behaviour of most of the participants was influenced by their gender, religion and/or ethnicity. For example, one female participant was reluctant to choose the instructor's gender during her process of learning how to drive so as to obtain a driving licence, and commented, "[It is] confusing to choose man or woman to be the instructor" (7f). Another participant who was at the bus station and wanted to find a nearby mosque to perform a prayer avoided seeking the information because of his religious identity:

> *The time is very critical, so I was waiting for the right person and looking at the people. Because the majority of them were non-Muslims, I couldn't ask them. I couldn't ask the non-Muslims if there is any masjid, so I waited. (14m)*

Later, 14m's religious identity positively influenced his choice of actively seeking his need by consulting a lady whom he described as a Muslim lady:

> *I found a lady. A Muslim lady, walking, and I told her, "Is there a masjid?" and she pointed out to me, "Yes, the masjid is there." I would say, I waited for half an hour, and I couldn't ask anyone else. (14m)*

Another participant from Libya was looking for information on how to find affordable housing. His behaviour was positively influenced by his ethnic identity, as he chose to seek the information through his Libyan friends: “I have known this information through the discussions with my Libyan friends” (19m).

In addition to searching through social networks based on shared characteristics, seekers can associate identity with the source’s experiential knowledge, leading them to seek information from people who share the same identity and have potentially gone through the same experience of seeking to meet the same needs. For example, one participant described her process of seeking information about restaurants that offer halal food: “A piece of information could be circulated between us [Muslims] about whether this town has places to offer halal food” (1f). The participant went on to emphasise the importance of the experiential information: “The most important source of getting information is by asking the person who has already experienced the experience before” (1f).

Identity and experiential information as associated factors influencing the interpersonal information source preferences, and therefore the everyday information behaviour, can also be pursued virtually (online) by creating online groups (as mentioned in the previous Section X) exclusively for members who share the same ethnic identity, in order to share experiences related to everyday information needs.

Seeking information through groups of people with a common identity may be extrapolated to describe this social setting as a small world (Chatman, 1992), whose insiders are characterised by the same identity and who went through the same experiences, or per se, Muslim immigrants in Scotland.

Identity has been previously reported as an important factor. Loss of the immigrant's identity when moving from one place to another has been reported as affecting information behaviour (Su and Conaway, 1995; Baruchson-Arbib, Shoham and Kaufman Strauss, 2007). Racial, cultural and socio-economic identity were found as factors that might affect the health information seeking behaviour of African American women (Warren *et al.*, 2009). According to Machet and Govender (Machet and Govender, 2012) and Caidi (2008), information about identity construction was among the most important information needs of immigrants during the settlement period. In addition to immigrants and ethno-cultural groups, identity may influence the information seeking behaviour of groups such as gays (Hamer, 2003) and persons who have undergone body modifications (Lingel and Boyd, 2013).

Stigma is a factor that is closely related to identity. Participants discussed times when they felt stigmatised by their identity and how these feelings might affect their seeking behaviour. For instance, one participant thought that wearing a hijab and being a female might lead to negative reactions from others:

> *Sometimes people in the street ignore ladies when asking and continue walking, it is happening but it is normal with no problems. At the end we are human but yes we put hijab; there is no need to [she is referring to people's negative reaction]. (7f)*

Religious identity, among other identities, was also discussed by the participants as associated with their feelings of being stigmatised. One participant felt stigmatised by his beard and clothes because they might expose his Muslim identity:

> *I was feeling shy by the beard and by the clothes, you know …*
> *You are more likely to be perceived as a troublemaker. (14m)*

Stigma as a factor influencing information behaviour was reported by a number of previous studies. Caidi (2008) found that stigma affected the information practices of immigrants during the settlement period. Stigma was also reported as a factor motivating a newcomer to hide information about his/her condition, to use different seeking strategies, and to re-prioritise the information sources preferences (Caidi, Allard and Quirke, 2012). Lingel and Boyd (2013) reported the same results concerning stigma and its effect on the information behaviour of body-modified participants; their study also drew some attention to stigma and its contribution to the formation of information poverty among participants (Chatman, 1999). Savolainen (2016) reported social stigma and cultural taboo as types of socio-cultural barriers that affected information behaviour. In a travelling behaviour study, Shakona and others (2015) studied Muslims and found that the hijab played a significant role in choosing places to go because the hijab is a representation and display of individuals' Muslim identity.

