CHAPTER 1
INTRODUCTION

1.0 Introduction

This chapter provides an outline of the study. It begins with the statistics of disabled persons in the world and in Malaysia, and this is followed by an overview of the context of the research and the problem statement. Application of theory, purpose of study, nature of the study and exploratory research questions are provided in detail. The chapter ends with the significance of the study, delimitation and limitation of the research.

1.1 Statistics and Legislations of Disabled Persons in the World and in Malaysia

According to the World Health Organization (WHO, 2011), between five hundred and six hundred fifty million people in the world have at least one type of disability, and eighty percent of this population lives in developing countries. At least two hundred million of this population consists of children and young individuals (Malaysian Ministry of Higher Education, 2011). According to the WHO, disabled persons face different types of barriers in their daily life such as lack of adequate medical care, discrimination, inaccessibility to transport system, and housing, access to information.

The WHO and the United Nations estimated that 10 percent of each nation’s population has one type of disability. However, the United States Agency for International Development (USAID) stated that the population of the disabled varies from country to country, and it could be more than 10 percent, such as in Canada, where 13 to 20 percent of the total population are disabled (Metts, 2000).
The estimation for Malaysia in 2000, with a population of 19,700,000 was 1,950,300 (Metts, 2000). Kassim et al. (2011) estimated that based on the current population of Malaysia, which is nearly 28 million people, the number of disabled persons should be 2.8 million. However, based on the 2010 statistics from the Social Welfare Department, the total disabled population in Malaysia is 299,305, aged between 7 years and more than 60 years old (Malaysian Department of Social Welfare, 2012). This report was based on the number of disabled who had registered voluntarily. Kassim et al. (2011) opined that the number may not reflect the true picture of the disabled population in Malaysia.

Studies on the disabled library users in Malaysia also support the above findings. For example, Pak (2007) mentioned that among 18 public libraries studied in Malaysia, only 3 could provide statistics of visually impaired users. She pointed out that it is crucial for libraries to keep statistics of disabled users so that sufficient budget allocations can be made when planning appropriate services and resources for them. Mohamad (1994) also pointed out the lack of reliable and accurate statistics about disabled library users as one of the factors which hampered libraries in their planning to provide library materials for visually impaired users. He also highlighted the possibility that the statistics provided by the Social Welfare Department could be inaccurate. As a result, libraries could not justify spending higher portion of the library budget to buy expensive equipment for the disabled users (Devatason, 1996; Ruslina, 2009).

Malaysia has its vision 2020, which is aimed at making it a rich and high income country by the year 2020. In this context, highly skilled and educated individuals, both able and disabled, are needed to help the country to achieve its target. Thus, the best way to achieve this vision is by providing education opportunities for everyone.
The statistics from the Ministry of Higher Education Malaysia (2011) indicated that the total number of registration in universities had increased from 414,964 in 2009 to 438,566 in 2010, and the number of international students had also increased from 22,456 to 24,214, respectively. The number of disabled persons registered with Malaysian universities had also increased from 979 in 2009 to 1,115 in 2010. It is clear that, the number of disabled students in Malaysian universities is increasing, and therefore, it has become necessary for universities to improve their physical accessibilities. From 1990 to 2003 the Malaysian government had taken some proactive measures, such as revising standard codes for buildings and their accessibility (Rahim & Abd, 2010). In 2008, Malaysian government became a signatory of the Convention on the Right of the Disabled Association of the United Nation, and the Introduction of the People with Disability Act (Anuwar, 2009). The content and aim of the convention was to balance and promote the right of disabled people to gain access to urban infrastructures, buildings, information and communication technologies, employment and entertainment facilities. The Malaysian government also aimed at increasing the designers’ awareness about the needs of the disabled in the architectural design. This means creating places which are accessible to the disabled people to enable them to integrate into the existing or future social space and environment. As a result, the architecture school at the International Islamic University is currently offering a new course such as “Barrier Free Architecture” in order to improve future designers’ awareness about disabled people and their special needs in urban environment, and in infrastructure design (Anuwar, 2009).

In the Law of Malaysian Act (2008), the Malaysian government stressed on the need for both the public and private sectors to be responsible for supporting and providing the disabled with equitable educational system and environments, access and use of
appropriate infrastructure, facilities, and materials so that the various needs of the disabled people can be met.

The university library is the heart of learning and the main mediator in providing access to information resources for both able and disabled students. As such the library in a university is responsible for creating accommodating tangible facilities, resources and services for their disabled users. Ruslina (2009) highlighted the barriers, which exist in making school libraries inclusive for disabled students such as the limited facilities, inadequate resources, curriculum, school regulations, and attitudinal barriers. Pak (2007) examined the status of 18 public libraries in Malaysia with respect to providing expedient resources, services and equipment for visually impaired users. The study also reveals the need for increasing awareness in Malaysia to provide an easily accessible physical facilities for disabled users in both public and university libraries.

1.2 Statement of the Problem

There are two major perspectives in disability studies - the medical model and the social model of disability. In the medical model, a disabled person is one who has impairment or body limitation and differences, and is in fact, a personal tragedy for the person. In other words, a person is disabled because of his own limitation and medical conditions. In the social model, disability occurs not only because of the individual’s limitation or bodily differences, but because of the political, economic, social, and cultural factors which create limiting environments. Disability is not an individual tragedy but occur because of the limitations created by the environment which surrounds that person, and which enforces the disability (Oliver, 1996).

The published literature on library services for the disabled people have focused on the social model of disability, and thus places emphasis on optimizing the library
environment to make it more accessible for disabled users. Joint (2005) declared that
disability occurs because of the environment, and libraries as a part of society have to
empower the disabled users so that they have their own place in the community of
library users. Joint emphasized staff training and adopting new ways to enabling rather
than disabling disabled users.

Based on the literature, the library environment for the disabled users should consider
the difficulties and problems encountered from different dimensions such as physical,
economic, political, collection, services, facilities and librarians. These different
dimensions create a circle or chain which affects each other, directly and indirectly.

For example, the physical dimension consists of the library building, equipment,
transportation system, location, which can be evaluated based on different international
standards such as the American Disability Act (Kuh & Vesper, 1997), Disability
Discrimination Act (DDA) and International Federation of Library Association (IFLA)
checklist (Noll, 1997).

The librarians dimension refers to their attitudinal factors, which can be divided into
their support, empathy, communication, and awareness about disabled users. Facility,
collection, and services refer to all things that the library prepares for their disabled
users from the rest rooms up to the type of resources in Braille and their availability and
accessibility. Todaro (2005) conducted an assessment on library resources and building
accessibility for disabled users, and found that one-third of the libraries he studied have
exclusive buildings. He also noted that libraries in Argentina do not have a budget, and
the librarians lack training, and low awareness of their roles. Forrest (2006), in her
assessment of library buildings based on the IFLA checklist, declared that the two most
important barriers to making libraries accessible are physical, and attitudinal barriers.
To overcome such barriers, libraries should: evaluate the current situation through the
disabled users’ perspective; include one of the users in the evaluation process; improve
the publicity quality; prepare staff by training them about disabled users; and use new
technology to increase awareness about the disabled users. Boone (2003) expressed that
the lack of budget, and organizational support as the two main barriers to making library
buildings accessible. Taylor (2004) stated that disabled students meet some difficulties
in the university campus, and these include inaccessible buildings, and attitudinal
difficulties which can have a negative effect on disabled students’ self-esteem. Barth
(2005) noted that the difficulties that disabled students faced in the university are not
only the lack of signage or parking space, but also the staffs’ behaviour and their lack of
support as well as inadequate social skills and communication skills in handling
disabled users. Birdi (2008) emphasized that librarians must have empathy and
understanding towards the disadvantaged groups through catering for their needs, and
providing relevant information and facilities as part of the efforts to ensure quality of
services in libraries. Galdi (2007) found that negative attitude of professors, inaccessible
educational sources, and lack of transportation, are the main pressing difficulties that
disabled students encounter in universities.

Baker, Holland, and Kaufman Scarborough (2007) stated that most studies on the
disabled people focused on making the environment, especially, the physical
environment, accessible and pointed out that accessibility is more than widening the
door or entrance of the building. He pointed out that the disabled people’s experiences
and psychological feeling have often been overlooked, and there is a lack of studies
from this perspective. It is often believed that creating an environment which is
accessible is tantamount to integrating the disabled into the space or community of that
user in the environment. For example, Pinder (2005) emphasized that libraries should
review their services and environment holistically with the aim of meeting the needs of
disabled users and to integrate them with mainstream society and they should avoid
ideas of separate or special libraries. Peters (2007) opined that the actual meaning of inclusive education is more than physical integration but involves integrating disabled and able students in similar situations to assist them to achieve their rights and needs. He proposed a supportive system, welcoming culture, and an atmosphere of acceptance as the real meaning of inclusion. Symeonidou and Phtiaka (2009) viewed inclusion as the right of disabled persons to participate and integrate into the society or community completely, not partially, or just physically being in that environment. Langeland and Wahl (2009) suggested that to achieve coherence for individuals who have mental health problems (MHP) it involves focusing on the quality of support and social integration. He identified some barriers in providing a sense of coherence in the society such as feeling lonely and the inability to find or have meaningful friendship with others.

The Ministry of Social Development in New Zealand (2007) stated that a person who is not excluded does not mean that he has been included in the society as inclusion occurs when people connect, have relationships or communicate with other peers or individuals in that community. He observed that even a person who is excluded may feel or experience strong inclusion with other communities. Burchardt, Le Grand, and Piachaud (1999) stated that exclusion or inclusion is a process and not just a result, and during that process, individuals may voluntarily or involuntarily include or exclude themselves from their mainstream environment. This means that sometimes individuals prefer to disconnect themselves from the community in which they are. Oxoby (2009) emphasized the role of individual beliefs, experiences, perception and interpretation of the policies and environment around themselves would impact their decision to be included or excluded from the group or community. He defined exclusion as isolation and stigmatization resulting in low self-esteem and a lack of the sense of belonging. In addition, Krill, Platek, and Wathne (2008) stated that social exclusion means being
ostracized by others or on individuals’ own psychological perception, experiences or tangible distance from others which has a negative effect on human’s four fundamental needs like sense of belonging, sense of control, self-esteem, and meaningful existence in the environment.

According to MacDonald and Borsook (2010) one of the fundamental needs which is very essential for psychological well-being is the sense of belonging, after physical and safety needs, based on Maslow’s (1962) needs hierarchy. Upton (2010) opined that a sense of belonging is essential to achieve positive self-worth, social skills and finding your own place and fit in the community or society. Doubt (2003), in his exploration of the physically disabled students’ perceptions and experience in an integrated school, identified two type of factors which facilitate and prevent inclusion in the school environment. He divided the factors into extrinsic factors which are related to the environment, and intrinsic factors which refer to the personal characteristics of disabled individuals interacting with the extrinsic dimension to create a feeling of being socially integrated or belonging to the education system.

In Malaysia, there are limited numbers of published studies concentrating on disabled library users. The majority of studies mainly focus on integration of disabled users with non-disabled users through efforts at making the library building, equipment, and services accessible. For instance, Pak (2007) identified factors which hinder the provision of appropriate services for visually impaired users in public libraries in Malaysia such as lack of budget, librarians’ view about the number of visually impaired as being too small, lack of cooperation between public libraries and special libraries for visually impaired users and lack of support from library committee members. On the other hand, some studies reported that public libraries lament that visually impaired users’ lack of interest to come to the library. Zahra (1994) and Wang (1994) mentioned that the lack of visually impaired users’ awareness about the library resources and
services could be the main factor for their disinterest in using the library. This also shows the low level of library usage among visually impaired users.

In summary, previous studies show the lack of knowledge and awareness about the disabled user’s psychological feelings such as sense of belonging towards the library environment. This study hopes to investigate this issue from the perspective of social model of disability. Indeed, we are going to understand the meaning of sense of belonging through the viewpoint of visually impaired participants based on what they have experienced and how they have experienced this concept in university library in Malaysia. Therefore, the study hopes to consider how the findings of this research confirm or not confirm the social model of disability.

1.3 Application of Theory

In this study, the researcher adopted the Social Model of Disability as a perspective lens for designing the research questions, data collection and analysis. From the social model of disability’s perspective, disability occurs not because of the individuals’ physical or mental limitation but because of the surrounding environment which consists of the physical, social and economic factors (Pak, 2007). The model stresses that disability exists not just because of the impairment but also because of the restriction that society imposes on individuals with disabilities (Mohamad, 1994). The key point of the social model of disability is that it distinguishes between impairment and disability which means disability occurs because of the interaction between an individual’s impairment and the social setting such as social, economic, political, cultural and architectural factors (Oliver, 1996). This model highlights disability as a disadvantage that occurs due to a combination of environmental and individual traits (Tremain, 2001).
From a social constructionist point of view, the reality of disability should be figured out in the negative labels and attitudes, which abled people enforce on impaired individuals and the creation of marginalized group in a society (Riddell, 1996). In the social model of disability, the difficulties an individual experienced in his daily function which limited his participation is because of the limiting environment not the person’s limited ability or situation (Williams, Bunning, & Kennedy, 2007).

In this study, the researcher will explore the type of barriers which exist in the library environments, which prevent the visually impaired students from feeling welcome, valued, accepted or apart of the library. Based on the social model of disability, there is the need to assess the visually impaired views about what sense of belonging means in the library context based on their daily experiences in the library environment.

1.4 Purpose of the study

The aim of the study is to investigate the sense of belonging to the library among visually impaired students who are enrolled at university library. This study seeks to find out whether the lack of a sense of belonging prevents the visually impaired from using the library's facilities, resources, and services or whether having a sense of belonging motivates visually impaired students to use the library more. The study will look at the problem from two aspects: (a) having a sense of belonging to the library and library avoidance, and (b) the intrinsic and extrinsic factors that are related to this state of having a sense of belonging to the library. In terms of the state of a sense of belonging, the study will explore and describe the visually impaired students’ experiences, perceptions, and behavioural attributes.

The following are the specific objectives of the study:
(a) To understand visually impaired students’ experience of sense of belonging in a university library;

(b) To explore conditions that fosters sense of belonging among visually impaired users in a university library;

(c) To explore conditions that hampers sense of belonging among visually impaired users in a university library.

1.5 Approach of the Study

This study uses the qualitative approach. This approach allows the researcher to explore the issues based on the researchers’ point of view on: the reality of the situation (ontology); the researchers’ relationship with the subject of the research (epistemology); the researcher’s interpretation of her experiences, field of study and possibility of biasness (axiology); the language of the research (rhetoric); and the method the researcher chooses for the research (methodology). The philosophical assumptions made will indicate the researcher’s’ views of the subject of research.

The researcher will also choose the paradigm, which is the “basic set of beliefs that guide action” (Wang, 1994) to influence the direction of the research. Based on the explanation given in this study, the researcher will use the socially constructed paradigm, which stipulates that people will try to understand the world or the environment they live in. According to this paradigm, the fundamental component of qualitative approach is to determine the views of individuals as much as possible, in the environment (Wang, 1994). Moustakas (1996) stated that this paradigm is used mostly in phenomenology studies in which the researchers aim is to explore the participants’ experience and their views about the subject of study.
Among five main qualitative methods (narrative, ethnography, case study, grounded theory, and phenomenology) this study shall adopt the phenomenology approach which allows the researcher to explore the essence of belonging among visually impaired students based on their daily experiences and perceptions toward the library environment, resources, and services.

The sample population was selected based on the following criteria: the participants are visually impaired students enrolled in a Malaysian university; data is collected through the semi-structured face-to-face interview and focus group interview. The participants are informed about the aim and objective of the research, what is expected of them, the type of information that will be collected, and how the information will be used. The details about the method used are presented in chapter three.

1.6 Exploratory Research Questions

The research questions which this study hopes to answer are as follows:

(1) How certain condition can foster a sense of belonging among visually impaired students based on their experiences and perceptions in the library community?

(2) How certain condition can hamper a sense of belonging among visually impaired students based on their experiences and perceptions in the library community?

1.7 Significance of the study

This study hopes to enrich existing literature on sense of belonging research in the library environment from views of the disabled users. It is hoped that the findings from this study will empower people with disabilities and to encourage them to use the
library in their studies to achieve their educational goals. The findings will also be useful to make libraries to be more sensitive to the needs of the disabled users when formulating their policies and regulations, and when making decisions on budget allocation, resources, services, staff training, and collaborating with the other organization to provide support for disabled students.
CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

This chapter provides a review of the relevant literature related to disability studies under three main categories. The first part of the literature presents the history, definition and models of disability studies. The second part discusses the disability studies in library and information science literature, which is mostly about library building accessibility, library resources, and services for people with disabilities. The last part of the literature focuses on the concept of sense of belonging, its definition in the literature, its effect on students’ persistence in an educational system and in the disabled students’ life.

2.1. Part A: Disability History, Definition and Models

Historical studies related to people with disabilities revealed the difficulties faced by them for centuries. The studies introduced the researcher to different types of strategies and plans which societies have applied towards disabled people based on their attitudes towards them. The history of disability is as old as the human beings of the earliest society. For instance, archeologists have found two skeletons with physical disability, from the Neanderthal period (Albrecht, 1992). Anthropologists talked about two main types of manners in societies towards people with disability. The first type is related to societies experiencing hazardous economic situations. In such societies, such as the Eskimos, any type of impairment would mean weakness and dependency, and usually, depending on the community decision, children with impairment were killed or were excluded from society (Barnes, 1996). In the ancient Greek society, impairment was considered as God’s punishment. The Greeks believed that there was a relationship between an individual’s or his father’s sin and God’s punishment, which resulted in
impairment (Carr, Darke, & Kuno, 2008). In contrast, in the Australian aboriginal societies or the native Americans, individuals with any type of impairment were considered as a valuable person in society (Barnes, 1996).

The Athenians did not care for their visually impaired children as they could not fend for themselves and believed that blindness was God’s punishment. Therefore, since visually impaired children were considered financial burdens, the families used them for profit-making by selling them as slaves or prostitutes. However, in ancient Egypt, Chinese, Japanese and Indian societies, a constructive role for the visually impaired people was found in these societies (Koestler, 1976).

The Romans like the Greeks viewed negatively towards disabled children and often put those who seemed weak and severely handicapped to death at the river Tiber in Rome. After the fall of the Rome Empire, during the Dark Ages, people believed that children with visible impairment were changelings (Haffer, 1968), left them at small hospitals for sick people (Barnes, 1996) and they were the subject of ridicule and amusement (Thomas, 1977). The situation was made worse during the period of industrialization where individuals were valued based on their ability to work in factories, which resulted in further isolation of disabled people from mainstream society.

Societies began to change their views about disability with the advent of World War I and World War II, when many soldiers became disabled. This was followed by the formulation of legislations to enable the process of providing people with disabilities with relevant education, employment and welfare (Carr, Darke, & Kuno, 2008).

More countries now have their own disabled-friendly legislations to protect persons with disabilities in the society such as the Americans with Disabilities Act of USA in 1990; the 1995 Disability Discrimination Acts in the United Kingdom, and the
Australian Disability Discrimination Act in 1992. However, despite all efforts to remove barriers in the life of the disabled, to create equal rights and increase their access to societal facilities, the disabled failed to adjust and overcome prejudice and discrimination towards them.

2.2 Definition of Disability

Previous literature depicts disability as a multi-dimensional concept (Williams, 2001), which is used to define disability from different perspectives. The Disability Discrimination Act in Ireland (1995) defines disability as individuals with physical or mental impairment which impacts on their ability to carry out their daily life and duties. The World Health Organization (WHO, 2011), characterizes disability as a broad term, which covers people with body impairment, and whose activities were limited. Disability is viewed as an intricate concept which illustrated the interaction between the individual’s body features and the circumstances of the society that the person lived in (WHO, 2011). Oliver and Barnes (1998) observed that the language society uses to define disability illustrates the attitude, norms, and mindset of society towards the concept.

2.3 Disability Models

Between the 1980s and 1990s, different analytical models were derived to depict different aspects of disability (Carr et al., 2008), and these include the medical model, social model, synthesized model and differentia model, which has sub-models like the social model of impairment, cultural model, affirmation model, inclusion model, and postmodern model. Although in all of these models the word disability has been used, the views about disabilities were different. Each model looks at disability from different perspectives, such as supporting an approach, improving a new idea or criticizing an
The following sections describe briefly the main models of disability. The figure 2.1 summarizes the disability models.

![Disability Models](image)

**Figure 2.1: Disability Models**

### 2.3.1 Medical Model of Disability

The Medical Model of Disability is based on the idea that disability is the result of an individual’s own physical or mental situation or limitations. The consequence of such conditions resulted in reduced quality of life and engagement in societal activities by the individual (Trani & Bakhshi, 2008). The medical model focuses on the impact of physical or mental limitations of individuals rather than the circumstance of the societies in which they live or operate (Oliver, 1996). In this model, the disabled individuals were considered as sick people who needed treatment. So, from this viewpoint, the only solution to integrate disabled people with society was through therapy and cure, which meant that individuals with any type of impairment have to adapt their situation to fit in with the demands of society and try to become like “normal” people (Carr et al., 2008). In general, the aim of the medical model of disability is to return disabled people to a normal life by finding a suitable cure through rehabilitation (Darke, 1999).

Despite the success of the medical model of disability in shifting the discussion of disability from one where it was considered a sign of sin and a punishment from God, aided by religious beliefs, to a discussion based on natural sciences, the medical model
theory still came under criticism. The literature also shows some of the disadvantages of this model of disability studies. Some critics believe that if the medical treatment given to the disabled person fails, the professional could make the person with disabilities feel like there is something wrong with them (Carr et al., 2008). In the medical model, the impairment of individuals created their disabilities and the disabled persons are perceived as passive people who do not have the ability to make decisions and therefore required “experts” to do it for them (Finkelstein, 1992). Indeed, critics have highlighted that the consequence would be the justification of excluding disabled people from mainstream society because of their lack of response to the medical treatment.

The International Classification of Impairment, Disability and Handicap (ICIDH) was established by WHO in 1980 based on the Medical model of disability to classify disabled people. In fact, this classification was accepted by rehabilitation professionals but criticized by disabled societies because of their main concern on physical and mental functions of disabled people instead of their social context (Finkelstein, 1992). Such criticism provided the foundation for the emergence of the Social Model of Disability.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective of disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
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<tbody>
<tr>
<td>Medical Model of disability</td>
<td>ICIDH*</td>
<td>Functional incapability</td>
<td>Abnormal</td>
<td>Functional independence</td>
<td>Rehabilitation</td>
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* International Classification of Impairment, Disability and Handicap

2.3.2. Social Model of Disability

The Social model of disability is considered as the foundation for many academicians and social advocates (Samaha, 2007). The social model of disability is a product of the cooperation of persons with disabilities and their movement to develop an alternative thinking to the medical model of disability (Jayasooria, 2000). The causation story of
the social model of disability started in the 1970s, and was successfully started up in the Western academic circles in 1990 by Micheal Oliver (UPIAS, 1976; Samaha, 2007). Indeed, disabled sociologists such as Oliver (1990), Finkelstein (1980), and Hunt (1981), in response to their challenge to the medical model of disability, presented the social model of disability. They viewed that people are disabled not because of their own physical or mental limitations but because of the inappropriate circumstances, which have been created by normal people through their assumptions about disabled people’s real needs. In fact, such assumptions depict the lack of awareness among normal people (Drake, 1999).

The proposed definition of disability by the social model of disability redirects the casual responsibility for an individual’s disadvantage from their physical or mentally impairment to their social, economic, and architectural environment (Samaha, 2007). This model shifts the focus to the individual’s surrounding environment instead of the individual’s impairments (Ball, Manaco, Schmeling, Schartz, & Blanck, 2005). The key point of the social model of disability is that it distinguishes between impairment and disability, which means disability occurs because of the interaction between individual’s impairment and their social setting such as social, economic, politics, cultural values and architectural factors (Oliver, 1996). This model highlights disability as a disadvantage that occurs due to a combination of environmental and individual traits (Tremain, 2001).

According to the social model of disability, it is society’s duty to design an appropriate environment and create more opportunities for disabled people to participate in society equally as normal individuals. Societies should try to empower disabled people as a group not just as individuals. Hence, instead of expecting disabled people to adjust themselves with society’s situation and trying to get them to become “normal” people,
society should consider the needs of disabled people and provide appropriate opportunities for them (Oliver, 1990).

The social model of disability does not ignore the fact that an individual’s physical or mental condition has an effect on their ability but the aim is to look at disabled people from a different perspective. The aim of this model is to shift the problem from the individual’s shoulder to their social context and barriers in society, which hamper them from reaching their own and real rights (Oliver, 1996; Joint, 2005; Loreman, 2001). Therefore, the social model of disability looks at the difficulties individuals with disability experience in their daily life in society (Williams, 2007). The disabled persons encounter a web of barriers in society such as social, environmental, architectural and transportation systems, which hamper them from exercising their real right (Bowe, 1978). In turn, in order to include disabled people in mainstream society would entail progressive and supportive ways of restructuring or redesigning society (Dubios & Trani, 2008).

The main discussion in the social model of disability is about the importance of causation based on environmental factors, that is, which factors of the environment has more effect in creating a disadvantage when interacting with the impairment of individuals. The social model of disability suggests that the best way to remove the barriers faced by the disabled in societies is through social change, which can be defined in three main categories such as physical, cultural, and technological. The first category is mostly related to material changes such as increasing the accessibility of disabled people to public buildings by adding accessible ramps and handrails. To achieve such optimization, society has to consider disabled-friendly legislation to ensure compliance with the Disability Discrimination Acts. The second category refers to increasing society’s awareness about disabled people in order to remove the negative
attitudes and prejudice towards them in society. The final category considers the right of
disabled people to keep pace with technological development such as designing
accessible websites or providing assistive technologies (Samaha, 2007).

One of the most important additions to the social model of disability is the inclusion of
psycho-emotional dimension of disability. This refers to barriers arising from the
relationship between individuals in the society based on their daily experiences.
Negative experiences may influence and restrict the disabled person’s psycho-emotional
well-being (Thomas, 1999). Disabled people through prolonged or repetitive experience
of negative attitudes of non-disabled people towards themselves through their daily
interactions encounter internalized oppression (Thomas, 2004). Therefore, such feelings
cause disabled people to accept their disability, which prevents them from challenging
societal boundaries, and negatively affect disabled people’s psycho-emotional well-
being (Reeve, 2002). In this regard, Hanisch (2011) observed that the disabling process
is not only what society cannot do, but it is also about what agents do to disabled
people, which means the psycho-emotional well-being of disabled people is more
important than their participation or integration. The findings of Hanisch’s investigation
indicated that enablement occurs through interpersonal connectedness, bonds and
friendship among disabled and non-disabled people in the society. To support this,
Thomas (2007) highlighted the effect of non-disabled peoples’ intended or unintended
hurtful words and social actions towards the disabled which negatively influence their
ontological security, self-esteem and personal confidence. Reeve (2006) gave some
examples of psycho-emotional dimension of disability such as staring of non-disabled
people at disabled people or activities of non-disabled individuals, which cause disabled
individuals to feel worthless, invalid, devalued and ashamed.
In summary, according to the new social model of disability, disability occurs not only because of interaction of an individual’s physical or mental limitations with structural barriers, but also because of the degree and quality of interactions between the disabled and the non-disabled individuals. Indeed, the degree and quality of interaction of disabled and non-disabled people in society is also an important factor, which affects the disabled people’s internalized perceptions which in turn affects their psychological well-being.

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<thead>
<tr>
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<tbody>
<tr>
<td>Social Model of disability</td>
<td>Social Constructionist view</td>
<td>Discrimination and Inequality</td>
<td>Discriminated</td>
<td>Social Institutions</td>
<td>Social change</td>
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### 2.3.3 Synthesized Model of Disability

The synthesized model of disability emerged as a result of combining the medical model of disability and the social model of disability (Carr et al., 2008). The WHO used the synthesized model to revise the International Classification of Impairment, Disability and Handicap (ICIDH) which was created using the medical model of disability (Oliver, 1996). WHO named the new classification framework as the International Classification of Functioning, Disability and Health (ICF). The ICF illustrates the new viewpoint of WHO from a purely medical model of disability to the new model with the aim of covering all dimensions of disability (Ustun, 1998).

The major critique of the synthesized model of disability is that despite its attempt to combine and integrate both the social and medical model, the main emphasis is still on the medical aspects of disability (Hurst, 1998), as the model had failed to develop the concept of participation (Pfeiffer, 2000).
Table 2.3: Synthesized Model of Disability (Carr et al., 2008)

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<td>ICF</td>
<td>Participation restriction</td>
<td>Unequal</td>
<td>Functional independence and social structures</td>
<td>Rehabilitation and social change</td>
</tr>
</tbody>
</table>

* International Classification of Functioning, Disability and Health

2.3.4. Differentia Model of Disability

The Differentia model of disability emerged as a result of the criticism leveled at the social model of disability, and it consists of several sub-models. So, it is difficult to identify it as a specific model in disability studies (Carr et al., 2008). Indeed, this model discusses two main challenges to the social model of disability. Firstly, it only focuses on the issue of segregation, and secondly, it considers disabled people as a homogenous group and fails to consider the varied experiences and perceptions of disabled people.

One of the difficulties with the differentia model of disability is that it consists of five sub-models such as the social model of impairment, culture model of disability, affirmation model of disability, inclusion model of disability, and postmodern model of disability. The other difficulties are the usage of different names by different investigators which has caused great confusion (Carr et al., 2008). The figure 2.2 summarizes the five sub-models of differentia model of disability.

![Differentia Model of Disability](image_url)

Figure 2.2: Differentia Model of Disability
2.3.4.1 Social Model of Impairment

The Social model of impairment only focuses on the negative experiences of the disabled. It also tries to consider the concept of disability and impairment equally. Indeed, the aim of this model is to explore the lives and identity of disabled individuals by investigating their negative experiences in society (Abberley, 1997).

The main discussion of the social model of impairment is the negative experiences of disabled individuals who have been ignored in the social model of disability (Carr et al., 2008). In fact, the social model of impairment views impairment as a negative experience and focuses on the physical and functional aspects of impairment (Houston, 2004).

Although this model did not ignore the importance of recognizing the segregation and oppression of disability as discussed in the social model of disability, it believed that the social model of disability failed to consider the effect of an individual’s impairment experiences (Morris, 1992). Therefore, it can be concluded that the view of the social model of impairment is like the medical model of disability, which considers being disabled as an individual-based tragedy, which has to be solved by the individuals and is not related to the society (Carr et al., 2008).

Table 2.4: Social Model of Impairment (Carr et al., 2008)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective on disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentia Model of Disability</td>
<td>Social Model of Impairment</td>
<td>Personal experiences of impairment</td>
<td>Have different experience</td>
<td>Experience</td>
<td>Dealing with an individual’s experience</td>
</tr>
</tbody>
</table>
2.3.4.2 Cultural Model of Disability

In the cultural model of disability, disabled people are considered as a group of individuals with the same culture and experiences and who are a minority in society (Lane, 1995). This model considers physical or functional differences as critical factors in creating a unique culture for disabled people. Therefore, the minority and majority in societies emerge based on cultural differences and not physical differences (Anderson, 1994). Indeed, based on this model, disabled people as a homogenous cultural group are identified as a positive thing in contrast with the medical model which considers disabled people as abnormal or oppressed as in the social model of disability (Kimura, 2000).

The cultural model of disability mainly focuses on heterogeneity in comparison with homogeneity. So, one of the challenges of this model is with the concept of inclusion or integration. Indeed, supporters of this model believe that the inclusion of minority cultural groups in majority groups in societies is an investment of the identity of the minority group. So, they are believed to exist in society as a minority group with equal opportunities without inclusion (Carr et al., 2008).

The critics believe that although this model contributes to a positive identity of disabled people in society, its incapability to consider the functional impairment of disabled people and its interaction with social conditions had caused it to fail as a comprehensive disability theory (Carr et al., 2008).

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective of disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentia Model of Disability</td>
<td>Cultural Model of Disability</td>
<td>Cultural invasion</td>
<td>Cultural minority</td>
<td>Culture</td>
<td>Positive separation</td>
</tr>
</tbody>
</table>
2.3.4.3 Affirmation Model of Disability

The affirmation model of disability views physical and functional disability positively, which means supporters of this model perceive disabled people as individuals with unique differences (Swain & French, 2000). This model highlights segregation as normal individuals’ lack of understanding about the positive and unique differences of disabled people (Gilson & Depoy, 2000).

The main concept of this model says that instead of considering their disability as an imperfection, it should be considered as special circumstances that should be embraced. This model advocates that the real problem of people with disabilities is created by a society, which fails to view their differences positively, which leads to discrimination towards them. In this model, heterogeneity is attributed to the individuals in contrast with cultural model of disability which illustrates the value of being different. Despite similarities of this model with the social model of disability for defining exclusion as a societal barrier, the main difficulty of this model is that it fails to consider disabled people’s potential limitation and capacities in their daily real life (Carr et al., 2008).

Table 2.6: Affirmation Model of Disability (Carr et al., 2008)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective of disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation Model of Disability</td>
<td>Affirmation Model of Disability</td>
<td>Negative attitudes</td>
<td>Unique</td>
<td>Attitude</td>
<td>Affirmation of differences</td>
</tr>
</tbody>
</table>

2.3.4.4 Inclusion Model of Disability

The origins of the inclusion model of disability can be traced back to the concept of disability in the social model of disability in the United States by Albrecht (Albrecht, 2002; Pfeiffer, 2001). This model uses the polyatomic perspective instead of a dichotomous perspective such as everyone is different, instead of disabled people and non-disabled people. Indeed, the inclusion model of disability views disability as a
physical and functional limitation which causes negative experiences, which is in contrast with the affirmation model of disability. This is also in contrast with the medical model of disability as supporters of this model believe that societies have to fit with individuals based on their needs. In fact, the aim of this model is to provide a practical intervention to fulfill the needs of disabled people based on their differences and different needs. This model considers disability as an equal factor as other demographic factors such as gender and ethnicity. Therefore, disability is not a primary discrimination and should be considered as one of the individual’s different factors which should be considered (Carr et al., 2008).

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective of disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentia Model of Disability</td>
<td>Inclusion Model of Disability</td>
<td>Social exclusion</td>
<td>Everyone is different</td>
<td>Social barriers</td>
<td>Social inclusion</td>
</tr>
</tbody>
</table>

2.3.4.5 Postmodern Model of Disability

This model emerged based on the philosophy of post-modernism which considers disability not as a physical or functional limitation but as a condition created by the social norms and values (Devlieger, 1995; Corker & Shakespear, 2002).

The postmodern model of disability defines disability and disabled people based on people’s understanding, perception and social norms of the society. Indeed, this model considers disabled people as a homogenous group. However, such a view point fails to consider the physical and functional limitations of disabled people in their daily life (Carr et al., 2008).
Table 2.8: Postmodern Model of Disability (Carr et al., 2008)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sub-model</th>
<th>Perspective of disability</th>
<th>Disabled people</th>
<th>Focal issue</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentia Model of Disability</td>
<td>Postmodern Model of Disability</td>
<td>Socially constructed</td>
<td>Socially constructed</td>
<td>Discourse</td>
<td>Discourse analysis</td>
</tr>
</tbody>
</table>

2.4 Part B: Literature about Disabilities in Library and Information Science

As discussed in the previous section, the social model of disability is one of the most popular theories in disability studies, which distinguishes disability from impairment and highlights that disability occurs not because of an individual’s physical or functional limitation but because of the limitation and ignorance of non-disabled people in designing the environment (Finkelstein, 1980; Oliver, 1996). A brief look in the Library and information science (LIS) literature shows that the current trend in disability studies are mainly based on the social model of disability. Libraries motivate their disabled users to use their resources and services by optimizing their environment from every perspective such as social, economic, political and physical (Nandjui, 2008). Also, research has found that the information needs of disabled people, is not the same as non-disabled people and libraries have to meet the needs of all their potential and actual users (Moy, 1990). According to the LIS literature, two main barriers which hold back libraries from including disabled people equally with non-disabled users and these are the physical barriers and the attitudinal barriers (Forrest, 2006).

2.4.1 Physical barriers in Libraries

A survey of the LIS literature indicates that the main barriers, which disabled users encounter in the library environment are inaccessible library buildings and equipment. In the context of higher education, King (1980) inspected the barriers in the university environment for physically disabled students who used the wheelchair. He used
different data collection methods such as distributing questionnaires and interviewing disabled students. The survey instrument King used was based on the Health Locus of Control Instrument, and the second questionnaire was designed by King to examine the perception of physically disabled users towards their barriers in the University. The interview questions were mostly related to the accessibility of classroom buildings, campus housing, and parking lots, the library building accessibility, lifts and doorways. The findings indicate that the main barriers are related to their accessibility to cafeterias, drinking fountains, sporting events besides a lack of adequate snow removal and facilities of self-care activities. King in 1980 therefore found no appropriate effort have been attempted to eradicate the disabled students’ problem in the higher education system, especially physical barriers.

To explore the compliance of Ohio public libraries with the American with Disabilities Act, Scheimann (1994) surveyed all small and medium libraries to collect data about their policy and strategy to provide an accessible environment for disabled users. A total of 104 libraries completed and returned the questionnaire. Scheimann considered four sections in his questionnaire such as the physical access to the library building, alternative information resources for the disabled, budget allocation for adaptive equipment and the library’s creative solution to meet the disabled users’ needs. The study found that some libraries perceived that they do not have any disabled users, which indicate a lack of accurate statistics about the number of disabled users. Indeed, lack of statistics can be considered as a main barrier in providing or allocating an appropriate budget to provide for accessible equipment. Nevertheless, the findings indicate that most of the library buildings were accessible and have provided alternative information resources for the disabled.
Jeal, Roper, and Ansell (1996) investigated the library service and building accessibility for deaf people. They established a series of interviews with service providers to become familiar with their priorities, attitudes and awareness about accessible services and architecture. The findings indicated the need to consider staff training, stock development, technological developments and exploring the real needs of deaf people through their view points. The researchers also discussed the architectural barriers in libraries under study such as the lack of good lighting, which hampers deaf people from lip reading and the lack of good library signage. They observed that since deaf people looked like normal people, they appeared shy to ask for help from hearing people and felt uncomfortable. Providing appropriate library signage would help users with disabilities to effectively utilize the library space.

In a similar study, Leong and Higgins (2000) assessed the public library’s accessibility situation for physically disabled people in Singapore to identify the factors which give rise to difficulties for them. The study used the focus group discussion technique to examine the problems through the real voice of disabled people. In total, eleven disabled people aged between 12 and 20 who used the wheelchair and the public libraries participated in their study. The findings highlighted the difficulties faced by disabled people when using the public libraries such as the lack of an accessible transportation system and inaccessible library buildings, lack of facilities such as lack of ramp, accessible lift, hindrances due to heavy doors, existence of stairs to reach the taxi station and the refusal of taxi drivers to pick them up because of their wheelchair. Also, poor quality and unfriendly designs of the library building as well as lack of signage to guide disabled users to the facilities within the library were other problems they faced. The disabled users indicated their difficulty in locating the lifts as there was no signage to guide them.
In another study, Taylor (2004) explored the criteria in higher education which could motivate disabled people to be more participative. One of the objectives of the research was to discover barriers which disabled students encounter in higher education. Taylor used the qualitative approach and interviewed 38 students in higher education to find out their educational experiences. The findings indicate that besides the lack of budget, lack of trained personnel support and the negative attitude of staff towards disabled students, the most frequently-quoted problem was the inaccessible physical environment of the university campus. The participants indicated that such physical barriers had a negative effect on their self-esteem.

Barth (2005) examined the challenges faced by post-secondary disabled student on campus. The main focus of his research was the relationship between the disabled students’ social experience and accessibility of their educational system. He found that most barriers in the university campus were related to the utilization of the library space, lack of signage, location of parking lot which was far from the library building, lack of accessible resources in different formats, and the lack of disabled-friendly policy to address the needs of the disabled students.

Todaro (2005) studied the library services and issues of building accessibility for the visually and physically impaired users in Argentina. The aim of the research was to find a way to integrate disabled users with non-disabled users by making the library space and services more accessible. Todaro believed that disability is a socially constructed concept and supported the social model of disability. He designed a questionnaire based on the guidelines formulated by the American Library Association, which cover eleven topics such as the type of library, staff, services, book collections, materials, library budget, and building facilities. The findings indicated that the libraries are victims of inadequate budget, which means that the services and facilities they provide to the
disabled people are mainly related the amount of fund that has been allocated to the libraries. He observed that most libraries have an exclusive building, which hampers the disabled users from engaging in the library activities.

To summarize, physical accessibility is an important matter in the life of the disabled people and can affect their motivation to use the libraries (McCaskill & Goulding, 2001). Therefore, libraries, especially academic libraries, should try to comply with the recommendations of the American with Disabilities Act (ADA) and the guidelines issued by the International Federation of Library Association (IFLA) provide an accessible physical environment based on those standards. Wilhelmus (1996) stated that the only way for academic libraries to be in compliance with the ADA and IFLA standards and guidelines is to accept disabled people as their real users and try to meet their needs through reviewing their resources, services and physical equipment by international disability standards to ensure that the standards and guidelines are followed.

Besides physical barriers there are also attitudinal barriers which prevent disabled users from participating and engaging in library activities. Attitudinal barriers refer to an individual’s perception towards disabled users in the library environment.

2.4.2 Library Resources, and Services Accessibility for the Disabled

Based on the survey of the LIS literature, attitudinal barriers are mainly related to the library staff’s perceptions towards disabled users, which affect their efforts to optimize library resources and services or informing library authorities about their real needs (Forrest, 2006). There are two main factors which can negatively affection the librarians’ attitude towards disabled people- librarians’ lack of disability awareness; and lack of training on how to handle visually impaired persons (VIPs) in libraries. Disability awareness can be viewed as awareness on the types and conditions of
disabilities and the new assistive technologies which can be utilized to access digital and web information.

2.4.2.1 Disability awareness

Besides the importance of the library’s physical accessibility and the efforts to integrate disabled users with non-disabled users in the library environment, the library staff’s positive attitude is also vital. Librarians’ lack of awareness about disability pertains to the lack of awareness the different types of disabilities, the needs of people with disability, and how to meet their needs. This lack of awareness can cause misunderstanding about the disabled peoples’ real needs in the library environment.

The librarians’ lack of awareness of disabilities and disabled users affects all aspects of the library environment such as the resources, services, policies and even budget allocation. Scheimann (1994) surveyed 104 public libraries in Ohio to examine the degree of compliance with the ADA. The findings highlighted that the lack of budget resulted in failures amongst public libraries’ ability to meet the disabled users’ need in terms of both the physical and service dimensions. Some librarians in Scheimann’s study even chose to deny the existence of disabled users in their libraries when evidence found this to be contradictory. The study concluded that the lack of budget allocations had resulted from the public librarians’ lack of awareness about the presence of VIPs in their libraries as well as their inability to identify the actual number of disabled users in their libraries.

In the United Kingdom, Pinder (2005) surveyed academic libraries to evaluate their conformance to disability legislations in higher education, especially to the Special Needs and Disability Act (SENDAL) issued in 2001. The SENDA requires libraries to follow some guidelines such as reviewing their polices to make sure they are non-
discriminatory, making library services accessible, offering resources in formats that are disable-friendly, ensuring library websites are accessible, and providing training for library staff to increase their disability awareness.

Chelin (1999) examined the remote access to course materials and library support for disabled students in universities by distributing questionnaires among disabled students. The findings highlighted two main barriers faced by disabled students - technological barrier, and social and cultural barriers. The participants’ commented on the lack of the British Sign Language resources in video format in the library, and the university website so as to enable remote access as well as create better accessibility of equipment for visually impaired students in the library. The disabled students suggested that library staff should be given disability awareness training so as to remove social and cultural barriers, and to make them to be more sensitive to implementing disabled-friendly policies. Chelin also observed that even the disabled students were not aware about the facilities and services which the library provides. This finding indicates the poor publicity by the library to inform and encourage disabled users to use the library.

McCaskill and Goulding (2001) pointed out that according to the DDA (Disability Discrimination Act), discrimination against disabled users in libraries can be attributed to three factors; (1) environmental (physical barriers); (2) organization (library policy); and (3) attitudinal (lack of library staff awareness) factors. They investigated the public libraries in the UK to find out the libraries’ degree of compliance with the DDA, and the real needs of disabled users. They adopted a qualitative approach and conducted interviews among library authorities and senior librarians in five public libraries. The objective was to find out the librarians’ response to the DDA, their attitudes towards disabled users, their training on disability awareness, their library policies, and the support given to meet the needs of the disabled users. The findings revealed that most of
the librarians are only aware of visible disability such as visual impairment or physical impairment, and are unaware of users who are deaf or dyslexic. Indeed, the findings indicate that besides improving both physical accessibility and formulating disabled-friendly policies for disabled users in libraries, library staff have to increase their awareness of disability. McCaskill and Goulding (2001) had also observed that knowledgeable librarians help to reduce the anxiety of disabled users because they would know the real needs of the disabled users and would be sensitive to make them feel comfortable in the library space.

Taylor (2005) investigated the degree of university staff’s awareness about autistic students’ real needs. He conducted interviews, focus group discussions, and made observations to gather data from both the university staff and the autistic students. The findings indicate that autistic students face problems when university staff are unaware of the nature of their disability. Autistic children appear “normal”, thus both lecturers and library staff are not aware about their disability and their real needs, and on the way to communicate with them. Often, lecturers who are unaware of these children’s disability misunderstand their behaviour and deem them to be rude or uninterested. As a result, the autistic students may be forced to work in groups, which may not be appropriate in view of their disability. The findings emphasized the importance of disability awareness among staff in ensuring that the library complies with the DDA or other disabled-friendly legislations in higher education. This awareness is also essential for creating a supportive and welcoming atmosphere for disabled students and motivates them to overcome their difficulties in the university and to achieve their educational goals.

Awareness of disabilities among users is especially pertinent to front-line librarians so that they are better prepared on how to motivate disabled users to engage in library
activities. Indeed, front-line librarian or library staff create the first and often lasting impression among the disabled users towards the library and its services. Poor communication skills and lack of empathy on the part of the library staff during their contact with disabled users, can cause them to have negative perceptions of the library. Jeal et al. (1996) investigated the attitudes and disability awareness amongst librarians and library authorities. Both the library services providers and the deaf users were interviewed with regard to the quality of library services. The findings revealed that librarians are more sensitive to the request from users with visible disability and their reactions are based on their previous experiences with them. The authors suggested that the awareness and attitudes of the front-line librarians are essential in creating a welcoming and congenial environment for disabled people, especially among the deaf individuals who often have difficulties in communication.

Charles (2005) commented that since libraries in the UK need to comply with the DDA, it is essential for them to have librarians who have awareness and are knowledgeable about the disabled people. She organized a conference at Dundee University on the different types of disability awareness training for front-line librarians. She pointed out that although front-line librarians are not decision-makers in libraries, they are the first point of contact with disabled users and they can create the most negative or the most positive impression of the library among the users. Charles suggested different training approaches for front-line librarians - observing disabled users’ difficulties with the library layout; presenting disability awareness videos; and playing the role of disabled people by closing their eyes with a piece of cloth, or sitting on wheelchairs). Subsequently, she distributed questionnaires to the participants for them evaluate the programmes. All participants found the programme to be useful and were satisfied with it. The findings highlighted the importance of this type of awareness training in creating interests and motivating the library staff.
Forrest (2006) examined the effectiveness of designing an online virtual learning environment for library staff to increase their awareness of disability by conducting his research in two stages. In the first stage, he provided an online module with the aim of giving librarians the opportunity to attend a disability awareness course at any time during the day. All participants have to answer the pre-study quiz to determine their level of disability awareness. In the second stage, Forrest conducted a post-study quiz to determine the participants’ level of disability awareness after having gone through the online courses. The findings indicated that the percentage of librarians’ disability awareness after participating in the online course has increased from 40 percent to 70 percent, even though both pre-quiz and post-quiz questions were the same. Also, 93% of the participants said that they will recommend the course to their colleagues. Forrest also suggested that libraries should consider flexible programmes for their staff to follow such as programmes can motivate them to be more sensitive to the needs of the disabled people.

Bonnici, Maatta, and Wells (2009) suggested the inclusion of disability awareness courses in LIS curriculum. LIS literature mostly focuses on three issues such as disability awareness training for staff, users’ perspective, and accessibility. The study was based on the social capital theory which tries to conceptualize equal access for all members of society. They distributed the questionnaire to 128 library experts in fifty states in the USA. The questionnaire contains twenty-six questions in six areas - demographic information, local services, LIS education, career opportunities, services, and clients. The findings indicated that the two main barriers to libraries complying with the disability legislations are the lack of budget, and the level of the librarians’ awareness of disabilities. About 55 percent of participants said the lack of sufficient content in the LIS curriculum to address issues on users with disabilities. The lack of disability awareness among the librarians affects their patience when responding to
requests for help from the disabled users, and the degree of their empathy towards the disabled users.

One of the consequences of low disability awareness among librarians is not keeping accurate statistics of disabled users and denial of their existence in the library. In Greece, Koulikourdi (2008) examined the quality of library services for disabled users, and the level of librarians’ disability awareness. He distributed a separate questionnaire to the librarians and the library’s disabled users. The questionnaire for the librarians consisted of 17 questions, while that for the disabled users’ questionnaire consisted of 15 questions. The findings indicate that the majority of librarians estimated the number of their disabled users between 2000 and 2004 to be stable. Only three libraries had special librarians and just 22% of the librarians in the libraries studied had disability awareness training. Koulikourdi found that most libraries were not able to provide disabled-friendly services due to insufficient budget. They have, however, stressed the importance of having suitable legislations and policies, as well as cooperation with relevant non-government organizations and disability organizations, to make such services possible.

2.4.2.2. Assistive technology awareness

The rapid advancement in technology has made it possible to have distance learning and off-campus access to library resources. It has also affected the information seeking and usage behaviour of library users, especially for visually impaired students (Jones & Tedd, 2003, Cahill & Cornish, 2003). The availability of computers for the disabled users, the disabled-friendly IT infrastructure and other assistive technologies have become essential requirements in the libraries. The Technology-Related Assistance of Individuals with Disabilities Act of 1988 (1988) defines assistive technology as any product or system or piece of equipment which increases the functional ability of
disabled people (Scherer, 2000). Assistive technology plays an important role in all aspects of the disabled individuals' life. Indeed, it provides an opportunity for disabled people to improve their self-sufficiency, their independence and access to mainstream information (Brodwin, Star, & Cardoso, 2007). Assistive technology gives organizations a way to provide equal opportunities for their disabled clients, especially visually impaired individuals (Konicek, Hyzny, & Allegra, 2003).

To examine the quality of electronic information services for visually impaired users in higher education, Jones and Tedd (2003) conducted a study at the University of Wales. They investigated the real needs of visually impaired students in higher education, the degree of university staff awareness and type of support that was provided to these visually impaired students. The researchers interviewed relevant university staff to find out the type of electronic information services that they have provided for visually impaired students. The findings indicate that the awareness of librarians and university staff is a vital component in creating accessible electronic information services for visually impaired students. They also pointed out that creating accessible e-services is not an easy task as all sections and departments in the university have to collaborate to achieve it. They must also be more aware of the availability of the types of technologies relevant for the disabled students.

In another study, Cahill and Cornish (2003) investigated the status of the use of assistive technology for visually impaired users in public libraries in the UK. They observed that the most-commonly used assistive technologies in public libraries are the screen reader software (JAWS), text magnifier (Zoom text Xtra), large print keyboard, and the mouse attachment. They also found that the main difficulty faced by visually impaired users was the lack of assistive technology awareness among the library staff. The library staff
who have not received any training on how to use and operate assistive technologies, would not be able to teach and assist the visually impaired users in the library.

Neal and Ehlert (2006) examined the ability of visually impaired students to have access to online resources in schools. Their findings also emphasized the importance of the educators’ awareness about visually impaired students, their online needs, and the procedures to follow to get the desired information from websites, besides having to be familiar with different assistive technologies which are available for visually impaired students.

Web accessibility is one of the most common barriers faced by disabled users, especially, the visually impaired users in libraries. According to W3C, there are two main reasons for higher education agencies to make their websites accessible: (1) It is the right of disabled students to have access to information on the site; and (2) It is the responsibility of higher educational agencies to comply with the ADA and Section 504 of the Rehabilitation Act of 1973 (Patterson, 2000). Therefore, web designers besides being familiar with the capability or deficiency of disabled users such as the visually impaired, low vision or color blind users, should be familiar with different screen reader software and navigation devices, which are used by VIPs to access information (Ball, 2004). Web site designers and managers are responsible for creating accessible web site for those disabled users. Kerr and Hiltz (2001) highlighted the carelessness of designers in adding multimedia on websites resulted in creating a web site, which is not accessible by visually impaired users. Therefore, librarians as service providers and clients of web designers should be aware of their disabled users and their specific needs in the library website.

Wallis (2005) conducted a study on web accessibility, and to find out how organizations in the UK comply with the new legislation for the inclusion of disabled people in
mainstream society. He pointed out the benefits resulting from the access to information and the development of technologies in the 21st century, and that there is a need for VIPs to improve their digital literacy and ICT skills. Indeed, the lack of access to relevant technologies as well as the lack of skills to retrieve and use and navigate information resources is considered new barriers to the social inclusion of disabled people. Wallis stated that besides having the skill to retrieve information, the assistive technology awareness of service providers is also vital to make accessibility to the information even easier for disabled people. According to Powell (2003), providing accessible web site is important as it not only ensures that all visually impaired users have access to online resources but also create an environment that respects the diversity of needs.

In summary, although physical and attitudinal barriers are two main barriers in the library environment, the librarians and library authority’s disability awareness is also important in removing or reducing the effects of the barriers. Indeed, knowledgeable librarians who are aware about the different types of disabilities and the real needs of VIPs, can optimize all aspects of the library services, such as through formulating disabled-friendly policies, collecting accurate statistics of their disabled users, allocating appropriate budget to provide disabled-friendly equipment, and planning disabled-friendly services.

Previous literature about the disabled and libraries had focused mainly on the integration of disabled users physically in the library environment by optimizing the physical dimension. The main aim is to increase the level of accessibility of resources in the library environment and not limited to just providing the ramp or widening the doors (Baker, Holland, & Kaufman Scarborough, 2007). Therefore, by making services and the environment accessible, libraries could provide an effective integration or inclusion.
programme. Exclusion or inclusion is a process in which individuals voluntarily or involuntarily include or exclude themselves from their mainstream environment (Burchardt, Le Grand, & Piachaud, 1999). Therefore, the real meaning of inclusion is more than just the physical integration of disabled users with non-disabled users in the library. The existence of a supportive system, welcoming culture, and an atmosphere of acceptance is the real meaning of inclusion (Peters, 2007).

According to the literature on disability, one dimension which has been overlooked is the psychological feeling (Baker et al., 2007). It means their interaction, experiences and perceptions with other members in the environment. Indeed, an individual’s belief, experiences, and perceptions about the policies and conditions of the environment around them would influence their decisions to exclude or include themselves from the community. An individual’s own psychological perception, experiences, and tangible distance from others have a negative effect on the four fundamental needs of human beings: a sense of belonging, locus of control, self-esteem, and meaning of existence (Krill, Platek, & Wathne, 2008). According to Maslow (1962), one of the fundamental needs which are vital for the psychological well-being of individuals is a sense of belonging. In fact, a sense of belonging is essential for a person to achieve positive self-worth, acquire social skills, and find a place in society (Upton, 2010).

Therefore, our lack of knowledge and awareness about the disabled users’ sense of belonging towards the library environment motivated this study.

2.4.2.3 Disability studies in Malaysia

A survey of the LIS literature in Malaysia indicates that only a limited number of studies have examined the disabled library users. The main focus of investigation of those studies has been to achieve the integration of disabled users with non-disabled
users by optimizing the library building, and its service accessibility. Pak (2007) investigated the status of 18 public libraries in Malaysia and looked into the provision of expedient resources, services and equipment for visually impaired users. Pak noted that only three out of the 18 public libraries had statistics of visually impaired users. He found that the barriers which hamper public libraries from providing adequate and appropriate services for the visually impaired users were the lack of funds, lack of accurate statistics of disabled users, lack of librarians’ awareness of disability, limited motivation, and interest of libraries to cooperate and share their resources and lack of governance support.

In another study, Mohamad (1994), Devatason and Mariam (1996) observed that one of the main barriers which prevent Malaysian libraries from providing appropriate services for visually impaired users was the lack of reliable and accurate statistics of disabled users. If the exact number of disabled users is not known, it is difficult for libraries to make justifications for money to provide suitable resources and services for disabled users. Zahra (1994) and Wang (1994) found that the visually impaired users were not motivated to visit the library because of their lack of awareness about the facilities that the library has provided for them.

In another study, Abrizah and Ruslina (2010) investigated the inclusive programmes, for disabled users of public libraries in Malaysia. The findings indicated that the main problems faced by disabled users include attitudinal and physical barriers, accessibility to resources, and school legislations that hamper them from experiencing an inclusive atmosphere.

In summary, most of the LIS disability studies conducted in Malaysia concentrated on the integration of visually impaired users with non-disabled users. These studies overlooked the psychological aspect of special services for special groups of users, and
also failed to consider these issues from the perspective of the visually impaired people. Therefore, it is essential to examine this aspect of library services for disabled people.

2.5 Part C: Literature on the Definition of Sense of Belonging

Libraries need to formulate socially inclusion policies for disabled users in order to provide them an accessible library services for them. Inclusion in this context means more than just physical integration, and thus, includes providing supportive systems, welcoming culture, and an accepting atmosphere (Peters, 2007; Symenoidou & Phtiaka, 2009). Inclusion is effected when disabled individuals connect with other members in the community and could happen voluntarily or involuntarily by the disabled individuals excluding or including themselves from mainstream community (Burchardt et al., 1999). Therefore, depending on their beliefs, experiences, and perceptions towards the policies of the environment, disabled people could make a decision to remain or leave the community (Oxoby, 2009). One of the factors which influence an individual’s decision to remain in any group is a sense of belonging (Upton, 2010).

2.5.1. Sense of Belonging

Maslow (1962), in his theory of hierarchy of needs, introduced the need for a sense of belonging and love as a fundamental human need. Humans need to belong and be loved by members of the community and is vital for making them feel accepted as group members. According to Maslow as long as the need to belong is not satisfied, no real learning will happen. In an educational system which aims to assist individuals to achieve their educational goals, there is a need to create an environment that fosters a sense of belonging among peers as well as to the educational system. Beck and Malley (1998) emphasized that students experiencing rejection and isolation, would also feel
lower self-esteem and are more likely to leave the educational system. This happens because of the lack of a sense of belonging to their community and their environment.

Poston (2009) described a sense of belonging as a condition when a person focuses his relationship with other members in the community. A person feels that he belongs when he forms romantic relationships, establishes close friendship, family and has children. He also believed that social anxiety is one of the consequences of the lack of a sense of belonging. In fact, when people cannot find their own place in the group and members of the group have negative attitudes towards them, they would feel socially anxious.

Osterman (2000) defined a sense of belonging as the fundamental characteristic of creating and sustaining a community. When members of a community see that their needs are being taken care of by other members of the community, when they receive the group’s support, when they perceive that members care and fulfill their needs, these perceptions make the individuals feel important to the group members. Such a feeling creates a sense of connection and belonging of individuals with a community and its members. Abedin, Daneshgar, and D’Ambra (2010) defined sense of belonging as an emotional connectedness of individuals with members of a group such as caring ties and liking each other, which at the end, bonds them with each other and creates the feeling of belonging to the community.

A sense of belonging is formed based on an individual’s feeling, perception and experience of their integration into the society. So, when individuals feel valued, accepted and needed by the system and their abilities to fit with the system, they feel like they belong (Hagerty, Lynch-Sauer, Patusky, Bouwsema, & Collier, 1992). Kuh and Vesper (1997) defined sense of belonging as an individual’s feeling of connectedness and coherence with other members of the community through their experiences. McMillan and Chavis (1986) defined a sense of belonging as the
individual’s need to be accepted, to belong, and to be important to each other in a group. In fact, such perception influences the feeling that their needs will be meet through commitment and interaction with each other.

Maestas, Vaquera, and Munoz (2007) noted that the definition of a sense of belonging, cohesion, and connectedness are the same. Belonging, therefore, means a feeling of association with community members. Sedgwick and Yong (2004) indicated that a sense of belonging is one of the basic human needs which brings security or relatedness to other members of a group. In fact, sense of belonging is created through a shared sense of socially constructed meaning among members of the community. Therefore, sense of belonging consists of feelings such as being valued, relatedness or connectedness and supported by other members of the community (Solomon, Battitisch, Kim, & Watson, 1997).

Other researchers address sense of belonging from different perspectives and sub-categories. Syed Jamal (2006) indicated that sense of belonging comprises different dimensions such as membership, influence, integration and emotion. In this context, membership refers to the feeling of being a member in a society or group. Influence refers to the feelings of individuals as a member of the society who believes that he has the capacity to influence the action or behaviour of the group, and a lack of such a feeling, may cause individuals, to prefer not to participate in that community. Integration as a third dimension refers to the feelings that each member of the group matters to each other. Such feelings cause members of the group to keep the relationship with the group and become interdependent among group members. Emotion refers to the tie binding the community group, which is formed through high frequency of interaction with each other.
Hagerty, Lynch-Sauer, Patusky, Bouwsema, and Collier (1992) divided sense of belonging into two main categories, which are psychology and sociology. Based on the psychology dimension, sense of belonging is the internal perception or feeling of individuals about their position in a group. Indeed, an individual’s perception of being valued and being important for the group causes him to feel connected to the group. In the sociology dimension, sense of belonging refers to an individual’s physical connectedness as being a member in a community

Strayhorn (2008) defined sense of belonging as a mixture of cognitive and effective dimensions. Cognitive perspective refers to an individual’s perception and feeling towards their position or role in the society or community while affective dimension refers to the effect of an individual’s cognitive perspective on their behaviour.

Some of the researchers refer belonging to external factors such as persons, community, system or environment from the physical, social or mental perspective. In this regard, McAndrew (1998) noted that the physical dimension plays an important role in creating an individual’s identity and sense of belonging. In fact, place attachment, which occurs during social interaction of individuals in a place, is created not only because of the space, but because of the individuals’ interactions and the creation of a sense of belonging among them (Cicognani, Menezes, & Nat, 2011).

Ross (2002) described sense of belonging as part of the concept of developing social capital in reference to an individual’s psychological well-being. In this context, an individual’s relationship, communication and interaction with other members in the society cause him/her to feel connected with the community, which in turn affectes their psychological well-being. Ross explained that communities, which prepare more opportunities for interaction and communication between their individuals by
developing different resources like libraries, parks, and so on can benefit from high levels of social capital.

Schaefer-McDaniel (2004) pointed out that despite the importance of a sense of belonging in social capital, this concept has been given very little attention in social capital literature. Indeed, he defined a sense of belonging as a psychological sense of community, which considers a sense of belonging as a degree of an individual’s feeling about being a real part of a collective community. Narayan and Cassidy (2001) and Morrow (2002) defined social capital in terms of sense of belonging. They explained that when young people feel that they belong to a school or any community, they prefer to make friends and interact with other peers in that environment. Schaefer-McDaniel (2004) further suggested that social capital consists of three components - a social network, trust, and sense of belonging - with an emphasis on the inter-relatedness of these elements with each other. Therefore, in an environment where one feels more comfortable and at home, one will have more interaction and a higher degree of trust towards people.

In summary, a sense of belonging is a concept, which has been overlooked despite its important role in an individual’s mental health. Anant (1966) discussed the importance of a sense of belonging and defines it as an individual’s feeling of being integrated, involved and accepted as a member in a system or society. According to the findings of Kestenberg and Kestenberg (2007) investigation, there is a lack of a sense of belonging reported by children who survived the Holocaust. The children explained that they do not feel like they belong to any place, group or family. The researcher found that a sense of belonging is one of the most fundamental components of Identity, which is created and developed during the life of a child and it is not limited just to the family, but to the country, nation, and cultural group.
The feeling of not being marginalized contributes to the feeling of sense of belonging and is characterized by feelings of being validated, trust, connectedness and acceptance. In marginalized studies, sense of belonging has been considered as the main factor in removing the feeling of marginalization (Hurtado & Carter, 1997). As Terenzini et al. (1994) suggested, one of the best solutions for removing the feeling of marginalization is to create the feeling of being validated. Indeed, the most effective element to achieve validation is by creating the sense of welcome and acceptance or in other words, a sense of belonging (Locks, Hurtado, Bowman, & Oseguera, 2008). In another study, Taylor (1991) highlighted the important role of a sense of belonging in creating trust among African American students. Indeed, the perception of African American students towards unfair educational systems resulted in their low retention level in schools. In a similar study, Solomon et al. (1997) demonstrated that students perceive a warm and supportive educational system as the main factor in creating a sense of belonging. A supportive system affects the quality and frequency of interaction between students and teachers in different areas such as personal or social matters. Such interaction increases the student’s sense of belonging towards their peers, teachers and educational system. In this context, students who experience supportive and caring atmospheres feel more connected and accepted, which in turn makes it easier for them to deal with norms and values of the school system. These feelings have an effect on their participation in their school activity (Battistich, Solomon, Kim, Watson, & Schrap, 1995).