With regard to language, participants discussed it as another factor that influenced their information seeking behaviour. Participants preferred to seek information through their own language rather than through the English language. Lack of English

language skills was discussed by participants as a barrier that hindered their seeking process. For example, one participant commented,

> *I had difficulties with English language because I wanted to be perfect so that I could communicate with all people. I am not the only person who suffers from this problem, but it is the problem of many people. (18m)*

Language was also reported in many studies related to immigrants during the settlement period. Most newcomers are not native speakers of the host country's language, and therefore faced difficulties in communicating in another language. Some studies reported that participants were seeking information through interpersonal sources who spoke the same language or through their native ethnic media (television or newspaper) (Su and Conaway, 1995; Jeong, 2004; Machet and Govender, 2012; Duff, 2015; Martzoukou and Burnett, 2018).

With regard to trust, participants discussed this as a factor influencing their information seeking behaviour. For example, lack of trust between one participant and her colleagues caused the participant to combine plural seeking strategies to verify the information she received through her colleagues:

> *When you ask them, what they tell you [about to do or not to do such a task] "should not" but what they do is different. So sometimes you have to observe and see. And also you know that if the person you can trust to ask information from next time. Because if what they doing is not the same as what they doing, then how you can trust them and ask them about information I need? (2f)*

Another participant valued trust when seeking through interpersonal information sources:

> *People that I know. Not social media ... I don't mean any people; no. People I trust. (5f)*

Trust is an important element in determining which interpersonal relationships are to be accepted and used as information sources. Trust was recognised and reported by most immigrants in relation to their information behaviour. For example, in their study of Hispanic migrants, Fisher and others (2004) reported that immigrants considered trust when choosing to seek information through their interpersonal relationships. Immigrant settlers in Canada and Syrian refugees in Scotland put particular emphasis on trusting the source before seeking information through it or accepting the information coming through these sources (Kennan *et al.*, 2011; Martzoukou and Burnett, 2018).

It is also important to note that the above-mentioned factors influencing the information behaviour of Muslim newcomers to Scotland are interrelated and connected. Identity drives participants to trust people who share the same identity (religious, ethnic and/or gender), and they prefer to seek information through sources who offer it in the participants' own language. It appears that stigma may cause Muslims to trust and utilise information from sources that share the same characteristics. According to Goffman's stigma management theory (1990), stigmatised people hide their characteristics from stigmatisers and trust other people who experience the same stigma. Goffman's theory may explain why Muslims asked

other Muslims for information and avoided asking non-Muslims. In both cases (identity and stigma), Muslims' seeking behaviour was affected by the division of their choices into two groups (Muslims and non-Muslims). This seeking behaviour of Muslim newcomers, who share norms and values and live a stratified existence, can be linked to Chatman's theory of the small world and insiders/outsiders (Chatman, 1999). Social capital is bridging related and mosque centred. The preference for seeking information through social networks (i.e. friends) at the mosque as an information ground (Fisher *et al.*, 2004), and the issue of trust as central in the small world and improvised life (Chatman, 1996) and as an essential feature of social capital (Putnam, 2000), attest to the existence of social capital (Putnam, 2000) that is bridging related and centred around the mosques.

6.2 Social capital

Some participants discussed events when they utilised old relationships to find information they need. For instance, the example of the participant 16m, male from Syria, asked his old friend to help him to find more information about his educational need. in this example, the participant utilised his stock social capital to seek information actively. In another words, the trust, norms, and his network, which are the main constructors to form the social capital helped him proceed the seeking for the information. 16m describe the relationship "as my brother" (16m) which can be referring to high level of trustworthiness between them, both Syrian, and probably

having the same norms and values. the bonding social capital was enough to motivate the participant to activate the seeking for the information.

Some participant discussed events when they initiated their social capital stock with people, they have met for the first time at the mosque. In the finding section. Participant 15m, male from Palestine, initiated his social capital at the mosque. He discussed how he met people from Sudan and asked them to help him to find information about the area. The relationship that was started at the mosque started from being a ritual relationship and expanded to other aspects of life because they later mutually exchanged visits and information. This bridging social capital, and arguably bonding, giving the strength of the ritual tie, the alienation status and environment, and constructed by the appropriate level of trust and shared norms and values, motivate the participant to proceed and make the discussion to actively search for the information he needed. Mosque also seems to play a significant role as an information ground (Fisher, Durrance, & Hinton, 2004) and to source the social capital. In another example of the participant 4f, a female from Africa. She made the decision to contact the women organisation at the mosque after she initiated her social capital stock in Glasgow by utilising the social capital constructors, as Putnam defined social capital, trust, networks and norms. Interestingly, it was not enough motivation for 4f to make the decision to start the seeking for social engagement without the present these constructors at the mosque when she have got the same information (business card for the Muslim women organisation) giving by someone who is not related to her identity circle (by a Mid-wife at the hospital). In the next section (information poverty will

provide more about the reasons that participant (4f) blunted to proceed seeking for the information).

The findings on this research that related to the role of social capital on the process of information seeking support previous studies on the field of information behaviour. For example, George and Chaze (2009) studied the information needs of 50 South Asian immigrant women in Toronto with a focus on the needs during the settlement period. George and Chaze (2009) found that information is the most important need during the settlement and participants were utilizing their informal networks to find the information they needed. The study provides an evidence that the "involvement with religious institutions had the potential to provide both these kinds of social capital to the new immigrants" (George and Chaze, 2009, p. 276). According to the authors, two kinds of social capital are created by visiting the religious institutions, identity social capital and status bridging social capital. Identity social capital created by bridging the network with people who share the same identity, and status social capital created by the ability to access more information resources resulted by the involvement at the religious institution (George and Chaze, 2009, p. 276). These finding support the clams of this research that mosques are the source of the social capital and social capital sourced at the mosque is based on networking with people who are sharing similar identity (i.e. ethnicity, gender and religion).

6.3 Information poverty

Chatman's information behaviour theory (1996) mainly relay on the notions of small worlds (outsiders – insiders) (Merton, 1972). Some participants of this research discussed events when small worlds (outsiders – insiders) influence their information behviour. For example, it is obvious that participant 4f, mentioned in the previous section observed the mid-wife at the hospital as an outsider, given the weak relationship and the mistrust. According to Chatman's poverty theory "things can only be understood by other insiders may explain why there are informational barriers between these two worlds" (1996). Same idea was echoed by Savolainen (2016) who reported that small world view (insiders – outsiders) may hinder the seeking process.

Some participants discussed incidents when they behaved in a way that reflect the chatman's information poverty theory concepts and propositions. Participant 14m was acted in secrecy and self-protected and did not take the risk to ask people in the bus station. He acted in a deceptive manner and remain silent. 14m in this example did not ask anybody because he thought outsiders may perceived him as a trouble maker, "Nowadays, it's general opinion that most of the troublemakers are Muslims" (14m). His perception tells that the outsiders are irrelevant information sources.

6.4 The relationship between information behaviour and social capital

This study provides evidence that the everyday information behaviours of the Muslim participants are largely influenced by the seekers' identity. Participants valued experiential advice from other with whom they could identify with gender, religion, and ethnicity key factors. Participants also discussed a reluctance to interact more widely (i.e. out of the Muslim communities) on many occasions due to feelings of judgement and stigma related to identity.

Savolainen (2016) reported social stigma and cultural taboo as types of socio-cultural barriers that affected information behaviour. Lingel and Boyd (2013) reported stigma and its effect on the information behaviour of body-modified participants; their study also drew some attention to stigma and its contribution to the formation of information poverty among participants (Chatman, 1999).

This study also demonstrates that mosques are important information grounds for Muslim migrants, a finding which aligns with key concepts characterising information grounds, as defined by Fisher (Fisher *et al.*, 2004). Mosques are shown to provide a trusted environment for social networking and information sharing. They are an important source of bridging social capital, but within a largely limited small world environment due to issues of societal stigma.

Managing the above interrelated influencing factors (especially the feeling of being stigmatised) often limites participants information seeking behaviours to

sources with similar characteristics, establishing a societal state of small world as reported by Chatman (1996), along with the existence of social capital (bonding and bridging) as defined by Putnam (2000).

This seeking behaviour of Muslim newcomers, who share norms and values and live a stratified existence, can be linked to Chatman's theory of the small world and insiders/outsiders (Chatman, 1999). Social capital is bridging related and mosque centred. The preference for seeking information through social networks (i.e. friends) at the mosque as an information ground (Fisher *et al.*, 2004), and the issue of trust as central in the small world and improvised life (Chatman, 1996) and as an essential feature of social capital (Putnam, 2000), attest to the existence of social capital (Putnam, 2000) that is bridging related and centred around the mosques. Feeling stigmatised can be added to the activation mechanism in Wilson's model (1997) alongside with the existing component "Stress/coping theory" because feeling stigmatise is a factor that may affect the seeker decision to start seeking. The newcomer will blunt seeking if he continues to feel stigmatised by his identity. world views (insiders and outsiders) also influence the seeking decision to start seeking. To solve the problem, the newcomer will seek the information at an environment where he/she does not experience the same feeling (stigmatised by his identity) and within a social setting where in feel similar as an insider.

Religious institution (i.e. Mosques) satisfy this conditions, the absence of stigmatisation feelings and access to people who are sharing the same characteristics, moreover, and because of the trustworthiness that is existed among the groups who

are regularly visiting that institution, and the existence of the ritual aspect of the relationship, Mosques became a source of the social capital for the seeker to facilitate his offers to make a decision to start seeking the information he needs.