Another characteristic of sense of belonging is feeling being valued and being fit to an educational environment. The psychological experience of being valued and being fit to the educational system, which is known as a sense of belonging is one of the critical factors in a student’s behaviour which enables him to be successful in the educational system (Goodnow & Grady, 1993; Hagerty, Williams, Coyne, & Early, 1996). These studies found a relationship between a student’s engagement in academic activity and
his feeling of belonging. Conversely, students with lower sense of belonging do not feel that they are members of the school or being valued and respected appropriately by their school teachers and other peers, and thus they tend to prefer to withdraw from school. Osterman (2000) and Salend (2004) pointed that social and emotional support from teachers and peers in the school creates a welcoming, accepting and being valued atmosphere, which results in a sense of belonging.

Another aspect of the sense of belonging is the feeling of being secure and not isolated. Syed Jamal (2006) indicated that in an educational system, the first priority is to prepare an environment in which students feel secure and safe. This will allow the students to develop their social network and interaction, which will help them to achieve their educational goals. Accordingly, a student’s difficulty in finding his own space in the educational system, or feeling isolated in that space can lead to a lack of commitment and interest towards the environment and eventually result in the student quitting the school or university without completing his studies.

Noll (2007) believed that a sense of belonging is necessary for all students in an education system especially the disabled students, who have come to an inclusive system, but lacking in social skills. Cothran and Ennis (2000) suggested that the main factor which can help disabled students to avoid feelings of isolation in an education system, is the feeling that the teachers and other students accept and respect them, and that they are welcome in the class.

Table 2.9 gives a summary of definition of sense of belonging according to the literature.
### Table 2.9: Definition of Sense of Belonging

<table>
<thead>
<tr>
<th>Definition</th>
<th>Reference</th>
</tr>
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<tbody>
<tr>
<td>Supportive System</td>
<td>Battistich et al., 1995; Solomon et al., 1997; Salend, 2004; Peters, 2007; Strayhorn, 2008; Symenoidou and Phtiaka, 2009; Osterman, 2000;</td>
</tr>
<tr>
<td>Welcoming Culture</td>
<td>Solomon et al., 1997; Salend, 2004; Peters, 2007; Locks et al., 2008; Symenoidou and Phtiaka, 2009; Cothran and Ennis, 2000;</td>
</tr>
<tr>
<td>Sense of Being Accepted</td>
<td>Anant, 1966; McMillan and Chavis, 1986; Terenzini et al., 1994; Hurtado and Carter, 1997; Hagerty et al., 1992; Salend, 2004; Peters, 2007; Locks et al., 2008; Symenoidou and Phtiaka, 2009; Cothran and Ennis, 2000;</td>
</tr>
<tr>
<td>Sense of Connectedness</td>
<td>Hagerty et al., 1992; Terenzini et al., 1994; Hurtado and Carter, 1997; Kuh and Vesper, 1997; Burchardt et al., 1999; Ross, 2002; Syed Jamal, 2006; Maestas et al., 2007; Sedgwick and Yong, 2008; Strayhorn, 2008; Abedin et al., 2010;</td>
</tr>
<tr>
<td>Sense of Being Important</td>
<td>McMillan and Chavis, 1986; Hagerty et al., 1992; Battistich et al., 1995; Osterman, 2000;</td>
</tr>
<tr>
<td>Sense of Being Considered</td>
<td>Battistich et al., 1995; Osterman, 2000; Abedin et al., 2010;</td>
</tr>
<tr>
<td>Sense of Being Valued</td>
<td>Hagerty et al., 1992; Goodnow, 1993; Terenzini et al., 1994; Hurtado and Carter, 1997; Salend, 2004; Locks et al., 2008; Strayhorn, 2008;</td>
</tr>
<tr>
<td>Sense of Membership</td>
<td>Hagerty et al., 1992; Schaefer-McDaniel, 2004; Syed Jamal, 2006; Maestas et al., 2007; Strayhorn, 2008; Cicognani et al., 2011;</td>
</tr>
<tr>
<td>Sense of Being Integrated/ Included</td>
<td>Anant, 1966; Syed Jamal, 2006</td>
</tr>
<tr>
<td>Sense of Being Safe and Secure</td>
<td>Jamal, 2006;</td>
</tr>
<tr>
<td>Sense of Being Respected</td>
<td>Cothran and Ennis, 2000;</td>
</tr>
<tr>
<td>Relationship with other Members in the Community</td>
<td>Ross, 2002; Syed Jamal, 2006; Poston, 2009; Cicognani et al., 2011;</td>
</tr>
</tbody>
</table>

In the next section, we will discuss the different sense of belonging scales which are used to measure an individual’s degree of sense of belonging.

#### 2.5.2 Sense of Belonging Scales

Studies on sense of belonging have mainly adopted a quantitative approach to examine the individuals’ degree of sense of belonging in different contexts. Although, the quantitative approach is useful as it allows the researchers to generalize the findings, it has limitations in embracing all factors to create a sense of belonging in the individual. Thus, evaluating a sense of belonging as a concept using a questionnaire limits the answers provided by the participants, based on specific categories. Such limitations deprive the researchers from exploring the real meaning of this concept based on individuals’ daily experiences and perceptions (Neuman, 2006).
Previous studies use a variety of scales to examine on individual’s sense of belonging. These include: Psychological Sense of School Membership (PSSM); Sense of School Community Scale (SSCS); Sense of School Community Scale (SSCS); Campus Connectedness Scale (CCS); The School Connectedness Scale (SCS); and The Belonging Scale (BS).

**2.5.2.1 Psychological Sense of School Membership (PSSM)**

Goodenow (1993) presented the Psychological Sense of School Membership (PSSM) scale, which consists of eighteen items in three sub-scales. The scale was designed to assess sense of belonging among middle school to junior high school students. The aim of the scale is to examine an individual’s perception of belonging in the school context, their feeling about their belonging, rejection or acceptance in the school community (Osterman, 2000). Goodenow (1993) reported that the internal consistency of the PSSM for students between nine and fourteen years old is around 0.77 to 0.88, which indicates high levels of consistency. This scale is used by seven out of ten studies to evaluate an individual’s sense of belonging (McMahon, Wersmon, & Rose, 2009).

**2.5.2.2 The Sense of School Community Scale (SSCS)**

The sense of school community scale (SSCS) was designed to evaluate students’ sense of belonging to their school community. SSCS consists of 18 items in two main categories - such as school supportiveness; and students’ autonomy. Each sub-category consists of nine items and each of them uses a five-point Likert scale ranging from “disagree a lot” to “agree a lot”. The internal consistency of the SSCS is around 0.81, which indicates its acceptable validity (Battistich, Schaps, & Wilson, 2004).
2.5.2.3. Campus Connectedness Scale (CCS)

Lee and Robbins (1995) designed the Campus Connectedness Scale or CCS to examine individual’s psychological sense of belonging in their campus setting. The scale includes fourteen items in the Likert format. One of the advantages of this scale is its high internal consistency, which is around 0.91. Indeed, this scale besides measuring an individual’s psychological sense of community assists researchers in evaluating their self-esteem and psychological stress as well as anxiety (Lee & Davis, 2000).

2.5.2.4 The School Connectedness Scale (SCS)

This scale has been designed based on the US National Longitudinal research on Adolescent Health to evaluate an individual’s degree of happiness, safety, closeness, and belonging to other members in an educational setting (Resnick et al., 1997). The SCS consists of six items to measure an individual’s psychological well-being. It is rated based on the five-point Likert scale ranging from “strongly disagree” to “strongly agree”. The internal consistency of SCS has been reported for a sample of adults between twelve and eighteen years old and is from 0.75 to 0.82 (Sieving et al., 2001).

2.5.2.5 The Belonging Scale (BS)

Frederickson and Baxter (2007) designed the Belonging scale based on Goodenow’s PSSM scale to measure students’ level of sense of belonging to their schools. They simplified the PSSM scale to evaluate the sense of belonging of young children between eight and ten years old. Therefore, they reduced the number of items from eighteen in PSSM to twelve in BS. In order to simplify and assist young children to evaluate easily,
the researchers changed the five-point Likert scale to three points. The internal consistency of BS, which was reported by Frederickson and Baxter (2009) is 0.87, which indicates its high level of consistency.

2.5.3 Sense of Belonging Literature

This section presents a review of the literature relating to the importance of sense of belonging in an individual’s educational life. The literature is divided into two main categories: (1) studies on the factors, which motivate or hamper students from feeling that they belong to the education environment and the effects of these factors on a student’s decision for retention or persistence; and (2) studies on sense of belonging, which is geared towards an inclusive environment for disabled students.

2.5.3.1 Sense of Belonging and Students’ Emotional well-being and Motivation

Baumsteir and Leary (1995) discussed the importance of sense of belonging, which is referred to the literature variantly as sense of relatedness, sense of community, place attachment, sense of connectedness, and so on. An individual’s sense of belonging affects his whole life such as his perception, relationships, motivation, and learning process. A sense of belonging is not restricted to an individual’s situation, culture or age and is one of the top psychological needs, which should be considered in an individual’s whole life (Deckers, 2005). Sheldon, Elliot, Kim and Kasser (2001) conducted three different studies to compare the psychological needs of ten participants and found that an individual’s sense of belonging is the first and most important psychological need, and which can affect the individual’s emotional well-being.
In an educational context, a sense of belonging, besides providing psychological well-being is also essential in creating motivation. Indeed, motivation researchers found out that motivation is created based on both intrinsic and extrinsic factors (Weiner, 1990; Deci & Ryan, 2000). Freeman, Anderman, and Jensen (2007) conducted an investigation to find out the effect of an individual’s sense of belonging on their academic motivation. They focused on individuals between eighteen to twenty-five years old and found that students’ perception of being socially accepted by their peers in the classroom has a direct effect on their motivation and academic success.

Accordingly, one of the main difficulties in an educational setting is the individuals’ lack of interest or motivation to continue their studies, which leads to their withdrawal. In this regard, some of the researchers try to find out the role of sense of belonging in preventing school withdrawals. Goodenow and Grady (1993) examined an individual’s sense of belonging and its effect on educational success in school based on the PSSM scale. He distributed questionnaires to 1366 students, who were in the fifth and eighth grade from two urban and one suburban school. The findings indicate correlations between an individual’s sense of membership and his motivation and effort to be successful in school. This finding infers that in order to motivate students, an educational setting should firstly increase the students’ sense of belonging.

In another study, Roeser, Midgley, and Urdan (1996) examined emotional and academic factors in a school setting, which motivate students. A total of 296 questionnaires were distributed to eighth grade students. The findings indicate that a student’s perception of their sense of belonging to the school is one of the most important predictors of their academic success. This means that, students with high levels of sense of belonging show less self-consciousness, lower anxiety, and feel less embarrassing.
The degree of support received is also related to higher sense of belonging. Goodenow (1993) assessed the relationship between an individual’s sense of belonging and the degree of support he receives from the environment. The questionnaire was distributed to 353 students from the sixth through eighth grade in a suburban school. He examined the students’ sense of belonging towards four domains - math, social studies, English, and science - based on the degree of support received from the school teachers. The findings indicate that the extent of teachers’ support, interest, and respect towards students play an important role in the students’ sense of belonging towards the school system. A supportive environment can help make students feel valued and respected and consequently, their sense of belonging as a real member of the school community.

Previous studies also found that an individual’s sense of belonging plays a main role in a student’s school retention. Therefore, satisfying an individual’s sense of belonging in an educational environment has a direct effect on the individual’s academic engagement, participation in academic activities, his motivation and desire to achieve his educational goals (Pascarella & Terenzini, 1991; Osterman, 2000). In this context, Johnston (1997) conducted a survey from 1994-1995 in a new Scottish University to find out why a quarter of the students who had registered for the year 1993-1994 withdrew from the school. The findings show that there are two main reasons for the students’ withdrawal such as feelings of unhappiness, psychological or emotional problems, and the sense of not fitting in with the school environment. The author explained that the lack a sense of being valued and being comfortable in the school setting cause the students to withdraw from the school or to register in another school.

The sense of belonging is also dependent on the extent of academic and social integration achieved by the students. To examine this, Bers and Smith (1991) conducted a survey to examine which factors influence an individual’s decision to withdraw from
school. The findings indicated that social integration has a stronger impact on an individual’s decision to remain or withdraw from the educational system. An individual’s educational objective, whether their education is part-time or full-time is another factor which influences their decision to remain or withdraw from higher education. Similarly, Beil, Reisen, Zea and Caplan (1999) conducted a survey to examine the relationship between an individuals’ persistence and their academic and social integration experiences in an educational setting. A total of 512 first year students participated in the research. The findings indicate that both academic and social integration of individuals have a direct effect on their commitment towards the educational system and indirectly on their persistence in college.

In this regard, one of the popular theories which examine the relationship of an individual’s academic and social integration and their retention in the higher education system is Vincent Tinto’s integration theory (Tinto, 1993). The theory emphasized the effect of an individual’s academic and social experiences on their decisions to remain or withdraw from the institution. Tinto observed that an individual’s perception of belonging to their academic environment influences their motivation and academic success. He put forward three main categories - pre-college characteristics (family background, prior school experiences and individuals skills and abilities); college experiences (field of study, academic performance, academic interactions); and the individual’s out of class experiences (extra activities experiences, peer interaction) - which affect their decision to remain or withdraw from higher education. Therefore, an individual’s decision to remain in college depends are on their positive experiences in their formal and informal academic or social integration in their context. It has been supported through previous studies that the quality, quantity and nature of interaction between the individuals and the environment, influence an individual’s perception, behaviour, motivation as well as their sense of belonging (Braxton, 2002; Freeman,
Anderman, & Jensen, 2007). Polinsky (2003) suggested that the main reason that students quit college is due to the lack of motivation, their lack of feeling of meaningful existence and lack of their ability to fulfill their college demands.

There were criticisms to Tinto’s theory, from Stage and Anaya (1996), Tierney (1992), and Yorke and Longden (2008). The main critiques were about its heavy focus on the concept of retention as an individual matter, conducted on first year white young Americans in private institutions, which misrepresented the cultural effects and ignored economic factors. Nevertheless, many researchers during the early 1990s used Tinto’s integration theory as their main theory for examining individuals’ retention and sense of belonging. Braxton, Milem, and Sullivan (2000) used Tinto’s theory to estimate the effect of an active learning atmosphere on an individual’s social integration and their decision to leave. A total of 718 questionnaires were distributed among first year, full-time students. The study found that the individuals’ positive experiences in the class have an effect on their commitment, intention to return, and their degree of social integration.

Braxton and Hirschy (2004), in another study, assessed the relationship between an individual’s institutional commitment and the level of their integrity. They defined institutional commitment as an individual’s agreement towards managers, administrators and teachers action towards the values of the institution. The result found a strong relationship between an individuals’ degree of commitment, their social integration and their persistence to the educational system.

In another study, Strayhorn (2008) conducted an investigation based on Tinto’s integration theory to find out Latino students’ college life experiences, its effect on their sense of belonging and compared the findings to results from a sample of white students. The researcher was curious to find out if the Latino students’ college life
experience was unique or if it was common between them. Strayhorn used the College Students Experiences Questionnaire (CSEQ) which consisted of 119 items to measure both the quality and the quantity of the participants’ college activities and usage of college facilities. He distributed the questionnaire both on paper and online among 589 Latino and white students who registered in 2004-2005. The findings show that the Latino students’ academic and social experiences had an effect on their degree of sense of belonging. Two main factors, which influence the Latino students’ sense of belonging were grades and time they spend studying. The Latino students, who were academically successful, feel more sense of belonging to the college in comparison with others, which consequently affects their decision to remain or leave their college. Strayhorn observed that although the findings of his research supported Tinto’s integration model, it is essential to use a qualitative method to explore the Latino students’ life experiences in college and extract the essence of the sense of belonging through negotiations with them.

In a similar study, Rhee (2008) found the main reason that Latino students dropped out of college was because they lacked a sense of belonging. The main factor, which increases the sense of belonging among Latino students, is the extent of their interaction with peers from different backgrounds. This infers that if an educational system wants to achieve its goal of creating an inclusive atmosphere, it needs to provide the opportunity for students to interact with each other to give them the chance to expand their social network, improve their social skills, as well as increase their sense of connectedness with the system.

Another criticism of Tinto’s integration theory came from Hurtado and Carter (1997) who believe that a sense of belonging is a psychological concept, which should be defined based on an individual’s sense of connectedness, attachment, and cohesion to
the environment. Maestas et al. (2007) emphasized that the meaning of sense of belonging is more than integration and it is mostly related to the individuals’ perception towards their place or association as a real member of the community.

In this regard, Hoffman, Richmond, Morrow and Salomone (2002) conducted a study to find out the factors, which influence an individuals’ sense of belonging. They summarized the findings in five main categories, which include perception of peers’ support, sense of being comfortable in the classroom, sense of staff’s understanding, and perceived isolation. They suggested that a sense of belonging is a psychological concept, which mostly refers to the individuals’ peers and environmental connection.

In another study, Flook, Repetti, and Ullman (2005) conducted a three year investigation to examine the role of sense of belonging in a student’s educational life. The findings show that the lack of peers’ acceptance in third graders affected the students’ self-concept, which resulted in their shyness, loneliness and anxiety in the fifth grade and their low academic performance in the sixth grade. Therefore, the lack of sense of belonging in the form of peer acceptance is more likely to influence the students’ educational progress in upper grades.

In exploring the sense of belonging among students in an educational environment, Osterman (2000) and Furrer and Skinner (2003) found that students who experience a sense of belonging reported higher interest, happiness and motivation to participate in learning activities, while individuals who were excluded from the environment reported more anxiety, frustration and sadness. Goodenow (1993) observed that the lack of sense of belonging among students in an educational environment increases stress and school anxiety, which result in decreasing self-worth, school engagement and retention. He emphasized the role of sense of belonging in balancing the sense of public exposure among students, which affects their relationship with teachers and peers in their schools.
Roeser et al. (1996) and Dorman and Ferguson (2004) also supported Goodeman’s findings and explained the role of sense of belonging in balancing the relationship between the students’ contextual factors (teacher and peers relationship) and their self-efficiency which has an effect on the individuals’ academic achievement, positive behaviour and decreased school anxiety.

In another study, Sedgwick and Yonge (2008) explored nursing students’ experiences and perceptions towards sense of belonging during their internship. The researcher chose the ethnographic method and used interviews and focus group as their main data collection method. The findings show that the main factors that create a sense of belonging among students are their characteristics, unit climate, and their relationship with all the staff whom they worked with. The students said that the more they feel like they belong to the unit, the more they feel safe and comfortable. The factors which inhibit them from feeling a sense of belonging are staff’s anger and students’ confusion about their place in the team. Indeed, the lack of ability of an individual to find their own place in a team influences their perceptions towards the acceptance by the group members, which can result in increasing their anxiety.

2.5.3.2 Sense of belonging and disabled student

Previous literature shows that disabled people cannot have a sense of belonging only by integrating with their environment. The physical conditions and the physical integration of disabled people in schools or colleges must be optimized to nurture a sense of acceptance and being valued among disabled people through social networks and friendship to increase the disabled people’s sense of belonging (McLeskey & Waldron, 2000; Pavri & Monda Amaya, 2001). However, to understand disabled peoples’ real life
experiences of sense of belonging, there is a need to consider their perception based on their cultural, historical and personal experiences besides contextual factors (Van Manen, 1990), and how their continued interaction influences their feelings and behaviour (Kenrick, Neuberg, & Cialdini, 2007). Therefore, in order to understand an individual’s behaviour, there is a need to consider their expectations of their surrounding comprising physical, social, economic factors and so on. Accordingly, researchers will only be able to find the appropriate way to connect them to mainstream society by taking the individuals’ perceptions into account. Based on recent studies, there is a relationship between the environment and individuals’ perception, feelings, and behaviour (Goodenow, 1993; Tinto, 1993).

To support this, Klingner, Vaughn, and Schumm (1998) explored the perceptions and feelings of disabled students towards their inclusive setting. They used a qualitative approach and interviewed 32 disabled and non-disabled students in grades four to six. The findings show that non-disabled students believe that disabled students learn better in an inclusive setting. Both groups declared that such inclusive settings give them the chance to find more friends, expand their friendship network, and develop their friendships. Such atmosphere also gives the disabled students the opportunity to see themselves as an equal as non-disabled students, and this can affect their sense of belonging and self-worth.

In another study, Brown, Higgins, and Paulsen (2003) investigated the relationship between the disabled students’ sense of alienation and their perception towards their school life. The researcher defined alienation as an individual’s feeling of powerlessness, normlessness, meaninglessness, estrangement, loneliness or separation, and lack of control over their lives. The researchers distributed the questionnaire among 222 disabled students. The result indicates that disabled students perceive special
education as making them disconnected from the school environment where they are
pulled out from mainstream schools. Indeed, disabled students perceive special
education as a sign of estrangement, which affects their sense of belonging to the
educational system. As Danielson (2002) pointed out that the main fear of disabled
students in inclusive schools is the feeling of being different from other students. Such
feelings reveal the difficulty that they face in order to be accepted by their non-disabled
peers, and this can directly affect their self-worth.

Teachers or staff also play important roles in disabled students’ educational life (Kohn,
2005). The students spend so much time with teachers, thus, teachers play important
roles in creating a sense of belonging among the students (Osterman, 2000). Before the
students can feel a sense of connectedness with the whole educational systems, they
have to first have a sense of attachment with their teachers (Bronfenbrenner, 1979).
Therefore, a teachers’ positive behaviour, attitude and interaction with disabled students
not only affect their relationship with disabled students but also affect their non-
disabled peers’ behaviours towards them (McLeskey & Waldron, 2000). Often, non-
disabled students model their teachers’ attitude and behaviours towards disabled
students, and this will affect their acceptance and attitude towards their disabled peers
(Ritter, Michel, & Irby, 1999). Therefore, creating a comfortable and positive
atmosphere gives the disabled student the chance to receive more support from their
peers besides increasing their social skills.

It can be concluded that the school is not just a place for education but it is also a place
in which teachers, through providing a safe environment, encourage disabled and non-
disabled peers to interact positively (Kohn, 1998). Kohn (2005) explored the feedback
that inclusive schools give to disabled students. The findings indicate that the feedback
that disabled students received from their schools and teachers plays an important role
in their life. Negative feedback causes them to feel slow or poor which affects their self-esteem while positive feedback causes them to feel acceptance, a real member of school community, and having a valuable place in the school’s mainstream activities. Stainback and Stainback (1990) pointed out that creating a sense of belonging among disabled and non-disabled students through cooperative education is essential for an inclusive setting. Cooperative education causes disabled students to perceive that they have important roles to play in their non-disabled peers’ life, and this can help them in feeling that they belong. Fink and Resnick (2001) also found that teachers play an important role as mediators in the disabled students’ life. It means that the teachers who are responsible for providing and designing structured activities with a caring culture, can help to promote more interactions between students.

Previous literature also revealed that inclusive training of teachers plays a role in creating a comfortable, safe and supportive atmosphere for disabled students. Koay, Lim, Sim, and Elkins (2006) investigated the relationship between the teachers’ perceptions towards inclusive education and the degree of their inclusive training. They designed open-ended questionnaires and distributed them among 501 learning assistants and general education teachers of primary and secondary schools. The findings indicate that teachers who received inclusive education training had positive attitudes towards disabled students in comparison with other participants and suggested that schools provide more support for disabled students.

Bradshaw and Mundia (2006) conducted a similar study to assess the attitudes of teachers towards inclusive education. They designed a questionnaire, which consists of 46 items and distributed it among 160 teachers. The findings indicate that teachers who had passed at least one course about inclusive education, perceive inclusive education as being useful, and they have positive attitudes towards disabled students.
2.6 Summary

Most of the studies on the disabled users in LIS have emphasized the role of physical and attitudinal barriers which hamper disabled users from actively participating in library activities. Physical barriers refer to architectural impediments, which hamper disabled users from accessing the facilities and services offered by libraries and the best way to remove such barriers is to consider physical adaptation. Attitudinal barriers refer to the negative attitudes of people without disability towards disabled people (Cookson & Rasmussen, 2001). In the library environment, negative attitudes towards disabled users and lack of awareness about their real needs, had resulted in the library’s failure to meet their needs. Indeed, attitudinal barriers have prevented libraries from establishing disabled- friendly policies, providing accurate statistics of disabled users, and allocating sufficient financial resource to provide accessible facilities, services and equipment.

A review of the literature indicates that integrating disabled people with non-disabled people in the physical environment does not mean inclusion because inclusion has a broader meaning (Baker et al., 2007). Inclusion is a process and occurs when individuals feel connected through their interaction and communication with other members of the society (Ministry of Social Development in New Zealand, 2007). Therefore, a welcoming atmosphere, supportive members, and sense of being connected and accepted by members of the community, can help individuals to feel a sense of inclusion (Burchardt et al., 1999; Peters, 2007).

The published literature also revealed that one dimension which had been overlooked in studies on disability is the psychological well-being of disabled people based on their perception and experiences (Baker et al., 2007). Krill et al. (2008) founded that, an individual’s own psychological perception, experiences, and tangible distance from others has a negative effect on the four fundamental needs of human beings - a sense of
belonging, locus of control, self-esteem, and meaningful existence. According to Maslow (1962), one fundamental need which is vital for the psychological well-being of individuals, is the sense of belonging. In fact, a sense of belonging is essential for individuals to find their own place in society (Upton, 2010).

An individual’s sense of belonging can affect their decision to remain in the educational environment. In this context, Osterman (2000) declared that sense of belonging matters in the learners’ life as it influences their motivation and learning outcomes. The sense of belonging of disabled users in the library is an area where not much research had been conducted. Little is known about the importance of sense of belonging, its essence, conditions, and the factors related to it in the educational environment (Freeman et al., 2007). This situation provided the motivation for this study.
CHAPTER 3
METHODOLOGY

3.0 Introduction

This chapter describes the philosophical assumption, paradigm and methodology which have been used in this study. It provides a justification for the use of a qualitative methodology in studying the phenomenon of a sense of belonging. The chapter also discusses the methods used for the data collection, the sample population, the sampling method, and the criteria used to select the unit of the study. Ethics, trustworthiness, and reflexivity are covered in the last section of this chapter.

3.1. Research Design

This study investigates the revelation of library sense of belonging among visually impaired students in a university library in Malaysia, and how this can affect the use of the library resources and facilities, which include library collection, services, facilities, and physical building. The study also investigates conditions which keep the visually impaired students away from the library or those conditions that motivate frequent use of the library. The study covers the problem from two aspects: (a) distinguishing the state and manifestation of the library sense of belonging, and (b) the intrinsic and extrinsic conditions that are related to this state of having a sense of belonging to the library.

In the context of the state of a sense of belonging to the library, the study aims to explore and describe the visually impaired students’ experiences, perceptions and behavioural attributes of their sense of belonging to the library. In this regard, the objective of this study is to: (a) to understand visually impaired student’s experience of
sense of belonging in a university library, (b) to explore conditions that fosters sense of belonging among visually impaired users in a university library; (c) to explore conditions that hampers sense of belonging among visually impaired users in a university library.

3.2 Philosophical Assumption and Paradigm

Creswell (2007) - identified the five philosophical assumptions that influence qualitative research - ontology, epistemology, axiology, rhetorical and methodology. He indicated that researchers choose different approaches when conducting their research, based on those five philosophical assumptions.

3.2.1. Ontology

Creswell (2007) denoted that ontology refers to the researchers’ view about the nature of reality in the world. In social research, there are some types of questions which are related to ontology such as “Is the social reality in the world independent from the individual’s interpretation?” “Does the world consist of one reality or multiple realities which are dependent on the setting or context within the discussed issues?” Three aspects positions of reality in social research include realism, materialism, and idealism. Realism posits that reality exists in the external world and it is completely independent from the individual’s beliefs. Materialism, on the other hand, refers to the belief that material things are real in the world such as physical and economical features. Idealism denotes that reality emerges through the meaning an individual attached to their experiences and it is socially constructed. Ritchie and Lewis (2004) clarified based on Hammersley and Atkinson (1995) that the reality in the world exists independently from the individual’s understanding of a subject, and to understand it well or interpret it, requires individual interpretations, which is known as “subtle realism”. Creswell
simplified it and explained that in a qualitative approach, the researchers believe in multiple realities which are subjective and depends on the views held by the participants.

3.2.2. Epistemology

Epistemology refers to the relationship between the researcher and the participants who are being researched. In fact, the researcher tries to be an insider in the participants’ world through collaboration and spending time in the participants’ environment and world so as to be as close as possible to their life and experiences. The more time the researcher spends with the participant in their environment, the more he will learn and know about them (Creswell, 2007).

3.2.3. Axiology

Axiology, another component of the philosophical assumptions, explains the values that researchers bring to the study. It refers to the researcher’s discussion about the role of his experience in the interpretation of the subject of study, together with the participant’s interpretation. Researchers acknowledge the presence of bias in the research; in fact, the researchers declare their position in the study (Creswell, 2007).

3.2.4. Rhetorical

Rhetorical refers to the language of the research. It refers to the style that researchers use in writing qualitative research reports in a literary, and informal style which may use personal voice. It is rare to see the term definition in that type of research because the meaning of the terms are elicited from the participants’ responses (Creswell, 2007).
3.2.5. Methodology

The last philosophical assumption is Methodological, which refers to the process of research which should include the logic of the research, the context, and the emerging design during the research (Creswell, 2007).

3.3. Paradigm

Philosophical assumptions are the special position that researchers take when they choose to conduct choosing the qualitative research, but the paradigm explains the beliefs and views that guide the research (Creswell, 2007).

Social constructivism is identified as an approach for qualitative research and is usually combined with interpretivism (Creswell, 2009). The paradigm explains that the individuals try to understand the world they live in, as well as the experience. Based on this paradigm, researchers use the qualitative approach to determine the meaning of the situation or event under study through the participants’ perspective. In this way, the researchers design open-ended questions or broad and general questions in order to facilitate the process for the participant to construct the meaning of the situation; the meaning, in fact, derived from the interaction and communication with other persons in the context. In this paradigm, the researchers rely more on the process of interaction (Creswell, 2007). Constructivism researchers concentrate more on the context in which participants work and live in order to understand their cultural and historical background. Creswell also explained how constructivism researchers declare their personal, cultural and historical experiences, which may affect their interpretation of the research data. He believes that their background has effect on their interpretation, and because of this, the researchers inform their positions in the research. He also stated that the constructivism paradigm is mostly used in phenomenological research where the
focus is mainly on the individual’s experiences and the grounded theory in which the researchers try to shape a model or a theory based on the participant’s world view.

The philosophical assumption for the constructivism paradigm in ontology is based on multiple realities rather than one reality like in post positivism in interpreting and explaining the phenomenon under study. In the epistemology assumption, the relationship between the researcher and participant is inter-subjective rather than objective (Jennings, 2010). It means that in order to have a deep understanding of the phenomenon under study, the researcher should go to the study site to collect data. The methodology in this paradigm should be qualitative and would involve the participants’ observation, interviews, and focus group to collect data from those who are living in that research study environment. This allows the researcher to view the phenomenon through the different views of the participants, or viewing it through a different reality. Axiology refers to the researcher’s values, experiences and role in interpreting data and extracting knowledge. It emphasizes that the researchers’ value is an integral part of the research process because it is a social process. Finally, the Rhetorical section or the language section in a qualitative research involves explaining and expressing experiences in the participants’ own words and their feeling about the subject under study.

<table>
<thead>
<tr>
<th><strong>Philosophical Assumption</strong></th>
<th><strong>Paradigm</strong></th>
<th><strong>Research Design</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology, Epistemology, Axiology, Rhetorical, Methodology</td>
<td>Postpositivism, Constructivism, Advocacy/Participatory, Pragmatism</td>
<td>Quantitative Qualitative Mixed methods</td>
</tr>
</tbody>
</table>

Figure 3.1. The Interconnection of Philosophical Assumption, Paradigm and Research Design (Creswell, 2009)
The qualitative approach is adopted in this study because it gives the researcher the opportunity to understand and explore the visually impaired student’s feeling and attitudes toward library usage. In fact, qualitative research allows the researcher to explore the lived experiences of visually impaired students through expression of their feeling regarding the library environment. Hence, we adopt this method in our attempt to better understand the feelings and attitudes of visually impaired users which could trigger or hamper positive attitudes the library, and this could, in turn influence their sense of belonging.

### 3.4 Theory in Qualitative Research

In the qualitative approach, the investigators use the theory in different ways, which can be divided into four types: (1) The first type uses a quantitative approach to explain behaviour or attitudes and it will be accompanied by the use of variables and formulation of hypothesis; (2) The second type uses a theoretical lens or perspective to provide support for the research questions, data collection, analysis, and an orientation guide for the research; (3) The third type uses the theoretical orientation or theory for explanation as the final point of the research; and it is used mostly in grounded theory in which the investigator, by inductive processes and through systematic analysis of data, creates broad themes to generalize a model or a theory for research; and (4) The fourth type refers to a situation where the researcher does not use any theory in their work (Creswell, 2009).