To better illustrate the relationship between social capital and information behaviour of Muslims newcomers in UK. The theories of social capital and information behaviour can be embedded into the Wilson model (Wilson, 1999) as illustrated below on the hybrid model.

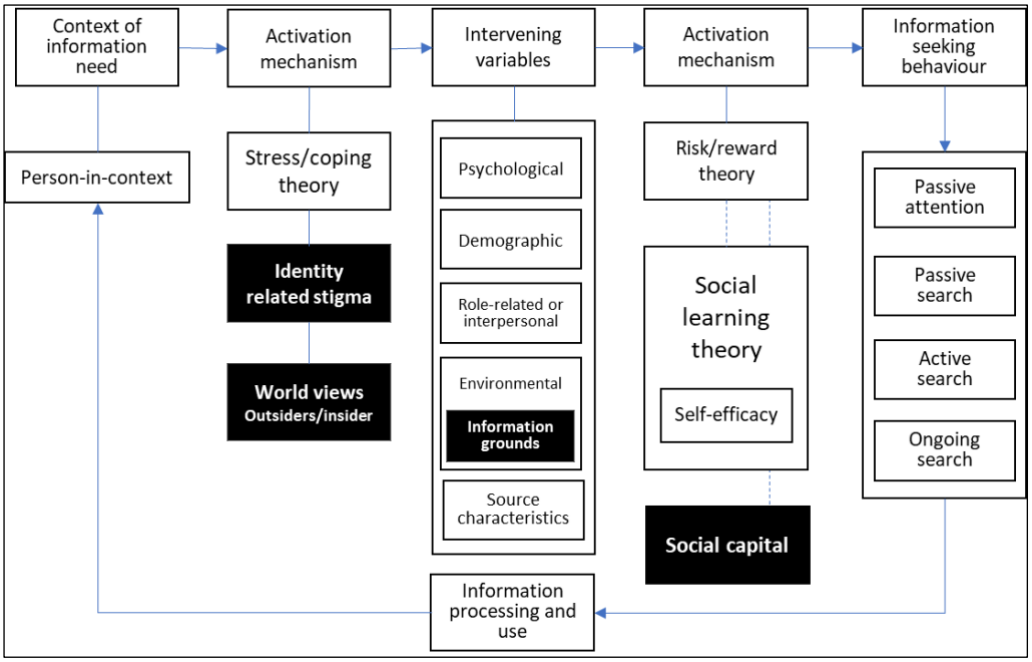

Figure 13: Modified version of Wilson model (Wilson, 1999)

The black boxes on the hybrid model represent the entity that been added as a result of this research and to answer the last research question concerning the influence of social capital on information behaviour of Muslim newcomers in Scotland. As a result of coping the stress and before making the decision to seek the information that the newcomer needs, identity related stigma (Goffman, 1990) and the worldview

(insider/outsider) (Chatman, 1996) are holding down the seeker to think twice and may blunting to activate the seek. However, if there is an information ground (Fisher, Durrance and Hinton, 2004) available for the seeker the problems caused by aforementioned activating mechanisms is probably solved because the information ground environment will offer accessing insiders and how are sharing similar characteristics, hence, allowing the seeker to manage the stigmatisation feelings. Participant of this research have founded Mosques to satisfy these conditions to overcome the issues of stigma and worldviews. Within the information ground, a religious institution in this research, the information seeker is accessing higher level of trustworthiness between the group members and stronger relationships as well as a community who share the similar norms and values, therefore satisfying the Putnam (1995) definition, facilitating the offer to initial a social capital stock as the risk that usually prevent the seeker from activating the search is already mitigated by the positive expectations to find the information needed.

6.5 Summary

This study provides evidence that the everyday information behaviours of the Muslim participants are largely influenced by the seekers' identity. Participants valued experiential advice from other with whom they could identify with gender, religion, and ethnicity key factors. Participants also discussed a reluctance to interact more

widely (i.e. out of the Muslim communities) on many occasions due to feelings of judgement and stigma related to identity.

This study also demonstrates that mosques are important information grounds for Muslim migrants, a finding which aligns with key concepts characterising information grounds, as defined by Fisher (Fisher *et al.*, 2004). Mosques are shown to provide a trusted environment for social networking and information sharing. They are an important source of bridging social capital, but within a largely limited small world environment due to issues of societal stigma.

Managing the above interrelated influencing factors (especially the feeling of being stigmatised) often limits participants information seeking behaviours to sources with similar characteristics, establishing a societal state of small world as reported by Chatman (1996), along with the existence of social capital (bonding and bridging) as defined by Putnam (2000). A suggested hybrid model (Figure 13) as a modified version of Wilson (1999) model offer identify related stigma and world views as barriers and information ground as a healthy environmental intervening variable to mitigate the seeking risk, source social capital to activate seeking.

7 Conclusions

This study investigated the everyday information seeking behaviour of Muslims in Scotland. Everyday information behaviour literature lacks studies aimed at understanding the everyday information seeking behaviour of Muslim migrants in Scotland, as well as studies aimed at understanding the relationship between everyday information seeking behaviour and the social capital of newcomers. To fill these knowledge gaps, this study sought to explore the everyday information seeking behaviour of newly arrived Muslim migrants in Scotland.

I designed this study to focus on the settlement period in order to understand the participants' everyday behaviour before integrating with the host society. This study was also designed to explore how social capital might (or might not) play a role in shaping the participants' behaviour. The study adopted a qualitative approach, implemented by semi-structured interviews with 19 recently arrived (within 5 years) Muslim individuals. During the interviews, the researcher used the critical incident technique to gain more in-depth description of the issue in focus. The data are interpreted on the basis of thematic and narrative analysis and approached deductively and inductively (iteratively): deductively through the lens of a theoretical framework (Wilson's everyday information behaviour model (1997), Chatman's information poverty theory (1996), and the theory of social capital (Bourdieu, 1986; Coleman, 1988a, 1990; Putnam, 1993, 1995, 2000; Woolcock, 1998, 2001; Woolcock and Narayan, 2000)) and inductively through the process of data analysis when any

important emerging thematic pattern, outside the scope of the theoretical framework, is recognised.

7.1 Key findings

In summarising the key findings, I return to my research questions:

1. What are the information needs of Muslim migrants to Scotland during the settlement period?
2. Where do they seek information to satisfy their information needs, and why?
3. What are the factors influencing the everyday information seeking behaviour of Muslim migrants to Scotland during the settlement period?
4. What is the relationship between the information behaviour and the social capital of Muslim migrants to Scotland during the settlement period?

With regard to research question 1, the information needs discussed by participants during the settlement period in Scotland can be grouped into 13 needs categories across multiple topics placed into three groups (see Table 3 in section 0): high occurrence needs (education, religion, and entertainment), medium occurrence needs (social norms, travel, health, and immigration), and low occurrence needs (shopping, employment, housing, financial support, driving licence, and technical support). The identified needs support previous studies of different ethnic groups but may include Muslims individuals, immigrants and international students (i.e. Baruchson-Arbib,

Shoham and Kaufman Strauss, 2007; Yi, 2007; Mehra and Bilal, 2008; Khoir, Du and Koronios, 2014; Oh, Butler and Lee, 2014).

With regard to research question 2, participants variously discussed a number of information sources, grouped into 8 categories (see Table 4 in section 5.3): online (websites and social media), friends, printed material, educational professionals and staff, health professionals and staff, family, and work colleagues. Preferences for information sources were mostly influenced by the tendency to seek experiential advice, to seek through authoritative sources (i.e. Educational and health professionals and/or staff), to seek second opinions, to seek trusted information. The sources identified and discussed above support previous studies in terms of typical information sources utilised by migrants during the settlement period (Baruchson-Arbib, Shoham and Kaufman Strauss, 2007; Khoir, Du and Koronios, 2014; Oh, Butler and Lee, 2014). Notably, this study provides further insight into factors influencing preferences for information sources, and in particular, preferences for experiential advice, authoritative sources, and issues of trust.

With regard to research question 3, this study found that identity, stigma, language and trust were the key factors influencing the everyday information behaviour of the study subjects. Gender, religion, and/or ethnicity are identified as key aspects of identity that influenced the information behaviour of participants. Importantly, this study reports that identity-related stigma was a key influencing factor. Goffman's theory (1990) may also explain why Muslims consulted other Muslims and avoiding seeking information through non-Muslims. In the case of both factors (identity and

stigma), Muslims' seeking behaviour was affected by the division of their choices into two groups (Muslims and non-Muslims). This seeking behaviour of Muslim newcomers, sharing norms and values, and living a stratified existence, can be linked to Chatman's theory of the small world and insiders/outsiders (1999). This study also found that mosques are important information grounds as defined by Fisher *et al.* (2004) for Muslim newcomers to Scotland and are also a source of bonding and bridging social capital (Putnam, 2000).

With regard to research question 4, Managing the aforementioned interrelated influencing factors (especially the feeling of being stigmatised) often limits participants information seeking behaviours to sources with similar characteristics, establishing a societal state of small world as reported by Chatman (1996), along with the existence of social capital (bonding and bridging) as defined by Putnam (2000). A suggested hybrid model (Figure 13) as a modified version of Wilson (1999) model offer identify related stigma and world views as barriers and information ground as a healthy environmental intervening variable to mitigate the seeking risk, source social capital to activate seeking.