In this study, we used the second type, where a theory is used as a lens or perspective in shaping the research questions, collecting data, and analyzing the data. Indeed, applying a theoretical lens or a perspective lens besides providing an overall orientating lens for the study; this enables the researcher to build the essence of a sense of belonging concept based on visually impaired participants’ perceptions and experiences.
As mentioned in chapter two, Tinto’s integration theory mainly considers the concept of belonging as an individual matter, and ignores other factors that could effect on individual’s sense of belonging (Wentzel & Looney, 2007). In disability studies, the definition of disability plays is important, thus, in this study, we adopted one of the most famous theories in disability studies - the social model of disability as a study perspective lens. The social model of disability defines disability as the interaction between an individual’s impairment, and the social and physical factors. This gives the researcher the opportunity to explore this concept from all angels.

3.5 Research Design

According to Creswell (2007), we should use qualitative research when we need to study a group or population, elicit the variables that can be measured or listen to their voices. He explains that qualitative method allows the researcher to explore and find out the problems rather than obtain outline information from the literature. This type of approach prepares a space to extract detailed information, which cannot be obtained without talking directly with the individuals who have experienced an event that had taken place or have rich information in that field and without having to go to the site of study in which the participants live and work and spend their time. In fact, the aim of a qualitative research is to provide an atmosphere in which the power of the participants increases and closes the gap between the researcher and the participants, and the most powerful person in this type of interaction is the researcher.

Creswell (2007; 2009) divided the qualitative method into five major approaches - narrative, ethnography, grounded theory, case study, and phenomenology approaches. One common factor in all these approaches is that they focus on the individual as a source of information, but recognize that there are also differences between them. For example, in the narrative approach the focus is on the individual and his life story and
experiences, while in the phenomenology approach, the focus is on the essence of a phenomenon based on the life experience of individuals who have experienced that phenomenon and have attempted to determine the hidden meaning of the phenomenon through the interaction between the researcher and the respondent (Grbich, 2009). In the grounded theory approach, the aim is to obtain a model or theory based on the individuals’ words through analysis and constant comparison of data (Hatch, 2002; Merriam, 1998). The ethnography approach is about cultural beliefs of one culture-sharing group and the role of these beliefs in shaping their lives (Creswell, 1998). The case study approach is similar to phenomenology approach, and according to Hatch (2002) the aim of a case study is to conceptualize a phenomenon with focus on the individuals but bounded with time and activity (Mertens & McLaughlin, 2004).

Table 3.1. Characteristics of Five Main Approaches in Qualitative Research (Creswell, 2007)

<table>
<thead>
<tr>
<th>Type of Approach</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative Research</td>
<td>Understanding and exploring the life of an individual</td>
</tr>
<tr>
<td>Phenomenology</td>
<td>Exploring the essence of the experience or phenomenon</td>
</tr>
<tr>
<td>Grounded Theory</td>
<td>Developing a theory grounded from on-site data</td>
</tr>
<tr>
<td>Ethnography</td>
<td>Interpreting and describing a culture-sharing group</td>
</tr>
<tr>
<td>Case Study</td>
<td>Developing and providing in-depth description of a case or multiple cases</td>
</tr>
</tbody>
</table>

As discussed above, the phenomenology approach is suitable for qualitative studies with the aim of finding out the hidden meaning of one concept or phenomenon from individuals who have experienced it. Grbich (2009) contended that, the essence of a phenomenon is not a fact which exists based on time or space because it is an imaginative intuition which can only be understood through interaction between the researcher and the participants in that research.
Therefore, this study which is aimed at exploring the meaning or essence of belonging among visually impaired users in the library environment, we chose the phenomenology approach. More details on the phenomenology approach and its characteristics will be presented in the section, below.

3.6 Phenomenology Approach

The phenomenological study explains the meaning of the individuals’ life experience about a concept or phenomenon. The researchers in a phenomenology study describe the common experience of the individuals, and the phenomenon narrating about what an individual experiences and how he experiences that phenomenon consists of two basic components of this approach of research (Creswell, 2007). Based on Creswell’s (2009) definition, phenomenology is a type of qualitative research in which the researcher explores the meaning and experience of the individuals about an event or phenomenon through the participants’ description. He stated that this procedure include investigating a small number of people over a prolong period.

Jennings (2010) explained that phenomenology is the subjective meaning that participants give to their experience and reality in which they are living and it is constructed by the individual’s meaning. Phenomenology focuses on the individuals’ interpretation about the situation and their feeling toward the behaviour and activities of other people.

Schwandt (2001) explained that phenomenology is the description of people’s vigilant daily life experiences which consists of their perception, feelings, judgments, decisions, etc. In order to achieve this, the researcher needs to turn to the meaning of the objects and the nature of the experiences rather than on the objects only. The best way is for the researcher to bracket his attitude from the interpretation of the participants’ experiences.
Neiswiadomy (1993) suggested that the researcher should bracket his experiences from the research process in order to elicit the pure experience and meaning of the participants in the research process.

There are two types of phenomenological approaches. The first type is hermeneutic phenomenology, which mainly focuses on the interpretation of the researcher and the belief that phenomenology is not just describing the experience of the individuals in the context, but is also the interpretation of the meaning of phenomenon through the researcher’s point of view. The second type of phenomenological approach concentrates less on the interpretation of the researchers. The researcher would try to bracket his/her experiences as much as possible in the research process in order to extract the full experiences of the participants. Hussrel (1982) named the bracketing of the researchers experiences from the interpretation as epoche (Creswell, 2007).

Creswell (2007) explained that according to Moustakas (1994), the procedure of phenomenological method is as follows: Firstly, the researcher has to choose a phenomenon to study, then brackets his experiences, collect data from the individuals who have rich information in that phenomenon and have experienced it, then analyzes the data to elicit the most significant statement. He uses two kinds of descriptions in phenomenology study - textual description which narrates the experiences of the individuals, and structural description which explains how the participant experience that phenomenon in the terms of situation, condition or context. At the end of the study, the researcher mixes these two dimensions and reports the phenomenon based on the individual’s point of view.

Each method has its own strengths and difficulties. For example, in phenomenology the researcher should select the participants with caution to ensure that all participants have experienced the phenomenon. The other difficulty for the researcher is in trying to
bracket him from the interpretation. The researchers should consider how and in what ways their background experiences and knowledge would influence their ability to give a fair interpretation in the research. The phenomenology approach like other qualitative methods has been criticized because of its poor generalization and validity. This weakness can be mitigated by a complete description of individual experiences through explaining and expressing using sufficient examples to enable readers to reach the same conclusion as the researcher (Bloor & Wood, 2006).

Each method also has its own strengths and advantages. According to Bloor and Wood (2006), clear epistemology, which describes the position of the researcher and individuals in a research as well as focusing on data collection of participants’ experiences, are some of the notable strengths of this method.

<table>
<thead>
<tr>
<th>Paradigm</th>
<th>Research Design</th>
<th>Strategy of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Construction</td>
<td>Qualitative</td>
<td>Phenomenology</td>
</tr>
</tbody>
</table>

Figure 3.2. The Interconnection of Paradigm, Research Design and Strategy of Research (Creswell, 2009)

In the context of this study, which aims at exploring the hidden meaning of sense of belonging among visually impaired students in a context of Library University, the phenomenology was selected to fulfill the aims, objective, and research questions. This study adopts the Moustakas (1994) phenomenology method for bracketing and reporting the findings of the study. The research focuses mainly on visually impaired users’ experiences and their perceptions about the concept of belonging, and the conditions which foster or hamper it in a university library environment.
3.7 Data Collection Method

In this study, semi-structured interviews and focus groups were chosen as appropriate data collection methods. The researcher selected in-depth interview as the main data collection method and focus groups as an auxiliary method after the interviews in order to obtain more detailed information. This also enables the researcher to observe the participant’s interaction and behaviour in a group based on their social norms. In the following section, both methods will be explained in detail.

3.7.1. Types of Interviews

There are different types of interviews such as unstructured, semi-structured and structured and they differ with each other based on the philosophical assumption adopted (Jennings, 2010). In unstructured interviews, the control is more in the hands of the interviewee and the researcher usually does not have any formal guidelines for conducting the research, but sometimes the researcher tries to manage and return the interviewee to the topic of conversation. Semi-structured interviews are the same as unstructured with the minor difference that the researcher has a guideline which helps him to concentrate on the conversation. However, there is no fixed order in interviewing different individuals, and based on the nature of the interviewee, the order of questions may be changed during the course of the conversation.

In this study, we used semi structured interview. It allows the researcher flexibility to follow the flow of the interview, and to concentrate on the conversation. Semi-structured interview helps the researcher to follow the response and interaction of each interviewee without losing track.
3.7.1.1 Interview: advantages and disadvantages

Gorman and Clayton (2005) pointed out five advantages of interviews in the Qualitative approach. Firstly, it allows the researcher to obtain the information sooner in comparison with postal surveys. Secondly, it prepares a situation in which both sides, as researcher and participants, could explore the meaning of the questions in order to solve any ambiguities. Thirdly, it helps the researcher to observe and analyze the behaviour of the participants in a way that would not be possible in the quantitative approach. The fourth advantage is the friendly atmosphere, especially in a research where the types of questions are confidential, unflattering and sensitive in nature. The final advantage is that in a research where the participants are not able to read or write because of various reasons, interviews would be the best method for data gathering.

Glazier and Powell (1992) stated that the in-depth interview is useful when the aim of the research is to understand the views of the participants about the particular situation of a phenomenon. They explained that in studying feeling, beliefs and attitudes, interview is an appropriate technique to use. They said that the value of interview in comparison to observation is in its cost-effectiveness and in obtaining a great deal of information about the phenomenon in order to increase the researchers’ knowledge and understanding about the subject of the study. Bloor and Wood (2006) also emphasized that interviews are the best method in phenomenological studies because it provides the researcher with the opportunity to listen to lived experience. He opined that the best way to achieve the description of an individual’s world is to interview him rather than using other methods such as documents, diary or visual methods.

According to Glazier and Powell (1992), to conduct a good interview, the interviewer should be aware about some interview techniques. They suggested some general rules in to be observed in the interview process such as the interviewer should try to create an
atmosphere that is conductive to enable the respondents to feel at ease to explain and talk without any interruption from the interviewer. To achieve this, the questions should be open-ended, and “yes” or “no” questions should be avoided. They emphasized that an interview is a complex task and the interviewer should consider three points during the interview - remembering what has been said; what the interviewer wants to know in greater details and be aware about the area which needs to be explored.

Glazier and Powell (1992) also suggested other techniques which could be helpful in conducting a good interview such as probing, which they define as a technique used in the interview to discover some aspects more deeply. They classified probing into four categories: (1) neutral; (2) clarification; (3) recapitulation; and (4) reflective, echo or interpretive probe. Neutral probe refers to motivating respondents to talk and explain more about a special area by using some phrase like “uh huh”, “I see”, “Then what happened”. Clarification probe refers to exploring the exact meaning of the participants response by asking them question like “at that moment, how did you feel?”. Recapitulation refers to motivating the respondents during the interview to come back to the beginning of the story or his expression in order to find and explore more detail about the event. Finally, reflective, echo or interpretive probe provides the opportunity for the interviewer to clarify the meaning that he has understood through the respondent’s reply by reflecting, sometimes using the respondent’s own words and asking a new question.

Gorman and Clayton (2005) stated that there are some disadvantages in the interview method. These include: time consuming during data collection, recording, and transcribing, if it is necessary; it is conducted face-to-face, thus, participants may lie or hide some aspects of the truth when the subject discussed is sensitive or if the participants feel uncomfortable with the researcher, and might not disclose all aspects of
their feelings because they have no way of remaining anonymous; selecting data and information from a large amount of data may create some difficulties for the researcher; and the danger of bias in the interview.

In this study, the interview method is the main method for data collection, considering that the study aims to understand the experiences and expectation of visually impaired students in university library toward their sense of belonging. The interview method allows the researcher to avoid ambiguities in the interview questions. It also allows the researcher to provide a friendly atmosphere for the participants to share their views on the research topic. It also allows the researcher to listen to true life experiences of participants and their views.

The section below discusses the preliminary study, the interview questions, and the different techniques used to have a better understanding of the participant’s view.

3.7.2 Preliminary Study

Gorman and Clayton (2005) recommended that a preliminary study should be conducted in any qualitative research in order to assess the language and content of the questions, the time needed for the interview, as well as to assess the researcher’s own ability to administer the interview.

Jennings (2010) suggested that in both quantitative and qualitative research, the researchers should develop the tools such as questionnaire, guidelines for observation or questions for interview, and they should examine the suitability of the tools through a preliminary study. In this context, before starting with the interviews the researcher needs to test the observation guidelines or interview questions to ensure that all grounds have been covered to be able to elicit all the data needed for the research.
On 15 November 2011, the first preliminary study was carried out with three visually impaired library users. The preliminary study was aimed at ensuring that all interview questions cover the objectives of the research. The three participants were told that the interview is a preliminary study. The result indicates that the questions about “sense of belonging” were not comprehensive enough. The researcher had used the statements of Psychological Sense of School Membership Scale which (PSSM) designed by Goodenow in 1993. Based on the literature the PSSM scale is one of the well-known scales for evaluating the sense of belonging. The researcher had changed the statements to question format so ask to provoke some thought each statement. In the three interview sessions, it was found that this type of questions was not appropriate. The participants found the structure and content of interview questions to be not friendly, and the type of questions weird, besides being confusing. All these made them a little sensitive about the research topic. As a result, the researcher changed the structure of interview questions, and used more appropriate and friendly words based on the feedback from the participants.

During the preliminary study, the researcher also became more aware of her ability as well as her weakness in conducting interviews. The researcher had no prior experience in conducting interviews, and in the first two interviews, she had some difficulties in managing the interview time, following the response from the interviewees, adhering to the interview guidelines, and getting a little flustered. At the third interview, the researcher felt more comfortable and confident, and was satisfied with the interview process.

3.7. 3 Interview Questions

This study used the semi-structured interview approach for collecting data. The criteria, to determine the number of interviews to be conducted were based on the amount and
depth of information to be obtained through interview sessions till the researcher reaches the point of saturation. This means that no more information could be obtained through interviews with individuals without data repeating itself.

In this study, the number of repeat interviews carried out was dependent on the participants’ situation and capability. Some respondents could quickly connect with the research topic while others needed more time to feel more comfortable with the researcher and the topic of the research. Each interview lasted 45-60 minutes, on average. All interviews were digitally audio recorded. The interviews were conducted in different places based on participants’ preference and convenience such as their carrel rooms in the library, the library special laboratory for visually impaired, the special laboratory in the students’ hostel (college seven) and in their room in the hostel. Since in Malaysia, English language considered as second language and all participants felt comfortable with it, all interviews done in English language.

Based on literature and the researcher’s aim to find out the conditions in the library environment that could affect which affects the sense of belonging of visually impaired users, the interview questions were divided into two broad sections. The questions in first section are related to the library environment and consist of six subsections general question; librarian; facilities; services; collection; site location; and interior layout.

The interview started with general questions such as “How often do you go to the library?” “What is in the library that motivates you to make the visit?” “What is the first thing that comes to your mind when thinking about the library?” As mentioned before, one of the benefits of semi-structured interviews is that the interview path is based on the trend of the interviewee’s responses, thus, the control of the interview is in his hand. The researcher merely tries to keep the interviewees on the right path and give them the opportunity to express their feelings and opinions. The researcher would also follow the
flow of the interviews based on each participant’s answer, and direction to other sub-
issues related to the phenomenon, where necessary.

In the sub-section about librarians, the interview starts with indirect question such as “If
you encounter any problem in the library, who is the first person to whom you will
consult and why?” Or “How do you become aware about the new resources or services
that the library provides?” or “Which resources or services do you prefer?” Based on the
interviewee’s reply, the researcher would then encourage them to give their opinion
about librarians, the librarians’ awareness or knowledge about disabled users or if they
had the opportunity to provide a training session for the librarians, what would be the
content of that course.

In the sub-sections on services, and facility and collection, questions are mostly related
to the type of services, facilities or collection which the library has provided for visually
impaired students and how they evaluate the current situation or if they could change
something or add anything new, what would be it based on.

The site location sub-section and interior layout sub-section include questions on
finding out if is there any difficulty in locating the library building, in parking, or public
transportation space, entrance, and library layout, arrangement of library equipment,
library lift, quality of library carrels and so on.

The second section of interview questions are related to the concept of a sense of
belonging, and include questions about the perceptions of visually impaired students
toward library components which provide feeling comfort, belonging, acceptance, and
being valued in the library, and their importance to them. For example “How does
librarians show their respect toward visually impaired students”, “What and which type
of resources, services or anything in the library that can make them feel like they have a
place in the library?” and “Can you describe any situation in which you feel you are welcomed or belong to the library”, and “How do you interact with other peers?”

The final questions are two main and broad questions to obtain the last words of the interviewee such as “If you could change something in the library what would you change?” or “Would you describe the ideal library for visually impaired students to enter, engage and attend” (Appendix A).

During the interview, the researcher tried to use all four probing techniques as mentioned earlier in order to obtain more detailed information. For example, the researcher tried to use the neutral probing approach by using words like “I see” or “Then what happened”; clarification probing by using words like “at that moment, how did you feel?”; use the recapitulation technique by asking the interviewee to go back to the beginning of his explanation in order to obtain more detailed information; and use the reflective technique through own word reflections in order to check if the researcher has correctly understood the participant’s intention correctly.

Table 3.3 presents the summery of interview sessions, interview duration, date of interviews and place of interviews.

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Interview duration</th>
<th>Session of interview</th>
<th>Date of Interview</th>
<th>Place of Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amir</td>
<td>60 Minutes</td>
<td>3 sessions</td>
<td>15 Nov 2011/ 27 Nov 2011/ 27 Feb 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>2</td>
<td>Ahdiyeh</td>
<td>60 Minutes</td>
<td>3 sessions</td>
<td>17 Nov 2011/ 9 March 2012/ 10 May 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>3</td>
<td>Atifah</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>13 March 2012/ 10 April 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>4</td>
<td>Fahimeh</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>9 March 2012/ 5 June 2012</td>
<td>Dormitory in 7th college</td>
</tr>
<tr>
<td>5</td>
<td>Farhan</td>
<td>45 Minutes</td>
<td>1 session</td>
<td>12 March 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>6</td>
<td>Farhad</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>10 March 2012/ 7 April 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>7</td>
<td>Firooz</td>
<td>50 Minutes</td>
<td>1 session</td>
<td>18 March 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>8</td>
<td>Hadi</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>5 March 2012/ 4 May 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Duration</td>
<td>Sessions</td>
<td>Dates</td>
<td>Location</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>---------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Louvee</td>
<td>60 Minutes</td>
<td>3 sessions</td>
<td>28 Feb 2012/ 8 March 2012/ 9 April 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>10</td>
<td>Max</td>
<td>45 Minutes</td>
<td>1 session</td>
<td>16 March 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>11</td>
<td>Mehran</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>27 Feb 2012/ 2 April 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>12</td>
<td>Sedigah</td>
<td>60 Minutes</td>
<td>1 session</td>
<td>30 April 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>13</td>
<td>Yacob</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>23 April 2012/ 4 May 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>14</td>
<td>Mostafa</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>7 March 2012/ 18 April 2012</td>
<td>Special lab in library</td>
</tr>
<tr>
<td>15</td>
<td>Nasir</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>12 April 2012/ 17 May 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>16</td>
<td>Noor</td>
<td>45 Minutes</td>
<td>1 session</td>
<td>19 March 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>17</td>
<td>Rahman</td>
<td>45 Minutes</td>
<td>1 session</td>
<td>13 March 2012</td>
<td>Carrel room in library</td>
</tr>
<tr>
<td>18</td>
<td>Laila</td>
<td>60 Minutes</td>
<td>2 sessions</td>
<td>14 March 2012/ 23 May 2012</td>
<td>Carrel room in library</td>
</tr>
</tbody>
</table>

### 3.7.4 Focus Group

Focus groups originated in sociology and psychotherapy. A focus group is aimed at eliciting the participants’ in-depth feeling and beliefs in order to find out how these feelings shape individual’s behaviours (Glazier & Powell, 1992). Krueger (2009) stated that the focus group technique has been applied since 1930 in social science but mostly used in marketing studies to find out users’ perception and preference. Bloor and Wood (2006) regarded the focus group to be a series of discussion groups, which consist of different participants. In this study, the discussions are and audio-recorded by the researcher with the aim of eliciting information from individuals about their experiences, beliefs and norms through their interaction. According to Gorman and Clayton (2005) indicated that focus groups consist of small groups of individuals and a moderator in order to discuss and interact with each other to find out the perception and attitudes of participants in relation to the topic of discussion.

Krueger (2009) considered four properties for focus group - it consists of individuals; the individuals have certain characteristics; it provides qualitative data; and it conducts
focused discussion. The number of individuals in each focus group ranges from five to ten people or four to twelve participants. The ideal group is one which is small enough to let individuals share their opinion and large enough to achieve different point of views. Gorman and Clayton (2006) suggested that focus groups should consist of six to twelve individuals in each group. Certain characteristics are related to the homogeneity of the group depending on the purpose of the research, and these characteristics can be defined broadly or narrowly.

In this study, the researcher conducted different focus group sessions and assigned four participants for each focus group. The small number of participants in each session enabled the researcher to manage and moderate the sessions more efficiently.

One of the aims of focus groups is to provide qualitative data from different viewpoints. The researcher too plays different simultaneous roles, from being a moderator, to a listener, to an observer, and to an analyst. During a focus group discussion, the participants usually influenced and influence each other, and the researcher can collect a lot of relevant data. Therefore, during the focus group sessions, the researcher tried to be active as moderator and provide the opportunity for all participants to participate in discussion.

The last property of the focus group is discussion and open-ended questions, which the participants asked in logical sequence during the discussion, and they start from the general to the specific questions. The intention of focus groups is not merely to achieve “yes” or “no” answers but to obtain more specific and detailed information in order to clarify any ambiguity in a topic (Gorman & Clayton, 2005).

The focus group can be used in qualitative research as ground work or as an auxiliary method to assist the researcher to get a better understanding and to obtain more
information. Focus groups are useful when the purpose of the research is to determine the factors or criteria, which have effect on an individual’s behaviour, opinion or motivation (Krueger, 2009). Bloor, Frankland, Thomas, and Robson (2001) regarded focus groups as adjoined to other methods to complement other works. One of the applications of focus groups is its use in different stages of their data collection. For instance, it can be used to elicit more in-depth information during data collection or it can be used in the interview in order to understand each person’s attitude and to provide an opportunity for them to interact with each other and debate or confront conflicting ideas. It can also be used at the last stage of data collection to provide support for the finding of the research (Pickard, 2007).

Focus group questions should be designed in a way that evokes conversation between participants in an informal atmosphere that enables individuals to easily share their experience and opinions about the topic of discussion. In designing the research questions, the researcher should consider using words which are easy to say, clear, short, uni-directional and open-ended in order to assist the researcher to obtain a good amount of data from the discussion (Krueger, 2009).

According to Krueger (2009), research questions in focus groups can be categorized into five categories: (1) opening question, which are questions posed at the beginning of the focus group in order to provide the opportunity for everyone to talk in the discussion group, and it should be simple to answer, (2) an introductory question, which prepares participants to think about the focus group discussion and find their connection with the topic being discussed; (3) the transition questions, which make the conversation to move from introductory to key questions and at this stage, the participants become aware about the other views of participants, (4) the key questions, which may consist of two or five questions that need special attention, and the researcher or moderator should
spend enough time and use different techniques like probing to gather enough information about the participants’ experiences and perception; and (5) the ending questions which can be categorized into three groups - all things considered question; summary question; and final question. The all things considered questions allow the participant to clarify their position on various aspects of the discussion, which are important to them or which they were critical about. The summary question is asked after the researcher gives a brief summary about the items discussed, and subsequently, the researcher would request the participants to add anything if they feel the summary is not adequate. The final questions are aimed at ensuring aim is also to ensure that critical aspects in the discussion have not been overlooked and to confirm with the participants regarding this (Krueger, 2009).

In order to provide an atmosphere in which participants can have fun and also be engaged in a focus group, the researcher used different techniques such as listing things, rating items, picture sorting, drawing a picture, drawing a diagram or flowchart, mind mapping and using the imagination (Krueger, 2009).

One of the advantages of focus groups is that during the discussion participants and the researcher can exchange interesting experiences. The other advantages are speed, transparency, interaction between individuals during discussion, flexibility, and use of body language and non-verbal communication of participants (Gorman & Clayton, 2005). Berg (2009) expressed that flexibility of focus group in regard to the number of participants, cost and time, opportunity for the researcher to obtain detailed information about participants and their views on the topic of discussion which can be modified, changed and created, hence, creating an appropriate atmosphere in which the researcher and the individuals can be closer to each other and allow them to share views on their norms and values based on their culture and society.
Gorman and Clayton (2005) pointed out that the main difficulty in managing a focus group is getting people together at the same time at a particular place. There are also problems in handling a member who wants to be dominant in group discussions, or accommodating members of different temperaments, or having the ability to spot the homogeneity of each group based on the research questions (Berg, 2009). In addition, one of the main difficulties of researcher was having all the participants together at a time which is suitable for everyone. This is understandable as the undergraduate participants are busy with their courses, and some are involved in volunteer reading sessions. Hence, choosing the appropriate time to satisfy all of them was the main challenge in conducting focus group session. Also, through the moderating the discussion session, the researcher tried to handle the dominant participants in each session by allowing the other participants the opportunity to participate in the discussion.

The next section will discuss the focus group sessions, sequence of questions and techniques which is used for conducting quality focus groups.

3.7.4.1 Focus Group Question

According to Pickard (2007) researchers can use focus groups after interviewing every participant separately in order to first be familiar with each participant’s first view, before gathering members together in a situation in which they could interact with each other and share their view about the research topic. In this way, the researcher is able to observe participants’ reactions to the topic of research in a group, based on the norm of their society and how they deal with conflicting ideas in a discussion session. In this study, the researcher used the focus group method after conducting separate interviews with all participants. Thus, the researcher knew every person’s attitude toward the topic of the research, and could interpret their behaviour in the group.
In this study, focus group discussions were used as an auxiliary method for data collection. After completing the one-on-one interviews with the participants and familiarizing herself with the participants’ views on the topic of research, the researcher conducted focus group discussions in order to observe the participants’ reaction to the topic in a group setting based on the norms of their society. The focus group discussions here provided the researcher an opportunity to explore how participants confront conflicting ideas in a discussion session. Each focus group discussion lasted from an hour and forty five minutes to two hours, and the discussion was recorded with a digital audio recorder.

The researcher informed all the participants about the days that she would be conducting the discussion and each visually impaired participant registered for a date based on their own schedule. The final arrangement consisted of four groups: two groups consisting of four persons, and two groups of five persons, on different days. The researcher tried to handle one group per day so as not to be overstretched and to be able to follow up on the discussion and maintain quality of research. Each focus group took from sixty to ninety minutes to complete their discussions.

At the beginning of each session, the researcher welcomed each participant separately, also provided light refreshments while waiting for all the participants to arrive. The discussion was recorded with a digital audio recorder. The session started by asking the participants to introduce themselves and about what they are currently doing. This starting question is considered an open question which is not difficult to answer. The aim of this question was to give each participant the opportunity to speak up early in the discussion.

After all the participants had introduced themselves, the researcher continued the discussion with an open-ended question, “what is the definition of belonging to you”.

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This is an introductory question, and beside introducing the topic of discussion, it also gives participants the opportunity to think about their connection with the topic.

The next stage was asking the participants about their feeling toward belonging in the library environment, “Have you ever felt that you belong in the library? What does it mean to you, to feel to belong in the library?” In fact this question can be considered a transition question which to move the discussion toward the key questions of the study.

After completing the transition question, the researcher started asking the key questions in order to obtain more information about their perception or experiences toward belonging to the library. The researcher first asked, “How important is it to you to belong, to be part of the library community? Why? Why not”; “How do you know when you fit in/ do not fit in? What experiences have you had to feel like this?” For the last key question, the researcher asked the participants, “What conditions in the library made you feel as if you have a place in the library, and how do they help?” Subsequently, the researcher listed their suggested criteria in a flipchart using the “listing of things” technique in the focus group. In fact, because the participants could not write their own list on the flipchart and because of their visual impairment, the researcher took on the role of writing the list. Then, they discussed the list and identified its sequence. It gave the group an opportunity to voice their opinions and advocate their opinions by sharing their reason with other participants, listening to other participants’ reason for disagreeing and providing a good atmosphere for them to interact with each other.

The researcher summarized the content of the discussion and the participants’ different views toward the topic of discussion. She then posed the ending question, asked them to “imagine you are allowed to wish for only one thing in the library which is very important to make you feel comfortable and feel welcome, what would it be?” (Appendix B).
When the discussion ended, the researcher thanked all the participants for their cooperation, the pleasant time she had with them during the discussion, and gave each of them a small souvenir from Iran.

Table 3.4 present the number of participants in focus group, date and place of focus group sessions.

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Participants</th>
<th>Focus Group duration per minutes</th>
<th>Date of Focus group</th>
<th>Place of Focus group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>120 Minutes</td>
<td>27 April 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>105 Minutes</td>
<td>28 April 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>120 Minutes</td>
<td>5 May 2012</td>
<td>Special lab in 7th college</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>110 Minutes</td>
<td>12 June 2012</td>
<td>Special lab in 7th college</td>
</tr>
</tbody>
</table>

3.7.5 Data Collection Procedure: Population and Sampling

This section presents the type of study sampling and its procedures. Because of the exploratory nature of the study, a purposive sampling method was chosen as the main strategy for sampling. We will also present the demographic information of visually impaired participants of the study.

3.7.5.1 Purposive Sampling

Bloor and Wood (2006) pointed out that purposive sampling is mainly used in phenomenology studies. Purposive sampling is used to select information-rich person or cases who can provide useful information about the subject of research (Patton, 2002). Jenning (2010) observed that purposive sampling is like judgmental sampling, and the researchers make a decision on who and what type of individuals should participate in the research based on their experience or knowledge. In fact, the researchers determine some criteria about the units of study and try to involve them in the process. According
to Pickard (2007), there are two types of purposive sampling: (1) prior sampling which consist of a sample framework before the sampling; and (2) snow ball sampling, whereby before the sampling the researcher does not have any framework to follow, and the samples might grow or decrease as the research goes on. The prior sampling method is more suitable for the researcher, as she does not have any experience in conducting a qualitative research, especially on academic research and due to the lack of time (Pickard, 2007).

As mentioned above, purposive sampling provides the opportunity to select individuals who have much information about the topic of study in order to meet the purpose or objective of the study. Thus, it was chosen the sampling method. The researcher also chose the University of Malaya (UM) as the case setting for three main reasons:

1. The Ministry of Higher Education Malaysia advised the disabled students in Malaysia to apply to UM as the university has appropriate facilities for disabled students;

2. UM is the oldest university in Malaysia and its library is well-known for its long experience in providing special services for visually impaired students; and

3. According to the visually impaired participants of the study, the UM is the first choice destination of visually impaired students in Malaysia to continue their education.

The UM library provides a variety of special services, facilities and equipment for visually impaired students. These include special carrels, which are very useful for visually impaired students at both postgraduate and undergraduate levels. The visually impaired students who registered for postgraduate studies can request for a carrel. The library authorities assess their requests and if approved, allocate the carrels to them for duration of one year. A renewed request must be made each year. The library has
special carrels, with fifteen carrels on the first floor, and six carrels on the second floor. The carrels are equipped only with an air-conditioner, one small table, two chairs and one small bookshelf. The personal information of each student is available beside their carrels. The library also has a special lab which is located on the first floor. The PCs in the lab are equipped with screen reader software such as JAWS, and a special printer like Embosser which can convert the PDF files to Braille. Visually impaired students sometimes conduct their reading sessions in the special lab or use it for gathering sessions. The library also has a notice board for the visually impaired students to put up notices on a advertise there to find volunteer readers. The notice board is located on the first floor beside the elevator lobby. There is no large print or braille signage inside the library. The library has disabled-friendly elevators but there are tactiles in the library environment. The library also provides a ramp, and disabled-friendly entrance door for disabled students.

Details of disabled students who are currently studying in UM were obtained by the researcher, from the Deputy Registration Section of the university. Based on the statistics provided with UM, as of 2011, seventy-nine disabled students have registered up to November 2011. Through discussion with the visually impaired students, the researcher estimated that there are more than seventy-nine disabled students in UM. As a result, the researcher made an appointment with the Deputy of Registrar Section, UM. The person who in-charge explained his reason for the conflicting figures. He said that they considered only one item in the application form, and request students to tick if they have any type of disability but some of the disabled students did not tick the box. He also mentioned that there is a lot of work to do in registry section and there is no enough staff, hence the statistics were not rechecked with other sections to update and extract the accurate figures.
To obtain the accurate statistics, in 2011 the researcher referred to the Counseling, Career and Disability Services, under the Student Affairs Division. Surprisingly, the statistics they provide were totally different from that from the Registrar Section. They reported that there are forty-nine disabled students (physically impaired, visually impaired, and low vision) in the University of Malaya. Through discussion with the head of the disabled students’ affairs department, the researcher found out that this statistics is based on the voluntary registration of disabled students, and therefore the figures are not accurate.