7.2 Contributions

An important contribution of this study is the insight provided into identity as an important influencing factor in the information behaviours of Muslim migrants, and

the role of Mosques as important information grounds. This research also contributing on understanding how identity playing a negative and positive role in the information behaviour of Muslim migrants during the settlement. Identity can be negative when the seeker is feeling stigmatised by his/her identity and can be a positive when associated with the experiential advise.

7.3 Limitations

It is important to note that Muslims are not a homogeneous group, and accordingly, the findings of this study are limited to the participant group and associated demographic profiles. In this connection, two factors are highlighted: gender and occupation/education.

The number of males (63%) recruited was higher than that of females (37%). The limited number of recruited females might be due to the recruitment mechanism employed being better suited to recruiting Muslim males, inasmuch as a male researcher could not start a conversation with females in order to introduce the research and seek participation. This lack of approachability between the researcher and potential female participants was caused by the fact that mosques (where most of the participants were recruited) offer separate prayer rooms for females, with separate exits, and approaching them to start a conversation would have been inappropriate (and risky) behaviour on the part of the researcher. Even though the researcher used

different methods to recruit females, such as asking male informants to talk to their relatives, putting up posters inside the female prayer rooms, and encouraging all participants to spread the message so as to snowball the sample, females were still reluctant to commit to volunteering. Such a limitation may not have a serious impact on the research results due to the exploratory nature of the research. However, such a limitation must be considered in future work in relation to the recruitment of Muslim females.

Information needs), and discussed various of information sources listed in Table 4 (Section 5.3: Information sources). However, whilst providing some indication of the importance of these needs and sources lists, the researcher would caution against over-analysis, as these results could simply reflect what participants chose to discuss at that point in time.

Participants came from 10 countries and none of them were native English speakers; all had learnt (and might be still learning) English as a second language or had their own English vernacular. In addition, 10 of the interviews were conducted in Arabic and then translated. This may limit the quality of the data; but to mitigate the impact, the researcher was aware of the limitation beforehand and probed the questions every time the participant's response was not clear; translations were done and double-checked to convey the meaning and to reflect the participant's actions and the actions' significance.

7.4 Future work

The findings indicate identity and identity-related stigma as important factors that warrant further in-depth investigation to understand how they influence information behaviour in different information contexts and for different migrant groups. The findings also indicate the role of mosques as information grounds and sources of social capital, justifying future investigation and in-depth examination. This study was

approached as qualitative research and implemented by semi-structured interviews with the participants; future investigations should be conducted by a different approach and designed using different data collection instruments so as to validate this study's results. Findings also have implications for the effective dissemination of important public information to Muslim migrants to Scotland (e.g. health, education, employment), and raise important questions regarding the role of Mosques. Again, recommendations are made for further research.

This research has suggested a hybrid model by embedding they theory of Chatman's information poverty, Putnam's social capital, into Wilson model. Future suggested research may be to test this new hybrid model against the same group or different migrant groups in the same context and in different context.

7.5 Researcher reflection

Whilst not theoretically familiar with HIB prior to beginning my PhD, I could appreciate its relevance from prior experience as a temporary migrant myself. When I moved to Glasgow, I spent nearly six months in temporary residence and faced problems in speeding up my settlement process. I tried to initiate connections with people from the host society, for example by volunteering, finding groups with whom to practise sports, or visiting the library. I always felt that there was something missing

and could not reach the point where I was satisfied with my progress until I found a group of people who shared the same characteristics, for example in regard to religion, sport, and origin. At that point I felt I was progressing in my settlement process and began to understand a lot of things that were relevant to me and that would satisfy my needs at that stage.

When I met Professor Buchanan and discussed a potential opportunity to set up a study to understand everyday information behaviour and its relationship to social capital, social capital was a new concept for me but after some reading I realised it might be the missing link for people (like myself) who had just moved to new places. This research was set as an ethnographic longitudinal research focusing on the changing information behaviour and social capital of international students from their time of arrival and throughout their settlement process so as to recognise their behavioural changes as time went on. The initial plan was ambitious and challenging for many reasons, given the fact that international students arrive at certain times of year and I had to put in place a continuous plan for recruitment, while the study subjects had to commit to involvement in the study over a long period because of its longitudinal design. I did not have enough confidence in my experience as a researcher to establish a longitudinal study as my doctoral study, a project which has its limitations in terms of funding and time. Therefore, I decided to establish the study as a mixed methods study, but because of the nature of behaviour and the normativity of the concepts (i.e. information behaviour and social capital), and the need for more in-depth explanation of the phenomena, I decided to approach the study as a qualitative one. Despite my

background as holder of a diploma in statistical studies, and the limitations of qualitative methodology as a research approach, I found in this study an opportunity to practise and learn more about qualitative research. I found that Muslim migrants to Glasgow, interestingly, could be the subjects of the study, as they seemed to be having difficulties in engaging with the host society even though they had their own societies within the Islamic communities. Also, I felt that being one of them would facilitate my task in recruiting for the research and interpreting the data. However, I faced many difficulties; for example, the diversity of Islamic communities and the newcomers' unwillingness to participate, especially in the case of women. The difficulties exhausted my research's resources for recruiting participants and transcribing the interviews (as some interviews were conducted in the Arabic language). During the early stages of data collection and discussions of the early findings with my supervisor, we realised that there was an issue with the participants' identity during their search for information. I decided to alter the interview guide and adjust my utilisation of the critical incident technique to focus more on actions related to identity. I had done 25 interviews, ranging in length between 45 minutes to more than an hour, and then omitted 6 interviews because the participants had lived in the UK for a sufficiently long time to seem already settled (12-25 years), as they had information needs inconsistent with the more basic needs of other participants. For example, a participant working at the police department needed information about equality. Conducting the interviews was sometimes very emotional for me as a human who was willing to help but could not, due to the need to maintain the researcher's neutrality. In addition, some interviews were emotional and obviously hard for some participants,

especially when recalling difficult times when they struggled to find important information they needed. Some participants were obviously in low socio-economic circumstances and needed support. I offered gift cards from Amazon to help, compensated them for travelling costs, and encouraged participants to help with recruiting and snowballing the sample. However, most of the participants rejected the gift and appreciated my efforts to explore the issues related to Muslim individuals, which encouraged me to commit to the study and keep going with more interviews in order to reflect the reality.

In summary, the main learning outcomes from this journey are as follows:

- I am now theoretically familiar with HIB and the factors influencing behaviours.
- I am confident in designing and conducting fieldwork with interviews as a data collection instrument.
- I am confident in planning and managing long term research projects.
- I am confident in speaking about research projects to different audiences.
- I am confident in networking within the research communities.

8 References

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9 Appendix

9.1 Appendix A: Recruitment flyer

University of Strathclyde Science

Participants needed

Sometimes finding information to answer everyday questions, or/and solve problems, can be so difficult!

This study aims to understand how people seek information to answer questions, or/and solve problems.

By taking part of this study you will help us to better understand how we can improve access to the information we need.

We are looking to interview Muslim individuals,

Between 18 and 45 years old.

For more information about this study, or to volunteer for this study, please contact:

Bader Nuwisser	07770374315	Bader.nuwisser@strath.ac.uk

Bader Nuwisser
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9.2 Appendix B: Information sheet

University of Strathclyde Science

DEPARTMENT OF COMPUTER & INFORMATION SCIENCES

Why this information sheet? This information sheet is made for you to fully understand this research before you make a decision whether to participate and take part of the study undertaking or not. After reading it, please, don't hesitate to ask the researcher any question as he is well qualified and prepared to answer all your questions and address all the concerns you might have before you decide to be interviewed by him.

Who I am? I am Bader and am a researcher in the Computer & information Science Department at the University of Strathclyde. I am conducting this research as part of my PhD studies.

What is this study all about? We, People, have different ways to find out about what we need. It is common that we ask somebody we know (for example: families, friends, or colleagues) to help us find information we need. This study aims to build the bridge and understand the relationships between how we seek information and how we are utilising our relationships to find this information. Your participation is essential to understand the relationship and answer this research questions.
In order to successfully answer this research questions, **we need your help!**

What else I need to know? Taking part of the study is completely **voluntarily**. The information you are giving during the interview is **confidential**. Data will be **stored securely** in accordance with the provisions of the Data Protection Act 1998. The data will only be used **anonymously** for the research purposes.

Why I chose you? I chose you because you are Muslim, between 18 and 45, and who's moved to live in Glasgow recently (during the past 5 years). Also, because I think that you will be able to tell me stories about what did you do and what happened at the times when you need to know about various things in your everyday life.

What would happen? If you agree to take part, we will meet in your convenient time at a private office in the Islamic Centre or at any other public place of your choice (for example, coffee shop, restaurant, or public library). I will answer all your questions and concerns about the study. I will give you a consent for to sign that you understand this information sheet and agree to participate. The interview expected to last 45 minutes to one hour. During the interview I will turn the audio recording on so I can remember what we have said, but if you do not want to be audio recorded I will not do so. The interview will start by asking you general information about yourself (age, marital status, etc.). Then the interview will be all about chatting and telling stories about times when you were seeking to know about something you need. You do not have to answer all the question and allows you can stop the interview and withdraw without questions being asked.