The statistics which the library gave to the researcher were found to be inaccurate too, as the contact person from the library only gave the number of disabled students, who had requested for carrel rooms. This means that the number is twenty one, because there are only twenty carrels for disabled students in the library. The interesting point is that visually impaired students occupying most of the carrels. Finally, the researcher convinced herself and assumed that there are seventy-nine visually impaired students, and this is the correct figures.

In qualitative approach, a homogenous population is preferred and it is easier to analyze the data (Creswell, 2007). In view of the facilities provided by the library for the visually impaired students and the frequent visits they made to the library, the visually impaired students were selected as the sample. Other criteria used in selecting the sample include;

(a) The visually impaired students should be Malaysian;

(b) Enrolled in a programme at the University of Malaya; and

(c) Totally or partially visual impaired.
In this study, the researcher considered low vision students to be visually impaired because their vision on the whole is around 15% to 20%, which means they have the same needs as visually impaired students.

The researcher contacted each of the visually impaired students herself. After introducing the research topic, aim and objectives, she requested for their email address so that the information sheet and consent form can be sent to them. All the visually impaired participants of the study used screen reader software such as JAWS or Window Eye to enable them to use the computer and the internet. After receiving and reading the information sheet via their email, they can then decide whether to participate in the study. Finally, eighteen visually impaired students agreed to participate in the research, of whom thirteen were totally visually impaired and five of them had low vision.

3.7.6 Participants’ Profiles

The researcher continued with the interviews until she reached a saturation point, which means no more information, could be obtained through the interviews with individuals without data repeating itself. Hence, the total number of visually impaired students who are enrolled at the University (which is selected as a case) selected for the interview was eighteen, comprising (six females, and twelve males). The age of the participants ranges from twenty to thirty-seven years old, and they are from different fields of study such as anthropology, Malay literature, Economics, and counseling. Nine participants were undergraduate students and another nine were postgraduate students (three Ph.D. and six Master’s students). All of the participants are single except for one who is married and has a child. Five of the participants (two females and three males) had low vision, but the researcher considered them to be visually impaired students because their vision
is very poor of about fifteen to twenty percent. In this study, the researcher to keep the anonymity of the participants used the pseudonyms for the interviewees.

Table 3.5 present the visually impaired participants’ demographic information.

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Degree</th>
<th>Marital Status</th>
<th>Type of disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Amir</td>
<td>Male</td>
<td>31</td>
<td>Postgraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>2</td>
<td>Ahiye</td>
<td>Female</td>
<td>22</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>3</td>
<td>Atifah</td>
<td>Female</td>
<td>22</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>4</td>
<td>Fahimeh</td>
<td>Female</td>
<td>23</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>5</td>
<td>Farhan</td>
<td>Male</td>
<td>22</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>6</td>
<td>Farhad</td>
<td>Male</td>
<td>22</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>7</td>
<td>Firooz</td>
<td>Male</td>
<td>21</td>
<td>Postgraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>8</td>
<td>Hadie</td>
<td>Male</td>
<td>22</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>9</td>
<td>Louvee</td>
<td>Male</td>
<td>28</td>
<td>Postgraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>10</td>
<td>Max</td>
<td>Male</td>
<td>20</td>
<td>Undergraduate</td>
<td>Single</td>
<td>Visually impaired</td>
</tr>
<tr>
<td>11</td>
<td>Mehran</td>
<td>Male</td>
<td>29</td>
<td>Postgraduate</td>
<td>Single</td>
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3.8 Ethical Procedure

Willig and Stainton Rogers (2008) advised that in qualitative research, the researcher has to consider four factors before going to the field for data collection. These are consent, confidentiality, consequence, and the researcher’s role in the project. They define consent as giving enough information to the participants about the aims and objectives of the research, and the advantages or disadvantages for participating in the research. The researcher should prepare a situation in which the individual participant on accord of their own would want to participate in the research or relinquish their participation whenever they wish. Confidentiality refers to informing the participants about what will happen to the information gathered from the interview, how they will be
published. The researcher also needs to obtain the participants’ permission to publish the information. The researcher needs to assure the participants about his effort to maintain the privacy of the participants in the research process, and to inform them which type of information will be accessible to whom in the research process.

In this context, the researcher, after contacting the visually impaired students, and explaining to them the aim of the research topic, will request the participants to provide their email addresses. The participants will be sent information sheet via email. The information sheet consists of four sections. The first section explains the aim of the research. The second section invites participants to indicate the type of demographic profile they fit into. The third section contains triggers, which the researcher needs to ask the participants in the research process. The fourth section indicates the type of data that will be collected and what will be done to the data, who will have access to information and what will happen to information at the end of research process. The last part of the information sheet provides information on the researcher’s contact number, email address, and address. (Appendix C).

At the beginning of the interviews, before any recordings were made, the participants were given the consent form to sign. The form is intended to inform the participants about: their agreement to participate in the research, their right to ask questions at any stage of research, their voluntary participation, their right to withdraw from the research at any time without any disadvantage, what happens to the data, and their agreement to allow for the publication of the result of research, and maintaining their anonymity be maintained. (Appendix D).
3.9 Data Analysis

Data analysis in phenomenology is similar to that for other qualitative approaches (Creswell, 2007). During data analysis, the researcher extracts the important sentences or statements that are relevant to the individual’s experiences about the event or phenomenon. Moustakas (1994) termed this stage as horizontization. During this stage, the researcher elicited the meaning units from significant statements, after which she created clusters of meanings or themes. The next stage involves writing and explaining about the participants’ experience, which is termed as textual description and how the environment or context in which that event happened influences the individual’s description about the phenomenon. This is termed as structural description. In brief, the analysis process is as shown in Figure 3.3.

Figure 3.3: Template for Coding Phenomenological Study (Creswell, 2007)

Creswell (2007) also mentioned his modified and simplified form of Stevick-Colazzi-Keen method’s which Moustakas (1994) considered to be practical. Creswell listed the stages as follows:

- First, the researcher has to describe her or his experiences with the phenomenon. This helps set aside a researcher’s personal experience and he pointed out that
this cannot be achieved a hundred percent but it is doable. Also, the ability to describe a situation is totally dependent on the participants’ experiences.

- Second, the researcher needs to look through the whole transcript and find significant sentences or statements, which the participants expressed as based on their experiences the statements are made. At this stage, the researcher should try to avoid overlapping of statements.

- Third, the researcher needs to group the significant statements in a larger group called “meaningful unit” or themes.

- The researcher describes participants’ experiences, and relates them to the phenomenon, and this is called textual description.

- The researcher describes how the participants experienced the phenomenon. This is known as structural description and is mostly focused on the setting or context in which the experience happened.

- At the end, the researcher should combine the textual and structural descriptions. This gives the reader the essence of the phenomenon and it includes a long paragraph that informs the reader what the participants have been experiencing in relation to the phenomenon and how they have experienced it in that specific context.

One of the common sense among qualitative researchers is finding themselves lost in the ocean of data. So, most of qualitative researchers apply qualitative software to manage their data easier and more flexible (Meyer & Avery, 2009). Therefore, in this study the researcher looked for appropriate qualitative software based on her budget and time. So, since during the analysis of the data, the researcher could not find any of qualitative software such as Nvivo 10, MAXQDA or Atlas7, consulted with the external audits. They suggested the researcher use the Excel. Indeed, according to the Meyer and Avery (2009), Excel can be considered as one of qualitative software. They noticed
since in qualitative research, the Excel like other qualitative software has the ability to handle large amount of data, providing multiple attributes and permit for variety of display techniques. Therefore, the researchers can consider it as one of the qualitative data analysis tool.

In this study, the researcher transcribed each interview and focus group discussion into a separate excel document, using her own laptop. Each recorded interview and discussion group were checked and reviewed twice before being transcribed. It provides an opportunity for the researcher to familiarize herself with the content of interview and students perceptions. The researcher reviewed the transcribed interview several times to complete the transcription and check for accuracy. The researcher first identified the significant statements of each transcript, next labeled each one and grouped the similar ones under larger group. The researcher continued categorizing the subcategories to reach the main themes. The researcher tried to describe what visually impaired participants experience (textual description) and how they have experienced it in the library environment (structural description). Finally, the researcher combined both textual and structural descriptions to produce a comprehensive description of the participants’ experiences and perceptions toward their sense of belonging in a library environment, and the conditions which foster or hamper them from creating a sense of belonging.

3.10 Trustworthiness

Trustworthiness is a term that refers to a set of criteria used to evaluate the quality or goodness of qualitative research (Marshall & Rossamn, 2006; Schwandt, 2001). The terms validity and reliability which are more commonly used in quantitative research,
after 1986 brought changes to the qualitative approach and replaced validity and reliability with terms such as trustworthiness, authenticity and goodness of fit (Jennings, 2010). Denzin and Lincoln (2005) explained that in qualitative research, instead of internal, external validity and reliability, we can use words such as credibility, transferability, dependability, and conformability. Naturalist researcher defined credibility as a parallel term for internal validity, transferability for external validity, dependability for reliability, and conformability for objectivity (Schwandt, 2001; Marshall & Rossman, 2006).

Marshall and Rossman (2006) presented some procedures in order to assist in obtaining trustworthiness, such as prolong engagement; member checks; triangulation of methods, data collection method, theory and investigator; peer debriefing. In the next section, each component of trustworthiness will be explained in more detail.

### 3.10.1 Credibility

According to Anfara, Brown, and Mangione (2002) credibility represents the accuracy of described data, collected by the researcher after considering various angles or aspects of the phenomenon under study. It indicates the research has been done in a way which is trustworthy for readers. Miles and Huberman (1994) mentioned credibility as a true value which means findings that have been depicted by the researcher indicate exactly what happened and what the phenomenon means for participants in the study. Marshall and Rossman (2006) explained that credibility occurs when individuals who participate in the research process agree about the content and interpretation of the research done based on their words.
Creswell (2003; 2007) identified some techniques for qualitative researchers to obtain credibility. The first one is triangulation and it consists of data collection method, data sources, investigator, and theory triangulation, which is used to indicate the consistency of the finding. The second technique is member checking, which involves sending back the research analysis, interpretation, and conclusion to participants for them to give their idea and judgment about the accuracy of the findings. The third technique is prolonged engagement, which gives the researcher the opportunity to get familiar with the participants’ culture, and provides the opportunity for the participants to trust the researcher and also prevent the researcher from misinterpreting collected data. Peer review or debriefing is another strategy which is used for credibility in which the researcher’s peers ask questions about the research method, process, meanings, and interpretation through peer debriefing session. Reflexivity is one of the strategies used to clarify the researcher’s bias in data interpreting. It is important because it gives readers the opportunity to get familiar with the researchers’ position in selecting the research topic, readers, and audience. It also clarifies the researcher’s past experience, bias, prejudice which shaped the interoperation of research data. Pickard (2007) also mentioned prolonged engagement in the context with the participants, persistent observation, triangulation, peer debriefing, and member checking, as different techniques used for verifying.

In this study, the researcher adopted prolonged engagement, member checking, peer debriefing, and reflexivity as the main techniques to satisfy the credibility criteria. At the end of this section, each processes will be explained in detail.
3.10.2 Transferability

Transferability in qualitative research is synonymous with external validity in quantitative approach (Pickard, 2007; Gorman & Clayton, 2005). According to Creswell (2007), thick and rich description of the context or individuals who participate in the study gives the other readers the opportunity to transfer the data to other context or setting. Marshall and Rossman (2006) suggested that triangulation is one of strategies that can be used to achieve transferability. Miles and Huberman (1994) maintained that in order to achieve transferability the researchers need to apply some strategies such as (1) appropriate and complete description of context, and its boundaries; (2) description of the sampling procedure in order to transfer it to another context; and (3) detailed description of the research process and findings so that readers can transfer it to other cases. Krefting (1991) also suggested detailed description of the research and sampling procedures as the main techniques to achieve transferability in qualitative research.

In this regard, the researcher tried to describe each stage of research process in detail such as the type of research approach, data collection method, types and procedure of the interview and focus group questions, type of sampling method, and detailed description of the research findings. In fact, the detailed description of the research and its findings in this study makes it possible for readers and other researchers to transfer such research to other contexts.

3.10.3 Dependability

Miles and Huberman (1994) described dependability as assessing whether the research process and methods are stable and consistent over time. They suggested some strategies to achieve dependability such as; the research questions should be clear; the researcher’s position in research should be clearly defined and data should be collected
across all range of context; and the participants and the time should be considered as important factors. External audit, peer review and detailed description of the research methodology, are other strategies which were suggested to achieve dependability (Krefting, 1991; Creswell, 2007).

In an external audit, the auditors assess the research process and this involves examining the accuracy of the transcription and the level of saturation in the data collection process. The researcher should provide evidence to show that the method or techniques used in the research process is appropriate for the type of study (Pickard, 2007). The external auditors provide the opportunity for examining the process and the result of the research, and for assessing whether the findings and interpretation in the research originates from the raw data of the research. In fact, they assess the accuracy of the research (Creswell, 2007).

In order to achieve the dependability, the researcher used some strategies such as a preliminary study (ensuring the interview questions are clear and meaningful for the research participants), external audit, peer review, detailed description, and reflexivity. Each of these strategies will be explained in more detail at the end of this section.

3.10.4 Confirmability

The main goal of confirmability is to determine the accuracy of the result which is based on the raw data of the research and not merely on the interpretation of the researchers, disciplinary assumption, theoretical trend, and research interest (Charmaz, 1995).

Conrad and Serlin (2006) explained that confirmability is a concept which should be achieved and confirmed by external audit. Also Marshall and Rossman (2006) mentioned that the findings of a research should reflect the participants’ words, and the
researcher should avoid effecting findings with their own bias or prejudice. Krefting (1991) opined that external audit, reflexivity and triangulation are suitable strategies for achieving confirmability.

In this regard, the researcher applied two main strategies - external audit and reflexivity - to determine the result of the research based on the information which extracted from the interview and focus group transcriptions. Each of these techniques will be explained in detail, later.

Therefore, in the context of this study, the techniques used to obtain trustworthiness are discussed below.

### 3.10.5 Prolonged Engagement

As mentioned before, prolonged engagement provides an opportunity for the researcher to build trust with the participants, get familiar with the context, their culture, and prevent the researcher from receiving misinformation (Creswell, 2007). In this study, the researcher spent seven months (15 of November 2011 - 15 Jun 2012) collecting data. During the seven months, the researcher kept in contact with the participants in their carrels in the library, their own residence in a residential college inside the campus, and in the special laboratory for disabled students in the residential college, even added all of the participants to her face book and invited them to the restaurant and coffee shop to build trust. In the beginning, they were shy, formal and some of them did not show any interest. They were not comfortable in answering all the questions, especially when the researcher asked them to explain some of their experiences in detail. Gradually, they began to feel more comfortable, especially when they learnt that the researcher knew their friends by name and had met them before.
The researcher tried to provide an atmosphere in which the participants feel free and comfortable to discuss about the different topics after or before interview sessions. This was one of the most important factors, which helped the researcher and participants get closer to each other. The participants were curious on why the researcher has chosen this topic, was there any special reason for doing so, and has she any type of disability or maybe one of her family members has, what is the situation of status of the visual impaired in Iran, what barriers exist in their daily activity, education and their employment. These discussions provided a good opportunity for both the researcher and the participant to share their knowledge and express their opinions toward the situation for the disabled in both countries, especially for the researcher to become more familiar with their family background, their ambition and the difficulties in achieving them.

The visually impaired participants, told the researcher what kind of assistive technology they use for their academic activity such as the screen reader software Jaws and window eye and how to use it, the special printer they use to produce their reading material in Braille. Low vision individuals also told the researcher which types of magnifier exist in the market and how to use it correctly. This communication between the researcher and the participants break down the barrier between the normal and disabled person and makes them more comfortable with each in their discussions.

The discussion include the field of study, the type of research approach, method of data collection, and challenges the researcher faced in trying to obtain the statistics of disabled students in Malaysia. These discussions were interesting and beneficial to both the students and researcher. This close rapport established motivation the participants to give the researcher more opportunities to remain in contact with the participants despite their busy schedule.
3.10.6 Member Checking

The researcher used the member checking technique in two stages. In the first stage, the researcher sent back the Excel file of the transcribed interview to the participants through their email address. This was done to ensure that the participants agree with the content of the interview. The visually impaired participants read the content of the transcribed interview using their screen reader software and send back their comments to the researcher. The most common comment was about the name of their screen reader software, which had been written wrongly and the researcher was requested to amend it. At this stage, only two of the undergraduate participants had difficulty in reading the Excel file using their screen reader software. Hence, the researcher requested for a meeting with them in their carrel room, and read out the transcribed file to them.

In the second stage, the researcher, after having finished her analysis, set up an appointment with visually impaired participants informally to see them in their carrel rooms in library or in their special lab in 7th college. The researcher informed them about the research findings and asked them to share their views about the findings of the research. The majority of the visually impaired participants agreed with the findings of the research - creating a sense of belonging by both social and physical aspect of the library environment. One of the interesting comments which the researcher received from one of postgraduate participants, was beside improving the social and physical aspects of library environment, the visually impaired students too have to try increase and improve their social skills, and be more active socially.
3.10.7 Peer Review

The researcher considered the assistance of two Ph.D. students from Taylor University’s Department of Tourism and Hospitality and Business. They became the researcher’s peer and they were debriefed before and after data collection.

Before the data collection, the researcher met them to discuss the research approach, research questions, sampling and methods of data collection. They commented about the interview questions, which they felt should have more open-ended questions, and they also reminded the researcher to avoid forcing the interviewee indirectly to give an answer which the researcher wants. One of the peers also gave suggestion about the format of the information sheet and its content, which should be clearer and cover all ethical components. Another suggestion involves adding some phrases to the participants’ form. The researcher had designed a method for collecting the participant’s personal information such as age, sex, field of study and other demographic data (Appendix E).

After data collection, and in consultation with their peers they suggested that instead of using MS Word for transcribing, the researcher should use Excel, which is more convenient for coding too. Hence, the researcher transcribed the interviews in MS Excel files. They also stated that using MS Excel, it is easier to find relevant sections of the interview based on the time. Thus, the researcher added the time of the interview to the first cell of the Excel sheet and input the time every five minutes.

In the final stage, after finishing the analysis, the researcher set appointment with her peers to discuss the quality and accuracy of her analysis. They reviewed the samples of the analysis and asked some questions. For example, they enquired why some
categories were put under this theme. The researcher explained her reasons and they were accepted.

3.10.8 External Audits

The researcher consulted two senior lecturers, one from Taylor University’s Tourism and Hospitality Department, and the other from the Business school University of West Scotland. Both of them are recognized as experts in the qualitative research, in their respective university.

The researcher sought the assistance of these two senior lecturers as her external auditors for most part of her study. Prior to data collection, the researcher conducted two informal sessions with the senior lecturer in Taylor University to discuss her research questions, sampling method, and data collection method. The researcher also did the same with the lecturer in the University of West Scotland albeit email.

Both experts had the same opinion about the method of data collection, that is, to cover all aspects of the life of the visually impaired students, both in the library and outside the library. They agreed that the researcher needs to conduct one-on-one interviews and focus group interviews to give her the opportunity to see the effect of societal norms in their interaction with each other, to be familiar with their culture, and to understand the barriers which they face outside of the library. They also recommended that the researcher considers the library environment to be a component of the participants’ society, and to follow up with their life in their society by cooperating with them at different times, different situations, and even to spend her time outside of the library with them.

They also recommended that the researcher conduct a focus group study in order to find out how the visually impaired participants interact in their own community, with their
norms, and behaviours, observe their silence, emotion during the interaction and how they behave differently or the same as when they were interviewed separately in the context of the research topic.

The researcher set an appointment with the senior lecturer in Taylors University after she had finished data analysis to get his feedback on the quality and accuracy of the analysis. This feedback was quite positive – he suggested changing the place of two subthemes in the extrinsic section. He left the final decision to the researcher.

To get feedback from the other external auditor in West Scotland University, the researcher sent him sample of the analysis. He sent his suggestion through email and left the final decision to the researcher.

3.10.9. Reflexivity

Reflexivity is a term which is used in a methodological sense to identify the process of a researcher’s self-reflection on his biases and preferences. In fact, reflexivity is more than declaring the bias, it takes into consideration that the researcher is one part of the context or social phenomenon which he or she tries to explore. Reflexivity is one of the most important validating tools in qualitative researches (Schwandt, 2001).

Bloor and Wood (2006) defines reflexivity as a researcher’s awareness about himself in the process of his research and his role in constructing that process. Miller (2003, Reflexivity 1) observed that the term reflexivity had been used since 1960 and is a well-known term in ethnography Schwandt (2007) expressed that it is also used in the methodological section in qualitative research as the researcher tries to reflect about his
biases and preferences and is one part of the context of the social phenomenon that the researcher is trying to investigate.

Gilgun (2005) suggested that the researcher should consider three aspects in expressing their reflexivity: (1) the topic of research and the researcher’s personal and professional preference in choosing it; (2) the researcher’s perspective and experience with participants in the research; and (3) the audience of the research.

On the following paragraphs the researcher note about her feelings in regard to the disabled people and her experiences with visually impaired participants.

In the context of this study, the researcher became familiar with disabled people (Deaf) when she was a teenager. “Next to my school, there was a special school for deaf people and I saw them every day at the bus station, in the street, and I just looked at them without trying to make any conversation. At that time their world and language was strange to me. Honestly, I was afraid to communicate with them”.

“Later, while pursuing my Bachelor degree studies at the university, I underwent an internship at the National Library in Iran. The library manager asked me to work with one of the librarians who had low vision. At that time, I had a negative attitude about him and I grumbled that I should not have to work with him, and that the manager should not put such a person in the frontline in the circulation desk. In fact, I could not understand his behaviour and body language, but little by little, I changed my mind while working with him and I grew to appreciate his knowledge, hard work and sense of responsibility”.

“During my graduate studies, I had worked as a volunteer for the Council of Children’s Books in Iran under the supervision of Dr. Ansari and Mrs. Tourane Mir hadi, the founder of the Council of Children’s Books in Iran. The aim of that NGO is to produce
a local Encyclopedia Iran with the cooperation of all academic members from different fields of study. The method they used was interesting, the referees for encyclopedia articles were children between ten and sixteen years old. After an article was ready, the children evaluated the quality of the article and discussed the parts which were not clear for them and gave some suggestions on what could be done to improve it”.

“Besides producing the encyclopedia, the NGO conducted other activities such as evaluating all published books or journals for children within a year, and they ranked the children’s publishers and choose the best work at the end of one working year. There was also a group for special children who tried to cooperate with publishers to publish touchable books for visually impaired students and other educational materials to assist the teachers and parents of visually impaired children. Honestly, only now do I understand and appreciate the value of their work for special students”.

“During my graduate studies, we had a course about how to interact and behave when working at a reference desk. The source material for that course was a translated book in which one chapter was allocated to interview and the interaction methods with special users in the library and how to behave normally with them. The interesting point was that the lecturer did not pay enough attention to that topic and just skipped the topic. After that class, I had a discussion with him about disabled users and why libraries and librarians did not pay enough attention to their problem. I was shocked by his answer that, firstly, we do not have enough budgets; secondly, it is not important as they are a minority. I remember that moment vividly. I was speechless. He was a well-known lecturer in LIS and was also known for being open-minded. I was shocked with his attitude that because they are a minority, then they are not important!”

“I made my decision and chose to focus my graduate study topic on library building accessibility for the physically impaired students, despite all oppositions. I selected
physical disabilities because, at that time, I thought that we cannot do anything for the visually impaired and they have to go to their special libraries, and social inclusion did not have any meaning for me. I can say that at that time, I just thought about the physical integration of the physically disabled people into a library environment. I applied the quantitative approach and designed a questionnaire based on the American Disability Act and distributed them through the welfare organization of Zanjan province and to librarians in public and university libraries, with whom I did not have any direct contact. When I think deeply, I can say one of the reasons for selecting only people with physical disabilities was my fear of communicating with visually impaired users. I did not know how to start a conversation with them or the type of language I should use in addressing them. I was afraid of upsetting them and thought that they are vulnerable. I thought that being in contact with physically impaired users is easier than with visually impaired people because they can see me, we can have eye contact and being friend with them is easier than with a blind person”.

“For my PhD, I had initially chosen the quantitative approach for my research and the topic was social inclusion of disabled persons in Malaysia. I thought this approach is better because I do not have to be in contact with them. Also, in Malaysia, there is the language barrier for me. I designed my questionnaire, but when I wanted to conduct a preliminary study, I found that the target universities do not have accurate statistics on the disabled students in the university libraries. After one semester of trying, I gave up and changed my approach from quantitative to qualitative. One of the dependent variables in the design framework from my initial framework was interesting for me, and it was the “sense of belonging”. It was interesting for me to find out how one psychological variable can play a main role in motivating people with disabilities to come to the library. With regard to the qualitative research, the investigator should choose a homogenous population, the availability of visually impaired students in the
University of Malaya library in their carrel, and also my interest to work this time with visually impaired people despite my fear of communicating with them. All these influenced my decision to study the visually impaired as my target population”.

“Finally, I overcame my fear and tried to set my first appointment with one of visually impaired students in his carrel. My fear about his possible reluctance to be interviewed, proved to be wrong when he accepted my invitation with pleasure. During the interview, I was not comfortable and was afraid to look at his face because in Malaysia the visually impaired people do not wear glasses, and although I found this interesting, it was also strange to me. However, gradually, I got used to it. During the interviews, I could sense that the visually impaired are also afraid of non-disabled people, and they do not know how to communicate with them. The visually impaired participants mentioned that they also do not know how to start a conversation and they feel shy. I remember the time I was interviewing a boy, and in the middle of the interview, a visually impaired girl entered carrel. She did not know that I was there and after I introduced myself as a researcher, she looked shocked and walked toward the wall to hide her face. She seemed ashamed to talk to me and left the carrel immediately. But that very person, after two to three months of talking and interacting with her, has accepted me, become more comfortable with me and trusted me. Now, I can say that we are friends and are not afraid of each other anymore!”

“One interesting observation was that, prior to accepting my request for an interview, the visually impaired students had asked me about the other people that I have met and interviewed. When they found out that I have interviewed one of their friends or they know the person, then they start to trust me”.

“I remember at the beginning of the research I had invited about ten visually impaired students to the Coffee shop in the college 7th to chat and to become more familiar with
each other. I asked one of visually impaired participants to arrange the meeting in the Coffee shop. After we had ordered the tea and coffee, they started to ask me some questions about my nationality, age, marriage status and so on. When they found out that I am from Iran, they started to speak Malay. At that moment, I did not feel comfortable! I could not read their mind through their eyes! It was very difficult! Through their words I understood that, they were talking about my religion. I asked one of them to explain me what happened? Why they are talking in this way? One of them asked me “Do you produce the nuclear bomb?! We heard Iran is producing the nuclear bomb?! Isn’t it?” I was surprised!!! I did not expect such a question!! But I should answer his question!! I told him we are not producing the bomb, but need the nuclear energy for our country, since the fossil fuels will finish one day, so we need a substitute and we are trying to replace it with nuclear energy!! After a second, one of the other boys asked me “Are you Shia?!” Oh My God!! This question was worse than previous one!!...I heard [from my Iranian friends] that Malaysian people do not have positive attitude toward Shia and perceive them as pagan. I had heard many bad stories about Malay people that we have to kill the Shia!!! Suddenly, I felt my face and ears burning, felt the Coffee shop get too hot! My heart started beating faster and faster! I did not know how to answer it, felt just put myself in a trouble!!! You know it was a very difficult situation. On one hand, afraid to tell the truth, on the other hand cannot deny it! I felt the owner and waiters in the Coffee shop were also looking at me! Honestly, if I could, I would like to disappear. Finally, despite all my Iranian comments for denying as being Shia, I made my decision! Told him, “Yeah, I am Shia!” Whenever, remember that time, I feel still my face burning! For a second, there was no sound, I could hear the sound of the wind! I think that Friday evening was the worst time I ever had in Malaysia…They started again to talk Malay to each other! I was really worried, did not like to lose them, so start to explain to one of girls who was their senior that our religion
is like yours, the same God, same prophet and book, only there are some differences in
detail! I felt, she accepted my words, so felt a little comfortable! But I saw the
discussion continuing among the boys, so one of them addressed me and asked me lots
of questions “Who your first Imam is? What is his name? Why do you have temporary
marriage in your religion and so on?” It was awful, first of all, my language was not so
good to answer his questions perfectly. Secondly, my knowledge about our differences
with them, thirdly, I was worried about myself, my research and I did not like to lose
them! Oh! My God, why did you put me in such situation!! Anyway, I tried to answer
his questions properly. At the end, I felt they accepted me and told me. Ok, let’s talk
about your project!! It was great! I was really thankful to God…Honestly; don’t like to
feel such a moment again in my life” (25 November 2011)

“After three or four month, when I get close enough to the visually impaired
participants and felt we have good relation, I invited them to join me for lunch in an
Iranian restaurant in the Faculty of Engineering. I set appointment with them and
depending on their time during each week they joined me for lunch…the first session I
invited one of the girls, I went to the library to pick her up, when I went behind her
carrel room, I saw that she was dressed very well, her blue dress and white scarf were
very nice…for a second I was watching her in her carrel, she was very nice…I knocked
the door. We then went to the restaurant. It was my first experience to guide a visually
impaired, so I told her it is my first time and I do not know how to help you! She told
me “just give me your elbow and tell me whenever there is any obstacle or want to cross
the road!” She meant that I should inform her before any action!! We reached the
restaurant and stood in the queue. She wanted to accompany me to order the food. I
explained to her the ingredient of each food and when it got to our turn, I saw the
Iranian chef was looking at her and asked me in Persian “Is she blind?!” I told her yes,
she is visually impaired!! I saw she shook her head and said some words to show her
sympathy!! I was really upset at her behaviour, also she looked weirdly at me, I felt she was looking to see do I have any disability or not! Then, we went and sat behind the table, the restaurant was very crowded…full of student… all international students…I saw all of them look at us differently…they were curious and I was looking at her face cautiously…it seemed it was first time they see a visually impaired…Later I found it to be correct, as there was no tactile in that direction most of the visually impaired eat their food around library Coffee shop in Perdana Siswa , their faculty or dormitory…Then I understood why they looked at us that way!” (8 January 2012)

“I went to the Iranian restaurant with Sedigeh and Louvee, I remember there wasn’t any free table, suddenly I saw three empty seats behind one of the tables with some Iranian students sitting there…I asked them whether we can in those chairs? Uncomfortably, they told me yes, can! After we sat, I saw they were looking at Sedigeh…You know, she has very big eyes … so at first glance it is a little bit scary but you get use to her!! … I could sense their feeling…because in Iran the visually impaired people wear dark sunglasses which indicate they are visually impaired but in Malaysia they don’t wear the glass and it would be strange for Iranian…all of them were staring at us!!! I think they were also get confused what is my relationship with them?! They just stopped their conversation and were listening to our conversation…I just ignored them and continued my conversation with Sedigeh and Louvee…after five minutes, the Iranian students left the table since they were not comfortable!!! That time I was really disappointed!!” (25 January 2012)

“On one occasion, I went with Farhad and Farhan to the Iranian restaurant. This time, I asked them to sit behind the table, just tell me what they want to order…First, I went and bought the drinks for them, then went to queue to buy the food…in the queue I saw Professor Mehmet, he was from Turkey, studied in USA but now working in the
Faculty of Medicine. He told me today is his last day in KL and he is going back to Turkey forever…I told him I have come with two of my visually impaired friends and does he like to join us? He told me yes and after he had bought his food we went toward the table!! When I reached the table I was shocked and couldn’t believe it!!! The table was full of coffee and ice. Farhad and Farhand also seemed uneasy and restless!!!…I couldn’t understand why the Malay and Chinese students who sat beside them didn’t do anything!!! Why didn’t they care about their peers!! How sighted people can be so unsensitive!!! I was really upset and angry… I felt like to screaming to all students in the restaurant!!! How can we believe they are human when don’t care about other people arround them?! I couldn’t understand them…really couldn’t… I still cannot!!! I apologized to Farhad and Farhan…Prof. Mehmat asked the waiter to come and clean the table, I also went to buy new drink for them…Although at the beginning of the lunch time, it was a bit awkward, when Prof. Mehmat join us, he helped us have fun…He was really sociable, so we started to chat with Farhad and Farhand, asked them some question about Malay girls and saw the men know their language better than me!!” (5 March 2012)

“One day I went to the library to see Amir, but couldn’t find him, so in the middle of the library I saw Sedigeh!...Told me she is going home and is looking for company to reach the bus station…I told her I am going there, just come with me…we went toward the bus station, it was around five in the evening, the bus station was full of students, very crowded…all of them were talking, laughing, screaming….Sedighe told me to look for bus number one…I wasn’t familiar with bus numbers since most of the time I took a cab in front of the library, so started to ask other students do you know which bus is number one? None of them knows it, they also didn’t care about it, they saw I am foreigner and am not familiar with bus station. Also I am assisting Sedighe who is visually impaired, but they didn’t care…suddenly, I saw three buses stopped in the bus
station, I couldn’t imagine, all the students were in a rush to get into the bus…they started to shove each other to get into the bus faster!!! I was in the middle of them, beside handling myself, caring for Sedigeh…for a second I felt very bad about all of them, how they can be so uncaring and selfish…they were only thinking about themselves and we were not important at all….the dangerous part was the platform of the bus station which I was afraid of falling down because of the shoving by the students…I was really upset at them…honestly, like to beat them…I had a strange feeling!! …Had never experienced this before!!!! It was like a horror movie for me!! I couldn’t believe I am experiencing such moment with my own eyes…felt I am in a cinema and I am seeing very painful scenes of a movie!! For a second, I lost my mind, my identity, who am I, what am I doing here, I only heard the sound of students, shouting and trying to get into the bus, my eyes get wet, I felt want to cry, wondering, in the middle of crowd! Nahid, what if I were Sedighe, how would life be?! How this world is so cruel?! Suddenly, Sedighe shook my hand “Hey Nahid!!Where are you?! Can you see the bus number one?!”… Finally we could pass through the crowd and reach one of bus drivers, he told me he knew Sedigeh and will help her to reach home…I helped her into the bus and left the bus station…but deep down in my heart, I was really disappointed…I don’t know maybe if my research wasn’t about visually impaired I might also behave like those students…but it was really painful for me…I felt how society without sighted people’s care can be dangerous for the visually impaired!” (7 April 2012)

“One of my interesting experiences during data collection happened during the focus group discussion…I asked the participants of that session “What is your suggestion to you feel more comfortable in the library?” All the participants of that group were boys…one of the boys started telling something in Malay and the rest of them were laughing…I asked them “What happened? Share it with me too, I want to know it!” But
they were shy to tell me, so I persisted!! One of the boys told me, “Ok! We thought we need a sexy librarian in the library!!” They again started to laugh!! It was interesting for me, as their laugh were mixed with their shyness…I told him, “Ok, it is your idea, how about others?” One of the other boys asked him, how can we tell that a librarian is sexy?! He told him, “It is easy, through her sound, and we can figure it out! For example Nahid can be a sexy librarian; her voice is soft and kind….Yeah, she is sexy!!” So all of them started laughing out loud!! I was surprised, couldn’t control laughing too but also didn’t know what should I say to them?! I didn’t know how to confront it; I didn’t read anything in methodology books about such moments!! On one hand, it was interesting for me, till that time nobody told me my voice is sexy, but on the other hand deep down in my heart, I was afraid of it! How would my husband react if he knew about it?! I knew my husband; he is open-minded but honestly, for a second, I was afraid of it!!... I felt, maybe they have accepted me and felt comfortable with me to say such a thing….I have never forgotten that session on Friday afternoon….at the end of session, when coming back home, just was reviewing the session, I cannot explain my feeling, really, it was strange!!” (5 May 2012)

“To be more in contact with the visually impaired participants, I created a Facebook account….till that time I have no experience with Facebook since in Iran it is considered as cyber-criminal! Anyway, I added all of my visually impaired participants to my Facebook…It was also interesting for me to see how they post their comments or share their views on Facebook…I want to know also what are their topic of interest. I mean I like to know what is the real life of the visually impaired people! So, after I added them went to their pages and looked at their activities, and surprisingly saw they are like other sighted people, there was no difference. And they also created their own community to inform about disabled people’s activities at the University of Malaya!! When visiting the participants on Facebook, I observed that one of them wrote a very
deep and beautiful essay about sense of belonging...he explained his interest and feeling toward sense of belonging and the topic of the research!! It was very interesting for me to see that he thinks deeply and is open minded!! ....one day [two or three months after I finished my data collection] he started chat with me in Facebook...I got really happy, I really missed him, honestly I missed all of them...we started to chat with each other...He told me, “I missed talking to you very much”. He asked me whether we can see each other! I felt it is a good time! Why not! Ok, I accepted and asked him when the best time is for him? When I saw his sentence I felt uncomfortable!! He wrote “whenever you like my dear, I am free this afternoon and this weekend. Maybe we can go for a movie or something. But, you have to hold my hand... (I mean when in the cinema due to its darkness)”...first I felt maybe it is my misunderstanding and he doesn’t have any intention with this words, but when I saw he continued using words like dear and love icon, got it!! Oh! Oh!! I think he has fallen in love!!! Oh My God!!! My mind went blur!! What should I say to him? How should I handle this situation? What did I do? Why is he talking in this way? He is very young and I didn’t like to tease him! I was reviewing my interview session with him, I saw him four to five times!! How did I behave with him? Maybe it was my fault?! I was scolding myself!! I was really upset and confused!!...I felt the room getting too hot, and couldn’t breathe!!! Jumped behind of my table and opened the window, turned on the air condition!! I was thinking what to write, I didn’t have time so should make my decision, I should be careful about my words...so, I told him, you know I don’t like the cinema, it is too cold but we can go to drink coffee, I know a good place in Gardens...he accepted and I felt he is very happy but he never came to see me! Just one hour before our appointment he canceled it!!! I saw him again two or three times but he didn’t say anything, the same with me...I figured it out, to what extent you should be careful in qualitative research about the emotions of both sides...during the interview without prior intent you are
starting a relationship, friendship with your participants, but sometimes managing it can be difficult!! People get interested in each other and even have some deep feeling toward each other…in my case, my situation and feeling was clear but don’t know why such feeling arose for him? I am still curious about it…but what can I do?! Should just forget it, there are some questions in our life which never would be answered!!” (23 Jun 2012)

“I found the visually impaired students are very accurate in keeping time and being punctual. They are really sociable, really polite and tactful!! During the interview sessions, they always wear their best clothes…their clothes were ironed and clean…especially, the boys used perfume and it was very interesting to me!! The smell of their perfume filled the whole space!! Even their choices of clothes were marvelous for me! How did they choose their clothes?! How do they recognize it?!! Is there anyone who helped them or do they recognize it by their special smell? When I talked to them, I did not feel that they have any limitation at all!! Although they were younger than me, some of them at least ten years younger, I can say their views and ideas on some aspect of life were clearer than mine!! They had very clear ideas about their needs and how the library and librarian can cooperate with them to provide better services for them. Their patience and determination to continue their studies are admirable, despite all the barriers, limitations, and difficulties they face in reading printed materials”.

“The qualitative approach gave me a chance to hear the visually impaired user’s voices, their experiences and perceptions of the library environment, while at the same time, disclosing the library’s strength and weaknesses. My main worries was the librarians’ reaction to the results of the research. I am afraid that my research and the cooperation extended by these students in expressing some weaknesses of the library services through their perception could cause some difficulties for them at the end of this
research. The reality is that after my research, I shall be going back to my country but they will be here and will continue to use the library for their studies. They will also be in contact with the librarians and the research results may give rise to some difficulties for them. I hope the librarians or library authority understand that my research is not an attempt to judge their services or expose their weaknesses, rather it is merely listening to the experiences and perceptions of visually impaired students regarding the services the library provides them. The aim of the research is just to explore the hidden meaning of belonging among the visually impaired students in the library environment”.

3.11 Summary

This chapter provided information on the present research’s philosophical assumption, paradigm, application of theory in the research and research design. In addition, the chapter explained the data collection methods, its procedure, type of sampling and ethical procedure which has been applied in this study. The final section provided information about the data analysis procedure and trustworthiness techniques which used in this study.
CHAPTER 4

INTRINSIC CONDITIONS AND STUDENTS’ PERCEPTIONS TOWARD THE LIBRARY, LIBRARY STAFF AND THEIR PEERS

4.0 Introduction

This chapter describes the perception and experience of students who are visually impaired in the context of an academic library usage, and examines the conditions, which could foster or hamper their sense of belonging toward the library.

In this study, after analyzing the data, two main themes (intrinsic conditions and extrinsic conditions) extracted from the descriptions of the visually impaired students’ perceptions and experiences. So, we separate the themes into two chapters. This chapter will describe the intrinsic conditions and students’ perception. The description about the extrinsic conditions and their relationships with students’ perception is covered in chapter 5. This chapter presents the intrinsic conditions and visually impaired students’ perceptions toward the library, the librarians, and their peers, and the conditions, which could trigger or inhibit the sense of belonging amongst visually impaired users.

4.1 Data Analysis

The analysis of the content of the interviews and focus group discussions reveals two causal conditions: (i) intrinsic conditions; and (ii) extrinsic conditions. Intrinsic conditions are elements that come from within the individuals, and which contribute to their personal makeup, the sum of their experiences, attitudes, and perceptions that are expected to influence the amount of zest they view the library, which in turn would enhance or decrease their sense of belonging. In this context, intrinsic conditions comprised students’ attitudes toward the library and librarians. This consists of the perceived support from library governance; the extent of being consulted by the library
management about policies, perceived support and empathy from librarians, and the extent of librarians’ communication and awareness of the needs of the visually impaired users. Intrinsic conditions also include students’ attitudes toward their peers, in terms of perceived peer support, the extent of peer communication, and awareness about the visually impaired users.

Extrinsic conditions are environmentally generated, and are outside the student’s control. In this context, extrinsic conditions comprised the: (i) facilities (carrel rooms, volunteer readers, specialist librarian, special lab, special resource centre, special toilets); (ii) services (library website, accessible OPAC, information skill session); (iii) site location (access to public transportation); and (iv) interior layout of facilities (accessible routes with tactiles, access to elevator), which the library provides or arranges for visually impaired users.

The main objective in the analysis is to examine the common conditions, which might have an effect on visually impaired students’ sense of belonging toward the library. Each condition is extracted by interpreting the interviews and focus group discussions, and further supported by the respondents’ answers.

4.2 Intrinsic Conditions

In this context, intrinsic conditions comprised students’: (i) attitude toward the library and librarians, which consist of perceived library management support; being consulted by the library management about policy; perception of librarians’ support; extent of the librarians’ empathy; extent of librarians’ communication and awareness; and (ii) attitudes toward peers, which consists of perceived peer support; degree of peers’ communication and awareness. The discussions under the sub-topics will be covered in the following sections.
4.2.1 Attitudinal Factors Toward the Library and Library Staff

An individual’s attitude towards a specific concept is related to the extent that the concept meets one’s own values. Eagly and Chaiken (1993) defined attitude as a psychological tendency, which is illustrated by evaluating a specific entity with some degree of favour or disfavour. Pickens (2005) defined attitude as a mindset or tendency to behave in a specific way based on both the individual’s experiences, and his temperament. Therefore, attitude helps us to envisage how individuals see a situation, how they behave toward a situation and this includes their feelings, thoughts, and actions.

In the context of this study, we assume that the attitude of visually impaired students toward their social environment and its components can affect their sense of belonging and connectedness to the library environment. Sellers (1998) pointed out that one of the most important factors related to a disabled students’ connectedness to their educational environment is their attitude toward the context. The context in this study refers to the students’ perception toward support given by the library through its policies, through the library staff’s empathy, communications, degree of awareness and support from their peers through their interactions and communications.

4.2.1.1 Perception of Support from the Library Governance

A number of researches have suggested that there is a close relationship between perception and attitude, and one of the factors, which influence perception is the perceiver’s attitude (Lindsay & Norman, 1977; Roa & Narayan, 1998). Therefore, perception is a process in which individuals interpret and organize their sensations to something meaningful according to his/her previous experiences. Michener, Delamater
and Myers (2004) described perception as an understanding of the social world based on the data individuals get through their senses.

What a person perceives is the result of the characteristics of the environment of the perceiver and the perceived. This applies to the library context too, where perception is triggered by an individual’s experiences while interacting with the library policies and its staff. A positive experience and supportive policies would result in returnees and a sense of belonging (Oxoby, 2000). When a member feels that he/she is important to a community and perceives that the community tries to satisfy his/her needs, the member would feel a sense of belonging to that group (Osterman, 2000). Syed Jamal et al. (2006) found that when a member of a community feels that he has the capacity to influence the action and behaviour of their group or that he matters to the group, he feels like he belongs to that community. In this study, it was found that the library policy is one of the conditions, which creates a sense of belonging and a sense of being accepted in the library context among students who are visually impaired. The existence of library policies specifically for visually impaired library users makes them feel that the library system cares and is aware of their special needs, and that meeting their needs are important for decision-makers. Thus the disabled students felt that such feelings to be a motivation to them to use the library more.

4.2.1.1 Supportive Library Policies

According to literature on the sense of belonging, the students’ perception of being considered and accepted in an inclusive learning context is essential for them to feel valued. Such a feeling motivates them to achieve their educational goals (Osterman, 2000). The perceptions of students who are visually impaired towards the library policy are influenced by the physical facilities which the library provides them. They expressed that the physical facilities or equipment for visually impaired students in the
library environment give them the feeling that they are important to the library authorities, especially, when the provisions meet their needs.

“When you see that the library considers visually impaired students’ needs such as a special laboratory, screen readers or special printers in their policy and budget programs, you feel that they are very considerate toward disabled students and are caring.... considering facilities such as carrel rooms, volunteer readers board (which helps us find our volunteer readers) for visually impaired students show me that the library management considers and thinks about the needs of special students.” (Ahdiyeh, 22 years old)

“When the library considers our needs in the library plan, such as providing carrel rooms, a special lab or volunteer readers, I feel that we exist.... When I judge based on the physical facilities that the library provides for disabled students, yeah, I think the management has done good. We feel that we belong in this library when we find out that the library knows our needs and considers them in their allocation policy” (Nasir, 21 years old)

“Providing facilities such as carrel rooms, knowledge of librarian about how to communicate with disabled users or considering special courses for them the same as for non-disabled students in the library policy makes me feel accepted ...Providing extra time for borrowing books or giving certain privileges to students who are visually impaired to borrow books is one of the best policies in UM library...I think policies which pay attention to the comfort of visually impaired users in the library environment motivates them to want to come to the library more! ” (Laila, 23 years old)
“The awareness of the head of the library is very important in formulating policies, which consider the needs of the visually impaired or other disabled users in the library. I can say that the lack of awareness about people with disability among the library officers results in them not being able to understand the importance of creating facilities through appropriate policies...I think the library needs to revise their policies toward visually impaired users. I mean they should put more effort in finding out what we actually need, such as more volunteer readers or providing appropriate facilities for visually impaired students through policy changes... ...” (Yacob, 37 years old)

However, when the visually impaired students experience difficulty in the library, and find that the library policy fails to support their special situational needs, they will feel frustrated.

“When I encounter any difficulties inside or outside the library, I feel very sad and disappointed with the library policy; this library has been operating for more than 30 years and has long provided services for disabled students. I ask myself why they don’t consider the needs of visually impaired students in their policy...”

(Farhad, 22 years old)

In most instances, the visually impaired persons (VIPs) have positive feelings toward the library, but they have also specific areas of critical needs such to have a good action plan to ensure that they have sufficient volunteer readers. Their desire can be briefly summarized as the need for the library to allocate more budget to buy special equipment for the visually impaired, allowing a longer period for borrowing books; policies that clearly obligate the library to support their needs.
4.2.1.2 Budget Allocation

One of the items, which VIPs wish for, is to be considered in the library policies in terms of adequate financial allocation the purchase of more magnifiers. They consider the provision of such a policy as demonstration of the library’s commitment to treat their users equally.

“I wish the library would consider, as part of its policy, allocating some budget to buy some equipment for low vision students too. I also wish that the library could provide us with the opportunity to use more learning software as provided for the normal students.” (Nasir, 21 years old)

4.2.1.3 Extension of borrowing period

Visually impaired students were appreciative of the library policy that considers their need to borrow books for a longer period. Since the visually impaired users had to find volunteer readers to read the books for them and then convert the useful parts into audio or Braille, it becomes necessary for them to keep the books they borrowed for a longer duration. Although such a policy exists, the students feel that the loan period should be extended further.

“The library has considered in its book borrowing policy a longer time or extra time for disabled students to borrow the book or reserve the book for their use. The loan period provided is a ratio of one day for non-disabled students to three days for disabled students...The library provides some privileges for disabled students in certain cases but only if it is necessary!” (Amir, 31 years old)
“...So far the policies of the library are good, but maybe they should consider extending the time for visually impaired students to borrow the books, I mean give us more time...” (Hadi, 22 years old)

4.2.1.4 Policies that obligate library support

One of the main difficulties faced by students who are visually impaired in the UM library is the lack of support to look for books on the shelves for them. Library staff are not obligated to do this for them as there is no provision in its policy to indicate that this is part of their role or service for the visually impaired, who cannot physically access the books on the shelves, on their owns. The visually impaired students feel that this lack of a clear policy on this matter is a disadvantage for them and believe that the root of such a problem is the lack of any policy to enforce librarian support for disabled students.

“I understand helping disabled students is not the duty of librarians but I think it is because the library management didn’t formulate any policy to support disabled students...library policy plays an important role in the life of disabled students. .... For me, the most important thing in a library policy is to obligate the librarian to explain to us what they have done in providing for our information needs or with regards to our complaint or request, I mean give us feedback...considering such rules in the library policy in fact improves the level of our trust. Such a policy maintains the trust of disabled students towards the library and its staff” (Louvee, 28 years old)

“If I have the power to change something in the library, I would try to change some policies in the library to make sure visually impaired users receive the appropriate support from the librarian. I mean the librarian’s support to search
for books for them or to be in touch when we encounter any problem in the library…. The existence of such a policy that ensure that the librarian helps visually impaired students in searching for books and finding the books on shelves or any other problems we encounter in the library would be very helpful indeed” (Mostafa, 24 years old)

“…The library should consider some policies that help motivate or train librarians to increase their awareness about disabled users’ needs…” (Yacob, 37 years old)

Katsiyannis, Zhang, Landmark, and Reber (2009) noted that there is a lack of knowledge about regulatory mandates, which require the librarians to support disabled users. When there are no regulations or policies that require specific actions when serving the disabled, the visually impaired are inhibited from claiming or requesting for such basic service as the right to have direct access to resources that are beyond their physical capabilities to locate and obtain. Students who are visually impaired in this study found it difficult to request for such services from the library staff. In this situation they would indicate or complain about not getting the resources they need, and feel helpless knowing that the library staff are not obligated by any regulations to disburse such services to them.

4.2.1.5 Policy that considers and reaffirms VIPs as users

Students who are visually impaired perceive that a supportive regulation is an indication that the library considers their needs and confirms their existence as library users. On the other hand, the absence of disabled-friendly policy in the library is an indication of the lack of visibility of the visually impaired students to the librarians, lack of acknowledgement of their existence, and of being under-valued by library authorities.
For example, Mostafa (24 years old) complains about the lack of library policy for disabled students or programmes to provide them with the opportunity to be in contact with non-disabled peers.

“To be honest, I have never seen any mention of disabled students in the vision and mission of this library’s policy! I have never even seen any posters to inform the disabled students about facilities and services available to them. I haven’t heard any information about any library policies that state how the library can support us to reach our educational goals. The only thing that exists is about the existence of carrel rooms or Braille books… I have never heard from my seniors about any programs organized by the library that is designed to connect disabled and non-disabled students. So, I think the library can consider some policies or programmes to connect disabled and non-disabled students, it will be easier for us to find volunteer readers” (Mostafa, 24 years old)

4.2.1.6 Policy related to inter-library loan procedure

Visually impaired users believe that the lack of disabled-friendly policy causes some difficulties for them in terms of getting the resources they need through the inter-library loan services. They advocate that the library should consider their needs and try to make the procedure of inter-library loan more convenient for them.

“One of our difficulties in this library is with inter-library loans. We have to go to that college [where the book is held], bring the form and fill it in. Why should I do it by myself? Why don’t the library staff do this for us? I think library staff or officer should consider our disadvantaged situations and think about improving policies to help us and make our life easier .... We do not need much, but we do expect the library staff to understand our situation as there are certain things that
we cannot do by ourselves. So I think if there is such a policy that makes sure that library staff help get books we need through the inter-library loan services that would be great!” (Mostafa, 24 years old)

Table 4.1 summarizes in general the feelings and perceptions of the visually impaired students toward the library policies in general and how their attitudes act as triggers or barriers to students’ sense of being included and belonging.

Table 4.1: Themes Emerging from Attitudes Toward Library Policies and Feelings that Trigger Sense of Belonging

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Policies</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive library policies (perceived from services provided)</td>
<td>Special laboratories Screen readers Special printers Carrels Volunteer readers Interaction with staff Special courses Borrowing privileges</td>
<td>Being considered Being cared for Needs are supported Visible and exist as a user Being accepted Comfortable Being informed through communications and interactions</td>
<td>Positive attitude towards library authority (trigger) Accepted/ respected as a library member (trigger) Being valued as a member (trigger) Sense of belonging (trigger) Motivated to go to the library (trigger)</td>
</tr>
<tr>
<td>Special budget allocation policies</td>
<td>Magnifiers Special learning software</td>
<td>Inadequate Unequal</td>
<td>Excluded – (barrier) inequality of treatment compared to those for sighted students - (barrier)</td>
</tr>
<tr>
<td>Borrowing/reservation policies</td>
<td>Extended duration for borrowing</td>
<td>Being considered</td>
<td>Being valued (trigger) Being included (trigger) Feel like a legitimate member (trigger)</td>
</tr>
<tr>
<td>Written policies that obligate library staff to help out</td>
<td>To get books from shelves Inform on requests submitted Inform about outcome of complaints Help solve problems faced when in the library</td>
<td>Confused about contradictory policy of access Helpless to ask for help Disadvantaged Disconnected or not informed about requests or complaints Invisible as a member</td>
<td>Excluded from regulations that obligate– (barriers) Unequal in getting access to resources (barrier) Dependent on the staff’s goodwill and cannot expect more (barrier) Unable to put full trust in the library (barriers)</td>
</tr>
</tbody>
</table>
The Royal National Institute for the Blind (1997) highlighted the importance of a written library policy related to services for users who are visually impaired. The institute recommended that a policy dedicated to supporting the needs of the visually impaired users should be translated in terms of budget allocations for equipment, and clear roles and functions in a written policy. A written policy would be a promotional instrument to indicate commitment with clear key performance indicator for all library staff serving users with such disability. The lack of a clear policy statement is evident in UK libraries as 42% of library authorities in UK did not have any written policy. In Scotland, half of the library authorities did not have a separate written policy for visually impaired users and many did not even consider it as important.

In this study, the researcher could not find any special policy formulated for the disabled or visually impaired users in the UM library vision and mission statements. The researcher could find in the library brochure/ documentations about the number of carrels and the location of carrels for VIP’s use, but through observing the library website under facility icon, the researcher could not find any relevant information about the number of carrels for VIP’s or the location of their carrels.

In general, even though students who are visually impaired appreciated the services provided by the library, they cannot help in voicing out that they want more so that they get full access to resources (books both in the library and in other libraries) they need for their learning. They feel excluded for always feeling apologetic when asking for help to get books from the shelves or to get books, which they have reserved as they cannot expect this help from library staff. Therefore, they are compelled to request that
such service to be formally embedded in the written policies. Walking to the shelves and retrieving books needed is an act taken for granted by the sighted students, which the VIPs are unable to do, even though this is an impediment to their learning.

4.2.1.2 Perception about the Library’s Initiative in Consulting with VIPs

McCaskill and Goulding (2001) in their investigation of public library compliance with DDA (Disabilities Discrimination Act) emphasized the library's role of consulting with disabled persons about their needs. Consulting with disabled people is vital for libraries to ensure that the library is meeting their educational needs, and making assumptions about their needs should be avoided. Browell (1998) similarly stressed the importance of consulting VIPs so that services can be effectively designed and appropriated. Also, the International Federation of Library Associations (IFLA) suggested that consulting the VIPs help improve the quality of library services (Forrest, 2006).

McMillan and Chavis (1986) discussed the concept of belonging as a feeling as being accepted and being important to other group members in a community. He found that such feelings influenced members’ perception that their needs would be met through commitment and interaction with other group members. The individual’s perception and feeling about relationships and interactions within any system not only creates in them a sense of belonging but is also vital for their psychological well-being (Hagerty et al., 1992). Consequently, when individuals in a group see that they are important to the system and the system tries to meet their needs and cares about their difficulties, they feel like they belong and are accepted as members (Osterman, 2000).
4.2.1.2.1 Felt being a legitimate member of the library

The visually impaired students in this study feel that they are legitimate members of the library, and their basic educational needs are supported by the library just as the library takes care of the needs of other sighted students. They perceive that the library staff discuss and negotiate with them when they complain or indicate being dissatisfied. This readiness to meet, discuss and negotiate makes the VIPs feel like a legitimate member.

“The library staff discuss and negotiate about issues, when we expressed being dissatisfied or unhappy about a situation. This makes us feel like a legitimate member of the library... The library staff and visually impaired students like me meet about once in two months or when it is necessary. We sometimes go to the library officers’ office directly for these meetings. So, when you see such a chance to discuss and negotiate about your complaints or dissatisfaction, you feel better. We often discuss and then make a decision together..... Most of the time, the librarian comes to visit us and asks us about their services, so we can give our feedback to them. We give them our suggestions to improve the services. Most of the time they listen and improve the services but sometimes they don’t do anything!! Maybe it is difficult for them to fulfill it!” (Amir, 31 years old)

“I think the staff in this library are friendly because before this semester started, we had a meeting with the librarian and she asked us about the library services, which need to be improved. She also asked what more the library could do. You know, the library staff are very concerned people...” (Fahimeh, 23 years old)
4.2.1.2.2 Felt being respected and accepted

The visually impaired students appreciate being able to meet with the librarians. The students perceive the meetings provide evidence that the library respects them and this gesture makes them feel accepted. Loreman (2001) opined that an educational environment, which evokes a positive atmosphere, would make the students feel respected and accepted.

“...When the librarian comes and asks us if we face any problems in the library, we see this gesture as showing their respect to students who are visually impaired. I also suggested to my juniors to go and see the librarian and to give their opinions about how to improve the library services” (Farhad, 22 years old)

4.2.1.2.3 Felt being connected through meetings

Evans, Salisbury, Palombaro, Berryman, and Hollowood (1992) highlighted the benefits of being in an inclusive atmosphere, especially for disabled people, where members feel a sense of belonging and connectedness to the system and other members. In this study, Mehran and Rahman expressed that being consulted by the library makes them feel connected to the library, similar to other members, and this is important to them.

“We feel connected to the librarian as we sometimes meet them to discuss about ways to improve the facilities and services for users who are visually impaired. The librarians asked us, ‘what is good for you, what is the best way to you, what can be improved for you’...” (Mehran, 29 years old)
“I advised my juniors to keep in touch with the librarian and discuss with them about how they can help visually impaired students and form a good relationship with them…” (Rahman, 22 years old)

4.2.1.2.4 Able to increase library staff’s awareness

The visually impaired students in this study believe that through the meetings with the library staff, they were able to exchange opinions about the current services and facilities as well as to inform the library about their needs. They also feel that the meetings help to increase the librarians’ awareness of their special needs. For example, Hadi, Ahdiyeh, Yacob and Laila pointed out the importance of the meetings with the librarians, which make the librarian to be more aware about their needs, and to evaluate the quality of services which the library provides to students who are visually impaired.

“Our consultations at meetings are important; you know they can become aware of our real needs and listen to our opinion about their decisions. For example, they ask us to share carrels because there are insufficient carrels. Can you imagine, I bring my friends here [at the carrel] for discussion and study but the other person wants to record or concentrate on doing assignments? I think the library should find another solution as it is not practical…I will not feel comfortable and am unhappy if this decision is carried through!” (Hadi, 22 years old)

“If I am a librarian, before doing anything or implementing any services for visually impaired users, I will try asking them about their expectations. Then, I will implement it in the library. I would try to ask visually impaired users about
suitable screen reader software for them because if the library provides facilities which are not suitable for us, it doesn’t work” (Ahdiyeh, 22 years old)

“The library sometimes organizes a meeting and invites students who are visually impaired to find out about the kind facilities that they want. They want to collect more information about our needs...”(Yacob, 37 years old)

“I believe librarians should ask us to confirm if the courses or workshop they provide is suitable for us…the librarian can ask us about our needs, how do we study, to increase their knowledge” (Laila, 23 years old.

In this study, visually impaired students feel that the librarians are consulting them. They believe that the librarians mean well, and they are trying to improve services and facilities provided for the visually impaired users. These consultations take place through informal and formal meetings. Sometimes, the librarians go their carrels and enquire how they are and ask their opinions about the current services provided, and what can be improved. At other times, the librarians call for a formal meeting and on these occasions actual exchange of opinions can be effected. These meetings effect a positive perception of the library among the VIPs who were interviewed. They feel they are being regarded as legitimate members of the library whose needs must also be taken care of. They feel respected and accepted because their opinions had being heard, even though at times, the library did not implement the solutions they have proposed. They also feel connected to the library staff, and realize the importance of active communication. They believe that through these meetings, they can help to increase the librarians’ awareness about their special needs, and they also feel assured that they will be consulted before any policy is implemented, especially, those policies that affect
their use of the library. Table 4.2 summarizes the emerging themes with regard to students perceptions about the consultations and meetings, the feelings that have arisen due to these activities and how these feelings can trigger a sense of being connected and a sense of belonging.

Table 4.2: Themes Emerging from Attitudes Towards Interactions with Library Staff and Feelings that Trigger Sense of Connectedness and Belonging

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being legitimate member of the library</td>
<td>• Formal meetings</td>
<td>• Reassured as a legitimate member</td>
<td>• Sense of belonging</td>
</tr>
<tr>
<td></td>
<td>• Informal meetings at student’s carrels</td>
<td>• Connected as given the opportunity to give opinions</td>
<td>• Sense of being included/considered</td>
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<tr>
<td></td>
<td>• Discussions and negotiations about issues</td>
<td>• Feel better and fee; welcomed</td>
<td>• Sense of being accepted</td>
</tr>
<tr>
<td></td>
<td>• Coming to a consensus or an agreement</td>
<td>• Positive about library empathetic actions</td>
<td>• Positive about being able to influence decisions</td>
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<tr>
<td></td>
<td></td>
<td>• Being taken care of.</td>
<td>• Being respected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Being important to the library</td>
</tr>
<tr>
<td>Being respected and accepted</td>
<td>• Meetings</td>
<td>• Satisfied</td>
<td>• Sense of being included</td>
</tr>
<tr>
<td></td>
<td>• Consultations</td>
<td>• Respected</td>
<td>• Sense of being considered</td>
</tr>
<tr>
<td></td>
<td>• Discussions</td>
<td>• Accepted</td>
<td>• Feel respected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Feel important</td>
</tr>
<tr>
<td>Being connected through meetings</td>
<td>• Meetings</td>
<td>• Feel connected with making decisions in the library</td>
<td>• Sense of belonging</td>
</tr>
<tr>
<td></td>
<td>• Consultations</td>
<td>• Connected to library staff because of the interactions.</td>
<td>• Being included</td>
</tr>
<tr>
<td></td>
<td>• Discussions</td>
<td>• Feel important as their opinions count</td>
<td>• Being considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Being valued</td>
</tr>
<tr>
<td>Able to increase awareness</td>
<td>• Meetings</td>
<td>• Feel satisfied as they could express their needs</td>
<td>• Sense of being included</td>
</tr>
<tr>
<td></td>
<td>• Discussions</td>
<td>• Feel connected to the library to improve service</td>
<td>• Feel that the library is concerned</td>
</tr>
<tr>
<td></td>
<td>• Consultations</td>
<td>• Importance of their role to make library aware</td>
<td>• Being considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Happy because they are consulted</td>
<td>• Feel important</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Important to the library</td>
<td>• Feel connected like other library members.</td>
</tr>
</tbody>
</table>
4.2.1.3 Perception about the support given by Library staff

Perception is a process in which an individual interprets and organizes the sensation to something that is meaningful according to his/her previous experiences (Lindsay & Norman, 1977). Therefore, perception is not considered a result but is a process, which is formed after prolonged experiences and learning. Indeed, individuals organize and interpret information which is received by their senses. Hamilton and Creel (2011) identified two main factors which can affect an individual’s perception. These are internal and external factors. He categorized needs and desire, personal characteristics, and experience as internal factors. People with different levels of need and desire may perceive the same thing differently (Rao & Narayanan, 1998). They also observed that people with an optimistic personality perceive things in their environment positively in comparison with those with pessimistic personalities.

In this study, the visually impaired students regard the library staff’s support as essential. They consider the library staff’s support in different ways such as when searching for books from the OPAC; finding books on the shelves; be approachable when at the book shelves; supporting the visually impaired students by processing their inter-library loan requests; giving feedback to their requests or complaints. Some negative perceptions were also expressed, such as being afraid to ask the librarian for help or perceive that the librarians are too busy to spend their time to entertain their enquiries. This negative perception seems to spread through word of mouth amongst the community of visually impaired students.