Researcher contact details:

Bader N. Nuwisser

Tel. 07770374315

Email: bader.nuwisser@strath.ac.uk

Address: University of Strathclyde, LT1207, 26 Richmond St. Glasgow, G1 1XH

Supervisor contact details:

Dr Steven Buchanan

Tel. 0141548409

Email: steven.buchanan@strath.ac.uk

Address: University of Strathclyde, LT1207, 26 Richmond St. Glasgow, G1 1XH

This investigation was granted ethical approval by the Computer & Information Science departmental Ethics Committee. If you have any questions/concerns, during or after the investigation, or wish to contact an independent person to whom any questions may be directed or further information may be sought from, please contact: enquiries@cis.strath.ac.uk

9.3 Appendix C: Informed consent

DEPARTMENT OF COMPUTER & INFORMATION SCIENCES

University of Strathclyde Science

The Relationships between Information Behavior and Social Capital

We, People, have different ways to find out about what we need. It is common that we ask somebody we know (for example: families, friends, or colleagues) to help us find information we need. This study aims to build the bridge and understand the relationships between how we seek information and how we are utilising our relationships to find this information. Your participation is essential to understand the relationship and answer this research questions.

Thank you for agreeing to be part of this study.

Interview Consent Form

- ✓ I have read and understand the information sheet provided.
- ✓ I have given the opportunity to ask any question about this study.
- ✓ All my questions was answered by the researcher.
- ✓ I have had enough time to think about my decision to be interviews as a participant in this study.
- ✓ I agree that my anonymous words might be quoted in publications, reports, web pages and other research outputs but my name will not be used.
- ✓ I keep the right to withdraw from this study any time without being asked any question.
- ✓ I keep the right to choose not to answer any question that I don't want to.
- ✓ I agree to audio record this interview and understand that I have the option not to be audio recorded.
- ✓ I agree for anonymous notes to be kept securely by the University of Strathclyde.

Researchers may contact me later to read my interview and clarify any points. ( ) Yes. ( ) NO.

If (Yes) please provide your contact information:

Telephone: . . . . . .

Email: . . . . . .

I confirm that I have read all statement above and agree to participate in this study.

Participant Name	Signature

REF UK TOP 20 RESEARCH-INTENSIVE UNIVERSITY

THE UK UNIVERSITY OF THE YEAR WINNER

THE UK ENTREPRENEURIAL UNIVERSITY OF THE YEAR WINNER

9.4 Appendix D: Interview guide

Participant ID:	Gender (F/M)	Community #	Participant #	Interview Count	

Demographics:

1. **What would you like me to call you during the interview?**

   ……

2. **How old are you?**

   ( ) 18-25 ( ) 26-30 ( ) 31-35 ( ) 36-40 ( ) 41-45

3. **What is your main occupation?**

   ( ) employed.

   ( ) Unemployed.

   ( ) Student.

   ( ) Other ……..

   A: How you would describe your main occupation? (I need to capture if he/she has multiple identity and the nature of his/her occupation if employed)

4. **What is your postcode?**

A: For how long you live in Glasgow?

B: previous to Glasgow, how long you have been in Glasgow?

5. **Education:**

   What is your highest completed level of education?

   ( ) Below high school.

( ) High school (either, Standard of Higher/A level).

( ) Graduate (eg BSc, BA).

( ) Post-graduate (eg PhD, MSc, MA)

6. **To which community you relate yourself?**
7. **Where are you from?**

Participation / engagement:

8. **Tell me how frequent you visit this Centre?**

9. **Tell me why you are visiting this Centre?**

A: How you differentiate this Centre from other centres? What makes this place special for you to keep attending here?

(To investigate how the participant relates him/herself to the community)

(Concepts investigated: insider/outsiders – trust – norms – social networks).

10. **Other than the Islamic community center, Do you usually attend (gather with) other group? Why?**

Help list (Example):

Education groups

Sport clubs

Unions

Market place

Communities

Organization

Clubs

Other...

Everyday Information seeking behavior

11. Tell me about something important you needed to find out about?

Help list:

Housing – Halal Food – restaurants – Health issues – consulting about legal issues – financial support- Education – job seeking - translation services – religious issues – something you want to buy something (car, bike, phone … etc.) – related to travel – programs in the community (prayers times or other events maybe organized by the community center) - Other things.

A: What was the thing you needed?

B: Why you needed it?

To capture the information need and encourage to tell more about what happened

12. Where did you go to find answers? What did you use? (trying to prop deep in the process)

13. What you did next? (exploring more sources)

14. Did you get the information you needed?

15. When you look for information is there anything makes it difficult for you? Could you tell me examples?

16. How you think your Identity effected your behavior?

- **Asking if he is open to be contacted again:**

Do you mind if we contact you again?

- **Time to closing the interview:**

Is there anything that you would like to ask me?

How you feel about this interview?