What needs to be emphasised here is that visually impaired students view and perceive their surrounding world differently from those sighted. There are three main factors, which influence an individuals’ perception - physiological, psychological, and cultural factors (Hamilton & Creel, 2011). Being visually impaired create different situations in
approaching learning situations, as VIPs view their surrounding world, perceive it, and interpret their interactions with objects and sighted persons differently (Hatlen, 1996). In this situation, it is essential to be aware and to have the correct views about the VIPs’ needs.

So far, the VIP’s perception of librarians’ support have been grouped into two main categories: (1) those that are positive (friendly librarians, librarians support as a sign of being valued, and positive experiences); and (2) negative (lack of librarians’ support, no help in finding books, lack of support in the inter-library loan process, busy librarians, being afraid to ask for help, and word of mouth effect). The following sections will elaborated on these categories.

4.2.1.3.1 Positive perception Towards support given by the library staff

Social inclusion refers to a situation where students with disabilities feel accepted because of the support that they receive from all members of the environment (Stainback & Stainback, 1990). A sense of belonging refers to a condition when an individual feels that his needs are important for the social system and he receives appropriate support and care from other members of the group (Osterman, 2000). Therefore, social inclusion initiatives do lead to the targeted group feeling connected and belonging to their community. In both situations (inclusion and sense of belonging), appropriate social and emotional support is essential for disabled students. This support would make the disabled feel welcomed, valued, and accepted by both administrators and peers in the environment. The outcome of a warm and supportive environment would be increased interactions between members of a group in the environment as well as across groups (Solomon et al., 1997). Students who experience caring and supportive environments, feel more connected to the system they are in and thus feel a sense of
belonging, which in turn influences the frequency of their participation and interactions within the environment (Salend, 2004).

Moore (2003) also pointed out the disabled students’ success in an educational system, which is mostly related to the type of emotional and social support they received. Emotional support helps disabled students to use all their potential talents to reach their educational goals. To support such a feeling, an educational system should, beside optimizing the physical aspect, consider how disabled students are treated by the staff and peers in the system. In this study, we classify the visually impaired students’ positive perception toward the librarians’ support into three sub-categories according to frequent word expression: (1) friendly librarians; (2) librarians’ support as a sign of acceptance; and (3) positive experiences during interactions with the library staff.

4.2.1.3.1.1 Library staff who are friendly

Friendships are important in the developmental lives of humans. Through friendships, humans source out their emotional needs for being happy, moderating stress and helping them to solve problems (Aviles, Anderson, & Davila, 2006). McAulay (2005) noted that although users who are disabled appreciate the physical accessibility of an environment, a warm and friendly atmosphere is more important. Langeland and Whal (2009) stressed on the role of social support in individuals’ mental health and social integration, and suggested that in order to increase the disabled people’s participation in the community and to promote their sense of belonging, more attention should be given to the quality of social support. The support can be created through meaningful friendship with members of the environment.
In this study, visually impaired students have a different conception of friendliness due to their handicapped situation. Other than just having friendly conversations with peers and library staff, they view people who are friendly to be those who are willing to carry out tasks for them, which they are unable to do. This perception is, therefore, out of the normal context. Students who are visually impaired perceive library staff to be friendly when they are willing to find books for them, both from the OPAC and from the shelves, help them to overcome difficulties they face in the library, simplify library procedures for them, and call a cab or show them the way when they have difficulty in finding their way. According to a visually impaired participant, receiving such support creates in them the feeling of being cared for, and belonging to the library, and evoke in them a positive attitude toward both the professional staff and the support staff of the library.

“I think the ideal library for visually impaired students is where the library staffs are willing to help out! In such a library the library staff would help students who are visually impaired to find books or assign a particular staff to support visually impaired users. This would make our lives easier as we do not have to wait for our friends to help us to find books for us!” (Hadi, 22 years old)

“I once had a positive experience in the library. I was trying to locate two books and one of the books is located in the medical library. So to borrow the book I had to request for it using the inter-library loan service. At that moment I was afraid of using that service for the first time! But when I went to the counter, there was a lady librarian, who was very kind although she had a sharp tone of voice! What we called (he paused for a second) a bit irritating tone of voice but she was very kind. She helped me and told me to just leave my number and when the library
finds the book; her office would call me back. At that moment I felt I belong to this library!” (Nasir, 21 years old)

“The librarians are so friendly. They help me find my way in the library or the security guards at the library sometimes help get a taxi for me in front of the library. Also, the library staff helped to repair the lamp or fixed things which were faulty in my carrel” (Yacob, 37 years old)

“…Friendly for me means if I ask any help from the librarian or support staff and they really cannot do anything, they would tell me why they cannot help me and this feedback makes me feel they want to help me and not they are unwilling. I mean sometimes they help me not because it is part of their job!” (Mostafa, 24 years old)

4.2.1.3.1.2 Library staff who are helpful

Visually impaired students feel that the librarians’ support creates in them a feeling of being valued, respected, and welcomed in the library. Such feelings make them feel accepted in the library. These feelings that characterize sense of belonging are feelings of being valued, integrated, and accepted in their community (Anant 1962; Hagerty et al., 1992, Cothran & Ennis, 2000). Cothran and Ennis (2000) noted that one of the main factors, which save disabled people from isolation in an educational system, is the acceptance and welcoming feeling which is created by the teachers in the educational context. Therefore, we assume that the library, as an educational system, its library staff could play an important role in creating such a feeling, and this is indicated by four participants.
“Librarians can value us by helping us to find our way in the library when we are lost or find books for us” (Hadi, 22 years old)

“... For me, a welcoming library is a place in which the library staff tries to help us and if we have any problem. We could approach the librarian to help us and they would do their best to help us. In fact, when the library staff help to search and find books on shelves for us, this shows their respect to those students who are visually impaired” (Amir, 31 years old)

“I don’t have the experience of calling the librarian to help me find a book. I just know Encik Habib, who is responsible for the carrels. He helped me so much and explained to me where the carrel is and what is inside the carrel or where is the rest room...” (Firooz, 21 years old)

“...When we ask for some help, and the librarian voluntarily helps us without asking any question, without any resentment, we feel the librarian respects us as visually impaired users!” (Yacob, 37 years old)

The visually impaired participants disclosed some conditions, which strengthened their sense of belonging to the library. For instance, they expected the librarian to give feedback on the status of their request, which they are keen to know. They indicated feeling of losing trust in the librarians if they are not given any feedback, especially after a long wait.

“... We need a progress report from the librarian regarding our requests or complaints. It is most important because if they don’t tell us the progress we lose trust in them! For example, sometimes we complain about the Internet access problems and send the complaint to them. The librarian told us to just wait. Even after two or three month we still have not received any feedback from the
librarian on why the server is down for such a long time. We want to know what progress or action has been taken by the librarian. Such behaviour causes us to lose trust in the library. This lack of being informed decreases our trust level!” (Loupee, 28 years old)

The visually impaired students indicated that besides the physical facilities which the library has provided, social support will help to make them feel they belong to the library.

“The only thing we expect from the librarian is just to be nice and gentle with us and committed to us whenever we ask for their help so that we are satisfied with such help … Yeah we know the library has already provided us a lot of facilities such as the carrels but, we still need a supportive system to help us find books on the shelves. Such a supportive system will help us feel like we belong to the library...” (Nasir, 21 years old)

4.2.1.3.1.3 Library staff who provided positive experiences

Attitude is shaped by feelings, like, dislike, thoughts, and ideas, which we have about other people and things that we see and experience in our daily lives. Attitude is therefore the product of emotions, which are triggered from our experiences with people and things. In other words, attitude is the result of the socialization experience that a person experiences in life (Loreman, 2001). The visually impaired students in this study shared their good experiences in the library, which help to shape their positive attitudes and, consequently, their sense of inclusion as a member of the library community (Oxoby, 2009).
“I remember the day I forgot to bring my carrel key! I just waited outside the carrel. One of the librarians came and asked me why I am standing outside the carrel? Do I want to register for a carrel? I told them that I am a new student and I had forgotten to bring my carrel key. He reassured me and helped me and opened my carrel with the master key.” (Ahdiyeh, 22 years old)

“The library staff are also helpful. When I want to return a book, they showed me the counter or open my carrel door when I forget to bring my carrel key, I only need to ask the staff who is in charge of the carrel and he quickly opens the door.” (Hadi, 22 years old)

“...My blind friends explained to me that, when they have lost their carrel key, they asked the librarian’s helped them and was given a duplicate key or something like that...” (Fahimeh, 23 years old)

“When I came to the library to register for a carrel, the librarian who was in charge for carrels helped me a lot! They showed me how to go to my carrel, what is inside my carrel. One day, the librarian even guided me to my carrel when there was a renovation” (Atifah, 22 years old)

“If I have any problem, I go directly in front of my carrel room where the counter is located and ask for some help. The library staff gave their contact number so that I can contact them if I have any problems in the library.” (Mehran29 years old)

Table 4.3 gives a summary of the results obtained from students’ attitude towards the support given by the library staff and the feelings of sense of belonging or inclusion triggered.
Table 4.3: Themes Emerging from Attitudes Towards Support Given by Library Staff and Positive Feelings Expressed

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library staff who are friendly</td>
<td>• Make friendly conversations.</td>
<td>• Cared for</td>
<td>• Sense of belonging</td>
</tr>
<tr>
<td></td>
<td>• Search for books in the OPAC and at the shelves</td>
<td>• Supported</td>
<td>• Being considered</td>
</tr>
<tr>
<td></td>
<td>• Solve problems when faced with troubled situations</td>
<td>• Helped</td>
<td>• Being helped</td>
</tr>
<tr>
<td></td>
<td>• Simplify processes/procedures</td>
<td>• Positive attitudes</td>
<td>• Being informed of situations</td>
</tr>
<tr>
<td></td>
<td>• Show the way in the library.</td>
<td>• Friendly</td>
<td>• Being treated with kindness</td>
</tr>
<tr>
<td></td>
<td>• Help with inter-library loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Call for taxi when needed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Repair faulty items in the carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cared for</td>
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<td></td>
<td>• Supported</td>
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<td></td>
<td>• Helped</td>
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<tr>
<td></td>
<td>• Positive attitudes</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>• Friendly</td>
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</tr>
<tr>
<td>Library staff who are helpful</td>
<td>• Help to finding the way in the library</td>
<td>• Lost without help</td>
<td>• Valued as a member</td>
</tr>
<tr>
<td></td>
<td>• Help when they are in trouble</td>
<td>• Welcomed</td>
<td>• Positive attitude towards staff</td>
</tr>
<tr>
<td></td>
<td>• Help find books</td>
<td>• Helped</td>
<td>• Being accepted</td>
</tr>
<tr>
<td></td>
<td>• Guided to the borrowing counter</td>
<td>• Informed</td>
<td>• Being respected</td>
</tr>
<tr>
<td></td>
<td>• Explain about carrels and other facilities</td>
<td>• Guided</td>
<td>• A welcoming place</td>
</tr>
<tr>
<td></td>
<td>• Guide to the rest room</td>
<td>• Respected</td>
<td>• Belong to the library</td>
</tr>
<tr>
<td></td>
<td>• Inform regarding progress of complaints</td>
<td>• Satisfied</td>
<td></td>
</tr>
<tr>
<td>Library staff who provided</td>
<td>• Open carrel door during an emergency</td>
<td>• Reassured</td>
<td>• Being valued</td>
</tr>
<tr>
<td>positive experiences</td>
<td>• Make duplicate keys when keys are lost</td>
<td>• Considered</td>
<td>• Being respected</td>
</tr>
<tr>
<td></td>
<td>• Enquire after their condition</td>
<td>• Grateful</td>
<td>• Being accepted</td>
</tr>
<tr>
<td></td>
<td>• Help return books</td>
<td>• Satisfied</td>
<td>• Being considered</td>
</tr>
<tr>
<td></td>
<td>• Guided to carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Act immediately upon receiving SOS from VIPs</td>
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Charles (2005) and Taylor (2005) emphasized the important role of frontline staff or librarians in the library in providing a welcoming atmosphere and being empathetic toward users with disabilities. Forrest (2006) advised that based on the IFLA guidelines, libraries should consider appropriate and organized support for disabled users. This applies especially to frontline librarians who play an important role in increasing disabled users’ interest and willingness to come and use the library (Forrest, 2006).
4.2.1.3.2 Negative perception towards support given by library staff

One of the main barriers which hamper visually impaired students from feeling positive towards the library is the negative perceptions and experiences while interacting with the library staff. This can be triggered by situations where they feel that the library staff are not helpful enough, especially in delivering a much-needed service to the disabled students. Some of the VIPs felt they were not helped in getting the books they need either within the library premises or from other libraries that have held the books. Those who expressed these negative feelings are more likely to perceive the library staff as being too busy to render help and, therefore, were afraid to ask for help. More often than not, this perception is the result of the negative or discouraging comments from their peers.

4.2.1.3.2.1 Library staff who do not help find books

Peters (2007) opined that an inclusive educational system is more than just providing for physical integration, but is also giving adequate support in terms of flexible curriculum knowledgeable staff, and welcoming attitude. Mounir A. Khalil (2008) stated that providing appropriate emotional support for those who have less self-confidence may help them to improve the attainment of their educational goals.

In this study, the visually impaired students felt that the failure to help them to find the books they need can affect their attitude towards the library, and their psychological well-being.

“... I cried many times in this library! Yes, I cried many times, especially at the time, when I need the assistance of a person but my volunteer was not in the library and I couldn’t ask the library staff to help me. I was really depressed! At
that time I was under pressure, my supervisor had asked me to complete my report and I needed the assistance of a person to find books for me. I am so sorry, but I have to tell you from my heart. I am seriously sorry to say it but the reality is that sometimes the library staff refuse to help! I don’t like to blame them. Maybe it is because they lack manpower. I mean maybe the number of library staff is not adequate to help us out. But you know we can’t help but need their help!”

(Sedigeh, 29 years old)

McAulay (2005) stated that to provide a welcoming and encouraging atmosphere in the library for disabled students, physical barriers whether tangible or perceived, have to be removed. According to these students, finding books on the shelves is one of their main challenges. They said that they can find the books in OPAC using the screen reader software, but the main problem is retrieving the books from the shelves. Therefore, such a situation, the library staff’s support in getting the books needed from the shelves or sometimes even searching for the book, an essential service the library should provide.

“...you know, I can find the books on the web and check if it is available with my screen reader software, but I cannot take the book on my own! We need somebody to help us to get the books. It is one of my main challenges in the library! Honestly, I feel very good in the library and I am satisfied with the cooperation of my friends, library staff and all the people around me but I think the library can make it more conducive for us by helping us find books on the shelves...”

(Mehran, 29 years old)

“When we need to borrow books, we have to ask our friends. The librarian didn’t help us! Maybe they want us to be independent or maybe they want to make us socialize more with non-disabled students and seek help by ourselves” (Ahdiyeh, 22 years old)
“Mostly in terms of finding the reading materials as I mentioned before the librarian couldn’t find the books but it could be more helpful if they can give more assistance to find the books we require! In that way, we don’t need to go upstairs to the bookshelf to find the books with our volunteer readers or friends…” (Amir, 31 years old)

Some of the visually impaired students voiced out that they are not satisfied with the support given by library staff, especially, with regard to finding the books on the shelves or the slow response to their requests.

“… In the case of the book, the library staff reactions are too slow. I mean finding books are very important for us! If there wasn’t any friend to help us to find the books it would difficult for us to ask for help from other peers. So the only option we have is the library staff… (Yacob, 37 years old)

“…Let’s say some volunteer readers help me to find the books, I feel Ok with this but when we search for a book but cannot find it on the shelf, I can say it is one of my biggest difficulty! And since I need the book, I fill the form and ask the library staff to help find the book and we waited for three working days and if they didn’t give any response, we go to the counter to enquire….the library staffs are friendly and if they were free they helped me to fill the form” (Louvee, 28 years old))

One of the suggestions from, both the visually impaired and low vision participants in this study is to consider having some librarians on each floor to assist them in finding books on the shelves. They believe that in order to make full use of the library resources, the library authorities should formulate disabled-friendly policy to obligate librarians to help them, in ways that are most needed.
“… If I could change something in the library, I would allocate some librarians to each floor to help the users so that we don’t need to go to the first floor to request for help from the counter. They can consider putting a small desk on each floor with a librarian in charge of helping to find books on the shelves and it is useful for both disabled and non-disabled people. Through my ten times coming to the library, I just saw the librarian at the shelves only once to ask for help!…The second thing I wish to change is the policy of the library to make it compulsory for librarians to search and find books for us or any other issues related to helping the visually impaired.” (Mostafa, 24 years old)

The lack of support from library staff to find books has created a negative attitude amongst some of the visually impaired students and this has made them reluctant to seek help from the library staff.

“I am not satisfied with the support given by some library staff. For example, if I want to search for something like a reference book and ask them to help me, they told me they don’t know and I have to search for it in the Library OPAC. Based on my experiences, I think they don’t like to help us. I asked them how to search for the book and they just told me to go and search in the OPAC! So my assumption is they will never help me… Librarian support is very important for us to make library usage easier” (Farhad, 22 years old)

“I don’t know why I don’t like to ask help from the librarians. Maybe it’s because of my experiences. I have an experience during my first visit to the library when I asked the librarian to find a book but he told me you can search for it on the website!..(he stopped for a second) also when we search for a book and it is not on the shelf, we ask the librarian where it is and they answer, we don’t know maybe another student borrowed it and did not return it! But I think librarians
must know it, it is their duty! Why they say such a thing? What are they doing in the library!! I think librarians have to help disabled students to search for books, help find the books” (Rahman, 22 years old)

Low vision students also have different types of difficulties in getting the library staff to find books for them. As Sacks (2010) explained, most students with low vision appear sighted, and this is often not recognized by their sighted peers and the library staff.

“... We don’t need much. Just that there are certain things that we cannot do it by ourselves. For example, when the book is on the top of the shelf, I cannot see it so I have to pull all the books down one by one to find the book I want, so I think it is ridiculous. Sometimes I feel bad because to find my own books I unintentionally mess up the library shelves, because there isn’t any person to help me! This would not happen if the library staff help me.” (Mostafa, 24 years old)

4.2.1.3.2.2 Library staff do not help out in inter-library loan requests

The visually impaired students indicated that they need the library staff to simplify their inter-library loan requests procedure, as the current procedure involves filling in the request forms themselves.

“...one of our difficulties is about inter-library loan from other libraries within UM. We have to go to that library, take the form by ourselves and bring it here. So it is quite difficult for us because it is far, we need transport! Why don’t the library staff help do such a thing for us? I think we need some policy to make sure library staff are obligated to support us in such cases!” (Mostafa, 24 years old)
“...Sometimes the library staff don’t like to help us. They tell us that we don’t have any support, you can ask your volunteer readers to search for the articles or books for you. This caused us some difficulties especially in inter-library loan! Sometimes we have to complete our assignments but cannot do so because we still have not received the books we requested!” (Yacob 37 years old)

4.2.1.3.2.3 Library staff who are too busy to help

The statements by some of the visually impaired students indicate their negative perception towards the support given by the library staff. They perceive the librarians to be constantly busy and do not have the time to help them.

“... Some of the librarians are very kind and helpful but some of them... I don’t know... just don’t like to help us! Because sometimes like for me, I cannot see very much but I can find books on OPAC by myself so after that I have to go to the shelves but sometimes oh, I don’t know how to locate the book on the shelf so I came back to counter and ask, Sir can you search this book for me? Then they just tell me oh, sorry I am very busy or they just tell me I don’t know! Sometimes they also spend only two minutes to search for the book and then came back and tell me that the book is not there! Maybe somebody has borrowed it! Because of that, I think it is better not to ask them for help and it’s better to struggle by myself.... I think it is mostly related to their attitudes” (Mostafa, 24 years old)

“The library staff are helpful. When they see that we are visually impaired, they help us to find our way but in searching for the books or finding books on the shelves, they are not helpful... The staff told us that we have to search for it with our volunteer readers. Also, they seem so busy that I don’t feel comfortable asking them to help!” (Laila, 23 years old)
According to Hatlen (1996), visually impaired people perceive their surrounding environments and their interactions with people differently from sighted people. Therefore, at the time they asked for help, the library staff may seem busy but the visually impaired users cannot really be sure because they cannot see. Such situations can evoke negative perceptions toward the library staff.

“... We know helping visually impaired students is not the duty of library staff and even when they do something for us it is on their free will! For instance, if suddenly we need to fill in any form, we go directly to them and ask them to help us. If they are free they will help us, if not, we cannot blame or scold them why they don’t like to help us because this is not part of their duty...It is difficult to judge since we don’t know their job specifications. Maybe they have and may be they don’t! But if helping us is made compulsory as part of their work, it will be better!” (Amir, 31 years old)

“Sometimes librarians reply to our needs a little late. Maybe they are too busy or maybe they think such complaint is just a small matter. Maybe our request for help is routine for them! ... Nevertheless if we encounter any unexpected form to fill in, we can go to the counter and ask the library staff to help us fill the form but if the library staffs are free, they will help. If not, we cannot blame them because it is not part of their duty...I believe library staff are friendly and treat us well but the problem is that we cannot request for help from them easily because they have their own formal duties” (Louvee, 28 years old)

We can infer from the “maybe” responses, that these visually handicapped students are trying to have a positive attitude towards the negative reactions they sometimes get from the library support staff. This way of justifying the library staffs actions or non-actions is quite usual, and this might even help to reduce their discontentment.
4.2.1.3.2.4 Being afraid to ask for help

The students’ fear in the library could be termed as an anxiety (Mellon, 1986). Bostick (1992) introduced his Library Anxiety Scale, which consists of five dimensions of library anxiety. One of the barriers is the barrier with the library staff. According to Bostick, barriers with the staff are related mostly to the users’ perception that librarians are not approachable or too busy to assist them.

Visually impaired students indicated being afraid to ask for help from library staff and perceive that the staff might get angry when they ask for help. They believe that librarians have a lot of things to do. Also, since searching for books is not their duty, the students avoid asking for such assistance unless they desperately need help.

“I never thought of asking the library staff to help me find books, you know, I think it is not their responsibility. I am afraid that if I ask for help, maybe they are going to feel hey, why you are asking me to help you...Since finding books is not their job, I think probably they won’t help me! Also, I have never heard any of my blind friends asking for help from library staff” (Hadi, 22 years old)

“...You know I am very afraid of the librarian, (she laughs) afraid of them. They are like a boss. I am afraid they might get angry at me. Maybe because of their face you know I have low vision and can see a little!” (Laila, 23 years old)

“... Maybe I am very afraid to ask for help from the librarian or complain about something! Let me ask you a question, If I give you a chocolate and you ask me more does it reflect my greediness? I mean some librarians think so. If I complain about the librarians’ lack of support to find books for me on shelves, maybe they think that I am not thankful for the other facilities or services, which the library is already providing for us!” (Ahdiyeh, 22 years old)
Sacks (2010) observed that people with low vision may look normal and often get into trouble when requesting for help. Because of this, most of them are very shy and easily frustrated. He found that, sometimes, low vision individuals have more difficulties in comparison to the visually impaired people. Indeed, they have low self-esteem. One low vision participant in this study expressed his feelings of being a person of low vision and the difficulties he faced when he asked for help.

“...I have heard from many of my visually impaired friends who ask the librarian easily at the floor for help but when I compare their situation with myself, see sometimes my situation is worse! I mean do I as low vision student have the right to ask for help since I look like a normal student, sometimes I feel shy to ask for help, I afraid maybe the library staff would refuse to help me!...”

(Nasir, 21 years old)

4.2.1.3.2.5 Word of Mouth Effect

According to the visually impaired students in the University of Malaya, there is a mentor system in which seniors help the juniors. The seniors are the visually impaired students who are pursuing postgraduate studies and they help the visually impaired undergraduates to familiarize themselves with the UM environment as well as the library. Because of this dependence of the juniors on their seniors, negative attitudes and perceptions might be transferred to the juniors through word of mouth, as indicated by two respondents.

“Yes! I remember my senior’s (a student who is higher level than me) words, telling me that in the library, I will need my friend’s help to find books. My senior said my friends are not the library staff! So based on my senior’s word, I automatically knew that I have to ask my friends to help me not the library staff”

(Hadi, 22 years old)
“... I remember during the first year of my degree programme, I didn’t know how to search for books. So, I always asked the library staff for help, but when I asked my seniors, they told me it is better for me to search on my own and after that I never ask library staff for help anymore. So, after that I avoided going to the counter and if I couldn’t find my books, never mind, I will try to find them again next week… ... also one of my suggestions to my juniors would be to never ask the library staff and be dependent on them. Try to be independent and ask for help from volunteer readers or friends because the librarian, what can I say! Some of them are very kind but some I think are very unhelpful, I think so!!” (Mostafa, 24 years old)

Table 4.4 summarizes the emerging themes related to attitudes of the visually handicapped students towards the support given by library staff expressed in terms of the negative feelings. The negativism prevents them from seeking help from library staff.

Table 4.4: Themes Emerging from the Attitudes Towards Support Given by Library Staff and the Negative Feelings Expressed

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library staff who do not help find books</td>
<td>• Unavailability of volunteer readers.</td>
<td>• Feel depressed.</td>
<td>• Sense of being excluded (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Refusal /reluctance of library staff to find books on shelves/</td>
<td>• Cried.</td>
<td>• Negative attitude towards library staff (barrier)</td>
</tr>
<tr>
<td></td>
<td>• lack of library staff support to find books.</td>
<td>• Challenges in the library.</td>
<td>• Sense of not being valued (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Inability to find books on shelves.</td>
<td>• Careless librarian.</td>
<td>• Sense of not being considered (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Lazy library staff.</td>
<td>• Not being considered.</td>
<td>• Sense of being considered/ valued (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Negative experiences</td>
<td>• Lack of interest in asking for help</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Friendly library staff and friends who help.</td>
<td>• Unwillingness of library staff to help</td>
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<td></td>
<td></td>
<td>• Negative attitude</td>
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<td></td>
<td></td>
<td>• Bad feelings.</td>
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<tr>
<td></td>
<td></td>
<td>• Good feeling/feel satisfied</td>
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<tr>
<td>Lack of support in inter-library loan procedures</td>
<td>• Transport to other library branches.</td>
<td>• Have difficulty in coping</td>
<td>• Sense of being excluded/ Sense of not considered</td>
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<tr>
<td></td>
<td>• Fill out inter-loan</td>
<td>• Feel library staff not</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Library staff who are too busy to help</td>
<td>Being afraid to ask for help</td>
<td>Word of Mouth effect</td>
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<tr>
<td>- Library staff refuse to find books on OPAC or shelves.</td>
<td>- Afraid of angering library staff.</td>
<td>- Influenced by seniors</td>
<td></td>
</tr>
<tr>
<td>- Inability to find books on shelves.</td>
<td>- Feel library staff are too superior entertain request for help.</td>
<td>- Senior advise to avoid asking for help from library staff.</td>
<td></td>
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<tr>
<td>- Perceive library staff to be busy.</td>
<td>- Unfriendly faces.</td>
<td>- Avoid asking library staff.</td>
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<tr>
<td>- Cold treatment by library staff.</td>
<td>- Afraid that library staff might think they are greedy/ ungrateful.</td>
<td>- Reluctant to be dependent on library staff.</td>
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<tr>
<td>- Library staff spend very short time to search books needed.</td>
<td>- Feel shy to ask.</td>
<td>- Perceive library staff to be unhelpful.</td>
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<tr>
<td>- Library staff unwilling to fill in the forms.</td>
<td>- Afraid of being rejected.</td>
<td>- Negative attitude toward library and library staff (barrier).</td>
<td></td>
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<tr>
<td>- Library staff delay in responding to requests.</td>
<td></td>
<td>- Avoid asking for help (barrier).</td>
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<table>
<thead>
<tr>
<th>forms.</th>
<th>willing to support.</th>
<th>(barrier)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Reluctance of library staff to help.</td>
<td>- Uncaring less library staff</td>
<td>- Sense of not being valued (barrier)</td>
</tr>
<tr>
<td>-Incomplete assignments.</td>
<td>- Not being considered</td>
<td>- Negative attitude towards library staff (barrier)</td>
</tr>
<tr>
<td>- Delay in receiving requested books on inter-library loan.</td>
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From the responses of the visually impaired students who participated in this study it can be summarized that the support of the library staff is important in the educational
pursuits of the visually impaired students. This support is not solely confined to face-to-face encounter/conversations, but also involves in ensuring that the visually impaired students have access to the books and references they need for learning. This could involve searching and locating the books on the shelves or searching for books that cannot be located. The availability of such support would motivate the visually impaired students to frequent the library, increase their library usage so as to effect an enjoyable experience for them (Jurkowski, 2006; Halvorson, 2006).

4.2.1.4 Library Staff’s Empathy

Empathy is defined as the deep understanding of other people’s feelings, thoughts, and emotions (Birdi & Wilson, 2008; Aldridge & Rigby, 2001; Masten, Morelli, & Eisenberger, 2011). Empathy is important in successful social interactions and the lack of it would cause social dysfunctions (Eisenberg & Miller, 1987; Hakansson & Montgomery, 2003). Rogers, Claw, and Kash (1994) described the important role of the front-line librarians in creating a sense of empathy with their library users. Birdi and Wilson (2008) pointed out that librarians have to learn how to show their sense of empathy to library users, especially those who are excluded or belong to minority groups. Hence, we can conclude that the sense of belonging towards a library can be created through empathetic relationship or interaction between the librarians and the visually impaired users.

There are two main conditions which can affect illustrate the librarians’ degree of empathy towards the visually impaired users: (1) Informing them about any library renovations (which may impede the VIP’s mobility in the library), and a sense of understanding. Indeed, visually impaired users expect the library staff to understand their situation and to keep them informed about any changes to the library layout; and
(2) the librarians’ knowledge about VIPs’ disability and their abilities. Visually impaired students expect librarians to understand exactly how they feel and the limiting circumstances for them in the library.

4.2.1.4.1 Library staff not communicating about Library Renovations

It is very important that visually impaired users are informed about changes in the library environment. This information can effect a sense of being safe amongst the visually impaired users (Moore, 2003). When the library staff fail to inform them of such changes the visually impaired users, will perceived the staff as not being empathetic.

“...Last week I came to my carrel with my visually impaired friend when suddenly we saw the librarian angrily calling us don’t go, don’t go there! We didn’t know what was happening! We are visually impaired and cannot see, we didn’t know there was renovation taking place! How could we know! I don’t know why they didn’t inform us about the renovation...!” (Rahman, 22 years old)

“One thing which annoys me in the library is when the library does some renovations! So imagine the situation if the librarian didn’t tell me about the renovation and I came to the library and it was the lunch break and workers leave all their stuff on the floor! I mean those woods and nails are dangerous for us! Luckily the last time the library had renovation, I was with my volunteer reader and she told me to be careful! ” (Hadi, 22 years old)

“... We expect the librarian to inform us about any new changes or plans for renovation. You know, sometimes there is some renovation in the library to change or restructure the location of something in the library. At that moment we
find it quite difficult to work and to move around! Sometimes we are already familiar with the old layout structure and changes in the layout cause us to get confused and we need time to get ourselves familiarized with the new layout. Like just now, I think they have put a carpet in front of the room because now there is some renovation for the staff office. So when I came to the library suddenly felt what is this? Why have they put such a thing in front of my carrel room and have blocked my path!! Why they didn’t inform us about the renovation! So I asked somebody and they told me there is renovation (he stopped for a second). Now after a few days, I feel quite convenient with the new layout. I am sure if I asked the librarian why they didn’t inform us, they will say so sorry, we forgot to tell you!” (Louvee, 28 years old)

“I just came to the library and asked what happened? Oh, some renovation! The librarian never informed us. Maybe they think it is not very important like a fire drill. I believe such a thing (renovation) should be informed because we can feel by ourselves the smell or smell of fire!” (Mostafa, 24 years old)

“...The problem is that they never inform us about changes in library layout. For example this current renovation, they could tell us no need to come to the carrels for two weeks, because we need to do some renovation! Sometimes I feel depressed. Anyway I have to face such problems and have to come to the library.” (Sedigeh, 29 years old)

4.2.1.4.2 Library staff who do not understand

Understanding is part of the feeling of empathy. When the library staff show that they understand the physical conditions of the visually impaired students this would improve
the VIP’s perception that the library staff are empathetic towards them and this can effect the sense of belonging in them.

“.....Library staffs can show their respect and value to me by understanding that I am blind! Understand my situation. Sometimes, I put my keys on the table but because I am blind, I cannot see, right! So, I didn’t know where the keys are. I forgot to take my keys and leave the room. So I expect the library staff to understand why I left the keys. I didn’t do it purposely....When I return books late; I hope the library staff understand my situation. I am blind and cannot really look at the receipt; I mean the paper they give me which indicate when I should return the book. I don’t have any problem with the fine one hour or one day fifty cent, it is Ok for me! But I expect them to understand my situation and not blame or scold me, I don’t break rules purposely!” (Hadi, 22 years old)

“...I have no problem paying a fine when I return books late, which is my mistake, but when the library staff blames and chides me as being careless, I get upset! They should understand my situation! The receipt is in print format, sometimes since we cannot read or there isn’t any person to read it for us or because there isn’t any other alarm for overdue of book we return the books late! We know there are such rules and don’t need the libraries staff to scold us! ” (Amir, 31 years old)

“We understand the library staff’s situation. We know they have to serve all students and if they help us it is just based on their willingness to show their empathy to us” (Louvee, 28 years old)
“When we come across library staff who understand my situation, that we need volunteer readers to read the books for us and they would extend the borrowing time from one day to three days, I feel very proud of them!” (Amir, 31 years old)

“As you know I have low vision. I remember the time I was looking for a book in the shelves under BF but couldn’t find it on the shelves. So I went downstairs and asked the library staff for help. She told me go to the second floor, there are library staff who are re-shelving books on shelves. It was one of my worst experiences in the library! I don’t know, I don’t want to point fingers at who is right or who is wrong. Anyway, I asked the person who was shelving the books where the book was as I couldn’t find the book. Maybe I sound a bit rude! So that person guided me to the BF classification area and showed me the book. He told me why I didn’t see the book on shelf? Can’t I see! Of course I cannot see; I have low vision! Maybe I look like a normal person but I cannot see all things, my vision is very low. At that moment I was so disappointed! They should show some respect! They need to understand us! Yeah that is very important, sense of understanding…” (Nasir, 21 years old)

“I feel there are some problems that we face in the library, which have arisen because of the lack of understanding of library authorities and lack of empathy. I mean may be it is difficult for the library staff to put themselves in our situations and understand our needs. Maybe library staff are too busy, or maybe there are some policies, financial or bureaucracy problems, which hamper library authorities from fulfilling all of our needs” (Yacob, 37 years old)

From the feedback given by the visually impaired students, it is obvious that they face trials and tribulations when using the library. If they are fortunate, they receive the help they need in getting the books from the shelves or not being scolded when they leave
their belonging on the tables or returning the books they borrowed late. As other human beings, VIPs want also a little understanding about their conditions, and not to expect from them the same level of ability or awareness as other sighted students. Even when they voiced out their complaints, they were apologetic, always trying to rationalize the actions of the library staff, giving reasons why the library staff treated them (on some occasions) in an unpleasant manner. Perhaps, they realize that they might be asking for too much help and attention, which might be beyond the role of the front-line library staff. Table 4.5 summarizes the themes emerging from the visually impaired students’ perception about the empathy of the library staff.

Table 4.5: Themes Emerging from Attitudes Towards Library Staff’s Empathy

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library staff not communicating about library renovation</td>
<td>• Sudden encounter with renovations.</td>
<td>• Feel confused/surprised.</td>
<td>• Negative perception towards library and library staff (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Not being informed about changes to the library layout.</td>
<td>• Depressed.</td>
<td>• Negative perception towards library staff’s empathy (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Workers who leave dangerous tools around in the library.</td>
<td>• Inconsiderate library staff.</td>
<td>• Sense of being excluded/not being considered (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Not being informed of library renovations.</td>
<td>• Feel annoyed/uncomfortable.</td>
<td>• Sense of not being valued/respected (barrier)</td>
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<tr>
<td></td>
<td>• Blocked from entering their carrels.</td>
<td>• Feel hampered.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Feel confused/surprised.</td>
<td>• Feel insecure/alarm about dangerous tools left around.</td>
<td></td>
</tr>
<tr>
<td>Library staff lack of understanding.</td>
<td>• Forgetting to take keys left in carrel rooms.</td>
<td>• Expect library staff to understand their conditions.</td>
<td>• Negative attitude toward library staff (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Returning books late.</td>
<td>• Discomfort and anger at being scolded.</td>
<td>• Sense of not being considered/valued (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Scolded by library staff for returning books late.</td>
<td>• Feeling upset.</td>
<td>• Sense of being included/respected (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Library staff who are willing to support.</td>
<td>• Perceived lack of empathy/understanding among library staff.</td>
<td>• Feel as legitimate member of library (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Library staffs who extend borrowing period.</td>
<td>• Feel disappointed.</td>
<td>• Sense of being excluded (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Lack of awareness of low vision students’ need, or visually impaired people’s limitations/situations.</td>
<td>• Not being understood.</td>
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<td></td>
<td>• Busy library staff.</td>
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<tr>
<td></td>
<td>• Negative perception towards library and library staff (barrier)</td>
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<td></td>
<td>• Negative perception towards library staff’s empathy (barrier)</td>
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<td></td>
<td>• Sense of being excluded/not being considered (barrier)</td>
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<td></td>
<td>• Sense of not being valued/respected (barrier)</td>
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4.2.1.5 Communication with Library Staff

Communication is a fundamental aspect of human life through which people exchange information, thoughts, beliefs, and emotions (Hoyeong Jeong, 2011). Indeed, communication is a useful method for integrating people into the community (Sheafor & Horejsi, 2006). Broady-Preston, Felice, and Marshall (2006) defined communication as meaningful relationship, which would result in better understanding of the customers’ needs by the service providers. Manohar (2011) stated that communication can be divided into two components—verbal, and nonverbal—and the interplay between them has a huge impact on the quality of communication.

Communication is an important tool that can help people with disability to adjust and become comfortable in their environments (Iwakuma, 2002). Librarians are often found to have little knowledge on how to communicate or handle the disabled users using the library (Broady-Preston, Felice, & Marshall, 2006) and this has resulted in librarians being perceived as a barrier by the disabled users (Holmes, 2008). The library can help by liaising with the academic section in the university that deals with the disabled, as well as with local or national disabled people associations so that the quality of service provided can be improved (Taylors, 2005).

In this study, the visually impaired participants expressed their feeling on the extent of communications they have with the library staff. They explained that the frequency and quality of their interactions with the librarians is important to them. They believe that communication gives them the opportunity to feel comfortable, and more ready to request for help. Visually impaired students wish to have friendly communications with library staff. In the context, issues concerning the library staff’s tone of voice, manner of greeting, and the type of words used during conversations are important. Based on
these issues, the visually impaired participants can gauge the library staff’s willingness or unwillingness to help them.

4.2.1.5.1 Friendly conversations

Duckett (2004) pointed out that library user’ expected librarians to be knowledgeable, friendly and polite and provide services at the agreed time. Although information transfer is more important for librarians when compared with the quality of the relationship and the attitude of librarians, the users might have a totally different view. Indeed, the relationship with the librarians is more important for library users. In this study the participants indicated that the amount and the quality of a librarian’s communication is important for them to feel like they belong to the library.

“To belong to the library, I like the library staff to be concerned about me. For example, if I ask for their help, the only thing I expect from them is to at the very least give me a smiling face! That is the first expression which I like to see and the second one is to help me whole-heartedly” (Nasir, 21 years old)

4.2.1.5.1.1 Library staff’s tone of the voice

The communication process between people involves the use of both verbal and non-verbal communication channels. The non-verbal channels consist of facial expressions and tone of voice, both of which can reflect the communicators’ feelings, emotions, and attitudes. Although visually impaired persons cannot see the facial expression of a person they are communicating with, they can perceive an individual’s expression from the tone of his voice (Laplane & Ambady, 2003). Boas, Ferreira, and Cristina (2012) pointed out that in a communication process, the tone of the voice of an individual can convey a great deal of information about the individual’s attitudes, emotions and
opinions. They pointed out that many of the visually impaired teachers are unaware of the power of their voice, and they do not know the extent to which their voice influences their professional performance.

The visually impaired participants in this study indicated that they can gauge the library staff's degree of willingness to help them based on the tone of the voice.

“... The ideal library for the visually impaired is a place I guess, which has friendly library staff. When you talk to the library staff, they speak to you softly. You know, because we are blind we can listen, listen to your voice, so we can recognize and define whether someone is friendly or not. We recognize their expressions through the tone of their voice, from the way they talk to us when we ask a question. For example, we ask a question about keys. I forgot to bring my keys or I return the books quite late, and I want to borrow more books, so from the librarians’ tone of voice or words, which they use we can guess their reaction. When library staff answer our questions with one or two words such as Yes, No, Ummm, I don’t know, it does not sound friendly to us!. So through their tone of voice, the way they talk, how willing they are to help and their reactions to our request for help, we can gauge the level of their friendliness” (Hadi, 22 years old)

“... For me, a library staff’s‘ tone of voice is Ok but the majority of my visually impaired friends are sensitive. So maybe if the staff speaks a little loud, the visually impaired student thinks that he is shouting. I think library staff should learn how to talk nicely and in a friendly manner to visually impaired students” (Fahimeh, 23 years old)

“Ok! Let’s be frank! Yes there are some library staff who I think talk nicely in a friendly manner- their voice creates in you such a nice feeling! Having good
communication with the library staff is very important for us because it helps us feel comfortable to ask for their assistance. Good communication makes the library staff our friend!” (Yacob, 37 years old)

4.2.1.5.1.2 Library staff’s greetings

Communication also creates first impressions about a person, event or incidents (Hamilton & Creel, 2011). The problem with first impressions is that sometimes people fail to change their previous impression even after undergoing new experiences during subsequent communication. Such feelings cause people to start making assumptions based on their own perception of other people. In fact, telling other people about such impressions or feelings can perpetuate either positive or negative attitudes upon the receiver.

In this study, greeting is one of the conditions in the library context, which can affect the visually impaired users’ perception and assumption of library staff’s friendliness. When the library staff greet, they create a welcoming atmosphere and evoke positive experiences as a result of making the VIPs feel comfortable or at ease. In this situation, the VIPs would have no hesitation in requesting for help when they encounter any difficulties in the library. Johnson (2001) explained that library users expect the library staff to be friendly, smiling, and interacting actively with users. Indeed, when the staff are friendly, the disabled users would feel more at ease and feel being welcomed in the library.

“To have an ideal library we need friendly library staff who would greet us with a ‘hi’ or ‘salam’ [peace]. Sometimes they come to our carrels and ask us how we are, what are we doing? We as visually impaired students don’t always need help;
we need to be talked to. Once we feel more comfortable with the library staff, we could talk to them, and we can easily ask them for help if there was any problem” (Fahimeh, 23 years old)

“I feel that the library staff respected me because they make friendly conversations with me. This makes it easier for me to request for more help! I mean when I ask for some help, the library staff is willing to help without any umm or resentful questions!... when the library staff greet me, for example, they would ask me how I am and that they have not seen me for a long time. This shows (to me) that the library staff are familiar in handling visually impaired students” (Yacob, 37 years old)

“Some of the library staff are friendly. I mean when they see me in the library, they would greet me both inside and outside the library. Sometimes the library staff bring us some food to eat or maybe during the festival celebration or on Hari Raya, they bring us something to eat” (Amir, 31 years old)

“Actually, every morning when I come to my carrel, Encik Habib comes and sees me, So I can talk to him and he can help me” (Firooz, 21 years old)

“Imagine a situation where you have not come to the library for a long time and the library staff would enquire from our peers posing questions such as why this person doesn’t come to the library? Has he graduated? Or imagine the moment you have finished your studies in UM and suddenly encounter a problem and come to the library and the librarian would pay attention to you!” (Louvee, 28 years old)
4.2.1.5.1.3 Library staff who converse

Tinto (1993) claimed that library users expect librarians to be friendly, welcoming, and to familiar with different sources of information in the library. Also, when an inclusive atmosphere is in place, people who are disabled would feel welcomed and comfortable. Such atmosphere helps the disabled persons to feel more comfortable in requesting for help. In this study, the visually impaired participants expressed their feeling towards the library staff who talk to them, and whom they perceive as being friendly, and one who motivates them to come to use the library.

“Friendly for me means when I go to the library and talk to the library staff, they would also talk to me in a pleasant manner... I can say that library staff on the first floor are quite good. When I went there they would talk to me, asking me how I am? And what do I want? Have I come to pay fees? They are talkative! But the library staff at the counter was less talkative! I believe the library staff at the counter have to communicate with all users; maybe they think their job is only scanning the books [for charging/discharging books”] (Mostafa, 24 years old)

“... Library staff can show that they accepted us by improving the quality of their communication with us. They could be more talkative and friendly! They should at first learn how to communicate with visually impaired students. Secondly, they should know how to motivate the visually impaired to come to the library.... I am not comfortable asking the library staff to help me. As I mentioned before, the library staff always to be seem very busy and cannot spend time with me. I think librarians should be more talkative and friendly! I am not afraid of the librarians but I think librarians are afraid of us (she laughs)!” (Laila, 23 years old)
4.2.1.5.2 Library staff who interacts

Lack of opportunity for social interaction is one of the barriers that disabled students face (Library of Congress, 2000). Since 1980, social interaction has been considered as one of the foundations for the movement towards inclusive education. The social contact that disabled students experience through the inclusion initiatives, provides them with the support to maintain their right as users in the library environment.

In this study, the visually impaired participants indicated that interacting with library staff is very important for them. They believe that close relationship with library staff would increase the success of getting assistance, as well as improve their social skills.

“... I don’t have any negative attitude towards the library staff; I would like them to interact with us, to see us, to talk with us, only this! Active interactions help make us feel more comfortable to ask for their help” (Farhad, 22 years old)

“I hope the library staff come to talk to me. That way, maybe I can approach them to have conversations, and our conversations is not limited to library services only but could talk about other things so that our relationships and understanding of each other improves. I hope the library staff would approach me, but maybe they are afraid to come to talk to us because they don’t know how to talk or discuss with us” (Amir, 31 years old)

“The librarian should learn how to interact with us as it will help us feel more comfortable to ask help from. Good interactions make us closer to them and make it easy for us to request for help... I prefer a friendly librarian. For example, for me a friendly person is a person who makes jokes” (Atifah, 22 years old)
“... Umm, friendly library staff are those who know how to interact and communicate with students who are visually impaired, who consider our sensitivity, our feelings and talk to us in a friendly way!” (Sedigeh, 29 years old)

The participants in the research believed that the degree of a librarians’ communication, and the quality of their interaction, can be related to their degree of awareness about disabled people, and the appropriate skill of communicating with them.

“... Many of the library staff are not familiar with visually impaired users, maybe because of their lack of knowledge or they are too busy to be in contact with visually impaired users. Some of them don’t have any interaction with the visually impaired.... Library staff should learn to listen to the visually impaired. Not only listen but also fulfill their request (he laughs). Librarians should interact, should have good interaction with visually impaired users in the library” (Yacob, 37 years old)

“Some of the library staff are very helpful and speak in a friendly manner but some of them don’t. It is human behaviour... Friendly to me means they listen to us if we have any request or needs. ... I never nag about such a thing. I keep it to myself, never mind, I don’t like to tell them about such things” (Sedigeh, 29 years old)

In situations where the visually impaired people perceive the library staff to be not interacting with them, then this would result in avoidance behaviour. The visually impaired students avoid interacting with the library staff and exclude themselves from the library activities.

“I think visually impaired students should try to keep in touch with library staff to make them aware what interactions means to the visually impaired. We are
sensitive people and library staff should respect us and talk to us properly”
(Rahman, 22 years old)

“.... I don’t have any reason to contact the library staff or to interact with them to help me, I prefer to talk with my senior. I mean I feel more comfortable to talk and ask her[senior] to help me. If I couldn’t solve my problem by myself, I’ll ask my friends and if they cannot, the last option is the library staff” (Ahdiyeh, 22 years old)

The responses from the visually impaired participants indicated indulging in conversations and interacting with the library staff. They felt that the library staff treated them well. However, they wanted more support to feel respected, included, and have a sense of belonging to the library. Occasionally, some of them might have experienced unpleasant situations such as library staff’s unwillingness to get or find books for them or being chided when they were late in returning books or when they misplaced their belongings in the library. Most of the visually impaired users know their boundaries and thus, they would only approach the library staff for help as a last resort or when they cannot find their friends or student volunteers to help them. They perceive that part of the problem to the lack of awareness amongst the front-line library staff on how to handle the disabled users. This lack of awareness could give rise to negative impression and perception amongst the visually impaired users towards the library and the library staff.

Charles (2005) emphasized the role of front-line librarians’ in creating a friendly atmosphere for communicating with the disabled users. She pointed out that although front-line librarians do not have the power to formulate any policy, they can still help in creating a positive impression, of the library, and thus will motivate disabled users to use the library again and again. Woo (2005) noted that one of the main criteria in
evaluating library service quality from the users’ perspective is the behaviour of the librarians’ such as friendliness, politeness in communication, willingness to assist users and keeping to their promise for timely services. Woo believes adherence to these quality attributes, helps to make the users feel secure and safe.

Table 4.6 summarizes the emerging themes arising from visually impaired students’ perceptions of the extent of library staff’s communication with them and how it can affect their feelings of being included, and their sense of belonging.
Table 4.6: Themes Emerging from Attitudes Towards Communication with Library Staff

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library staff’s tone of voice</td>
<td>• Communicate in soft tone of voice.</td>
<td>• Happy and have a sense of belonging</td>
<td>• Sense of belonging (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Reply with smiling faces.</td>
<td>• Feel welcomed</td>
<td>• Positive attitude towards library staff (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Answer questions using just one or two words.</td>
<td>• Touched by friendliness.</td>
<td>• Feel being accepted/respected (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Staff willing to help.</td>
<td>• Nice and warm feeling.</td>
<td>• Sense of not being valued (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Talk loudly.</td>
<td>• Feel comfortable</td>
<td>• Negative attitude toward library staff (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Good communication.</td>
<td>• Feel embarrassed</td>
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<td></td>
<td></td>
<td>• Feel angry</td>
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<td></td>
<td></td>
<td>• Feel afraid.</td>
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</tr>
<tr>
<td>Library staff’s greetings</td>
<td>• Staff greetings.</td>
<td>• Feel welcomed</td>
<td>• Sense of being included/considered (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Salutations upon meeting (Hi/Salam).</td>
<td>• Feel comfortable</td>
<td>• Sense of being respected/valued (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Friendly conversation.</td>
<td>• Respected by library staff</td>
<td>• Sense of being accepted/important (trigger)</td>
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<td></td>
<td>• Staff willing to help.</td>
<td>• Feel easier to ask for help.</td>
<td>• Positive attitude towards library staff (trigger)</td>
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<tr>
<td></td>
<td>• Staff bring gifts during festivities.</td>
<td>• Cared for or thought of by staff who are aware of those with disabilities.</td>
<td></td>
</tr>
<tr>
<td>Library staff who converse</td>
<td>• Library staff who talk in a pleasant manner</td>
<td>• Feel welcomed.</td>
<td>• Positive attitude towards library staff (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Talkative library staff</td>
<td>• Feel good</td>
<td>• Sense of being included/considered (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Quality conversation with library staff</td>
<td>• Feel accepted</td>
<td>• Sense of being respected/valued (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Busy library staff</td>
<td>• Feel uncomfortable</td>
<td>• Sense of being accepted/important (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Staff do not spend time with the disabled.</td>
<td>• Reluctant to seek help from library staff.</td>
<td>• Positive attitude towards library staff (trigger)</td>
</tr>
<tr>
<td>Extent of interactions with library staff.</td>
<td>• During conversations.</td>
<td>• Feel included</td>
<td>• Sense of being excluded (trigger)</td>
</tr>
<tr>
<td></td>
<td>Conversation with staff about other things not only library services.</td>
<td>• Feel comfortable in asking for help.</td>
<td>• Sense of being valued/important (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Library staff who make jokes.</td>
<td>• Helping staff to understand</td>
<td>• Sense of being accepted (trigger)</td>
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<td></td>
<td>• Library staff who consider their sensitivity.</td>
<td>• Feel close enough to library staff to ask for help.</td>
<td>• Sense of being considered (trigger)</td>
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<tr>
<td></td>
<td>• Listen to library user’s request.</td>
<td>• Feel staff are friendly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reluctance of library staff to interact/converse.</td>
<td>• Perceive library staff to be busy/people to be unaware of the disabled users.</td>
<td>• Negative attitude towards library staff (barrier)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel library staff are afraid of them</td>
<td>• Sense of being excluded (barrier)</td>
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<td></td>
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<td></td>
<td>• Sense of not being accepted (barrier)</td>
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4.2.1.6 Awareness amongst Library Staff about Disabled Users

Based on the LIS literature, there are two main barriers for disabled people - physical barrier, and attitudinal barrier. Attitudinal barriers are mainly related to the perception of library staff towards the disabled users. It is suggested that attitudinal barriers in comparison with physical barriers, create more difficulties for disabled people and hamper the library from adopting good practices for disabled users (Forrest, 2006). Library staff are often unaware of the needs and limitations of visually impaired students using the library. This unawareness may contribute to lack of empathy and reluctance in helping disabled users. One way of increasing awareness and empathy is through training (Pinder, 2005).

Increasing library staff’s awareness is one of the conditions, which visually impaired students request for in order to make them feel more comfortable in the library. They believe that knowledgeable librarians could create a welcoming environment. Indeed, when librarians are aware about their disabled users, they would understand the special needs of these users and will make efforts to service these needs. This gesture in turn will make the disabled feel respected, and valued and subsequently effect in them the sense of belonging to the library.

“If library staff want to help us, they have to know more about our difficulties! When they are aware about us and our needs, we will feel more comfortable to ask for their help!” (Atifah, 22 years old)

The visually impaired students believe that the best way to increase librarians’ awareness of their needs is to include issues related to them and their needs into the library policy, and to make it compulsory for staff to attend disability awareness courses or workshops.
“I think library staff need to be trained as it is important for them to learn how to handle and make library sources more accessible for the visually impaired students. The library should create some policies to require library staff to increase their knowledge! Sometimes I feel that the library authorities are not aware about the needs of the visually impaired or that their needs are not important for library authorities! Maybe my judgment is wrong, maybe the problem is bureaucracy of the library or financial problem” (Yacob, 37 years old)

Yacob, like most respondents tried to rationalize and justify why library staff might not be aware of the disabled users in their library. Library staff’s awareness will be discussed further under two sub-sections; awareness about the disabled and their disabilities; and awareness about assistive technology used by visually impaired students.

4.2.1.6.1 Library staff’s awareness about the disabled and their disabilities

A librarian’s awareness plays an important role in creating a welcoming environment. When the library staff are aware about disabled students using the university library, they would be more willing to help create an easily accessible and friendly environment for them (Pinder, 2005). Taylor (2005) also emphasized the role of disability awareness amongst library staff in order to familiarize themselves with the different types and nature of disability. He suggested increasing staff’s awareness through training.

Participants in this study emphasized the importance of awareness of disabled users among the library staff. Staff who are unaware would pose problems for the VIPs, as they perceive that library staff that lack awareness tend to be less willing to
communicate, interact or help the VIPs. Staff that lacks awareness would also be less likely knowledgeable on how to provide an effective supportive system.

“Actually, I think one of reasons that most of the library staff don’t like to talk with visually impaired students is that they are not familiar with the different types of disabilities and not so much because they are busy or do not have the chance to interact” (Yacob, 37 years old)

“I think some of the problems faced by visually impaired students in the library are mostly related to the lack of awareness amongst the library staff. For example, if the library doesn’t provide any supportive system for the visually impaired users to search, find and retrieve books from shelves it is because the staff do not have enough knowledge about visually impaired people, their capabilities or their limitations... For an example, if the library doesn’t inform us about renovations carried out in the library, they don’t understand the problems that will be faced by those of us who are blind or of low vision” (Mostafa, 24 years old)

The participants suggested that library staff should increase their knowledge by attending courses or seminars on disabled people and their disabilities.

“...If you can propose in your thesis, please suggest that the library should consider a one-day workshop on disability equality that is compulsory for all library staff to attend to increase their knowledge. It should be compulsory for all the library staff!” (Sedigeh, 29 years old)

“...When they [library staff] don’t have awareness it creates some problems for us as they don’t understand our request, which frustrates us! For example, when we ask for the screen reader software or need a special information skill session
for visually impaired students, I see the librarians being very hesitant about it! They were wondering how blind people can learn IT skill!” (Yacob, 37 years old)

“The library should cooperate with disabled associations, which can provide personnel who can teach library staff about how to communicate with visually impaired students and understand what their needs are. The library staff should learn that when they want to explain to us a feature of something, for example about a ball, they have to bring the ball in front of us and then explain it to us. Ball is something like this! We need to touch things to know what the shape of it is! ... I myself think one reason that library staff don’t care about us is because we are a minority! So they don’t think it is important to know more about us!” (Fahimeh, 23 years old)

“For me the perfect library is a place where the library staffs have good knowledge about the needs of disabled students... because sometimes we request item A but suddenly they bring us B! I mean bringing us different things! That is why I am telling you, library staff have to improve their knowledge....!” (Louvee, 28 years old)

“...Uhhh, I think the library staff do not know enough about disabled students! How can I explain it to you? Uhm, for example they don’t know how we as visually impaired study, what they can do to make it easier for us to find reference or other source of information” (Farhad, 22 years old)

When library staff are more aware about people with disabilities and their special needs, the participants in the study indicated that they will be amazed and proud, and this, in turn would result in making them feel that they matter and that they belong to the library.
“Yes, it is important for library staff to know more about the disabled and their disabilities! You know, most of the library staff are not aware but if they are aware I would feel so amazed and proud of them! When library staff show that they are aware, it shows us that they have tried to know us and understand our needs” (Amir, 31 years old)

4.2.1.6.2 Library staff awareness about assistive technology

Cahill and Cornish (2003) investigated awareness amongst library staff on the assistive technologies used by visually impaired users. They pointed out that the library staff need to receive training about how to operate the technologies and how to teach this to the visually impaired users. This knowledge is essential, especially, amongst front-line staff (Charles, 2005). The staff concerned should be given relevant training and be asked to attend in-service or special courses (Koulikourdi, 2008).

In this study, the visually impaired participants talked about the lack of awareness about assistive technologies for the disabled people amongst the library staff they have encountered. They also gave suggestions on how to create this awareness.

“*We cannot expect the library staff to know everything about our assistive technology. They are only human! Most of the library staffs, who taught us how to use library resources, services or search in OPAC or END Note, were aware about assistive technology but not a hundred percent! I understand their situation; it is quite difficult to understand the speech screen reader! I think the librarian needs to get trained about this*” (Amir 31 years old)

“I believe library staff should know how to use the screen reader programmes such as JAWS or Magnifiers” (Rahman, 22 years old)
“Let’s say, for certain software such as screen reader software, the library staff do not have enough knowledge because they don’t use it frequently and I know it is difficult for them!” (Louvee, 28 years old)

“The library staff are not aware about the screen reader software and how we can use it to read the websites, how we can use it to navigate our keyboards in web pages. So, I think we - I mean visually impaired people can teach and cooperate with library staff to increase their knowledge! We can explore it together!” (Mehran, 29 years old)

The lack of awareness of library staff about assistive technologies seems to evoke negative attitudes amongst respondents towards the library and the library staff. To the participants, if the library staff are not aware about assistive technologies, then they would not pay enough attention to maintaining.

“When I meet library staff who are not aware about assistive technologies for visually impaired students, not familiar with screen reader software or the format of materials which is more suitable for us, in such a situation I would ask myself - what kind of a library is this? But what can we do!” (Ahdiyeh, 22 years old)

“... Uhm, I think the library staff are not aware about high technology available for visually impaired people. I mean there is a lack of knowledge about assistive technology and because they don’t know about it, they don’t think about maintaining it! Also, the staff have difficulties when they have to teach visually impaired students to extract information with their screen reader software! I have attended information skill sessions and seen the librarian teach visually impaired students using the same methods as the non-disabled. The librarians don’t know how to use the voice of the screen reader! So, it is very difficult for visually
impaired students. I can say that we ... have to be creative and have innovative skills to use and adjust ourselves because we have more experiences in using the screen reader and the voice of screen reader!” (Yacob, 37 years old)

The important role of librarians’ disability awareness in all dimensions such as knowing the nature of disability, different types of disability, and new technologies, which can assist them in the library, had been discussed in the literature (Taylor, Baskett, Duffy, &Wern 2008; Taylor, Duffy, & England, 2009). It has been highlighted that having awareness would increase the library staff’s understanding about the real needs of disabled people, and how to meet these needs. Therefore, equality amongst users in libraries can only be achieved when library staff know more about disabled users.

For the visually impaired participants in this study, the more awareness the library staff have about the visually impaired library users, the better their experience in the library. When the library staff are better aware of the visually impaired users’ needs, they are more likely to consider introducing appropriate policies, allocating special budget, allocating a special librarian to take care of the VIPs’ needs, improving on the quality of their communication, and a better understanding, generally, of VIPs. The participants suggested that front-line library staff [both support and professionals] could be sent to participate in disability awareness courses, workshops or seminars. We can conclude that knowledgeable library staff help in creating a welcoming environment, which makes the visually impaired students feel comfortable, considered, valued, respected, and a sense of belonging the library.

The researcher also observed that the front-line library staff were not sufficiently aware on how to give guidance to students who are visually impaired. On one occasion, she observed that when one of the visually impaired students requested for help to guide him to the lift, the librarian put his finger on the backbone of the visually impaired
person and guided him by pressing his finger! The correct way to guide a visually impaired person is to give his elbow.

On another occasion the researcher was discussing with a professional librarian about the negative perception of visually impaired users regarding the impending library policy of requiring the visually impaired students to share carrels. She was upset and a little angry about their negative perception towards the library facilities despite all the efforts that they (the library) have made done to satisfy them. Her tone of voice during the discussion was such that even the researcher could sense her anger! I asked her, “Are you angry?” But she said, “No, I am not angry!” If the researcher, a sighted person can perceive through the conversation the anger reflected from the librarian’s face and tone of voice, it is obvious this can also be perceived by individuals who are visually impaired. The Library Manager said to me, “Why you only ask them (the visually impaired) about the library? Why didn’t you ask us? They are not normal and cannot judge!” I was really shocked by these words! I tried to make her see that the visually impaired students are normal, but different. They see the world in different ways and we are discussing about diversity and we should respect their ideas! So, if they are not fully satisfied with the library services and voice their opinion, the library should take heed and consider making improvement to its services and facilities.

Table 4.7 summarizes the themes emerging from respondents’ perception about the extent of library staff awareness about the disabled and their disabilities.
Table 4.7: Themes Emerging from Attitudes Towards Library Staff Disability Awareness

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Library staff awareness about the disabled and disabilities | ● Library staff lack of interest to communicate.  
● Lack of supportive system to search and find books.  
● Library staff not informed about library renovation.  
● Library staff lack of awareness.  
● Lack of care from library staff.  
● Doubts of library staff about the ability of the visually impaired.  
● Cooperating with other associations handling the disabled.  
● Compulsory workshops about the disabled for library staff.  
● Awareness of library staff                                                                 | ● Concerns about library staff lack of awareness about visually impaired people’s capability and limitations.  
● Disappointed that staff shows lack of understanding.  
● Sad that library staff do not understand the real needs of VIPs.  
● Feel frustrated.  
● Feel they are a minority.  
● Feel unimportant.  
● Feel amazed.  
● Feel proud.  
● Feel important.                                                                 | ● Negative attitude towards library staff (barrier)  
● Sense of being excluded  
● Sense of not being considered (barrier)  
● Sense of not being accepted/ valued (barrier)  
● Sense of not being important (barrier)  
● Sense of being isolated (barrier)  
● Positive attitude towards library staff (trigger)  
● Sense of being library legitimate library member (trigger)  
● Sense of being included/ considered (trigger)  
● Sense of being valued/respected (trigger)                                                                 |
| Library staff awareness about assistive technology | ● Lack of awareness about assistive technology.  
● Lack of awareness about high technology software.  
● Unfamiliar with screen readers.  
● Using the same approach when teaching visually impaired students.  
● Cooperation with library staff                                                                 | ● Convinced that library staff need awareness training.  
● Library staff need to increase their knowledge  
● Feel upset/disappointed  
● Concerned that unawareness results in poor maintenance of assistive technologies.  
● Convince increase their knowledge.                                                                 | ● Negative attitude towards library and library staff (barrier)  
● Sense of being ignored/excluded (barrier)  
● Sense of not being valued (barrier)  
● Sense of not being cared/ considered (barrier)                                                                 |

The researcher also discussed other issues with the librarian, especially regarding the library policy, available statistics on the visually impaired users in the university, and the budget allocation for special equipment. She claimed that there are policies for the disabled but it is not written!! She was not aware about the number of visually impaired
students who had registered for the new semester. She was not aware about the actual number of visually impaired students enrolled at the university. The library geared their services based on a list of students who have requested for carrels! As the numbers of students who actually use the carrels are small, the researcher felt that it would be difficult to justify any request for additional budget for special purposes. Hence, requests could only be made based on estimation and assumptions. The researcher concluded that it is vital for library staff at all levels to increase their awareness of VIPs, otherwise, they will not have empathy towards them, and it would be difficult to understand the VIPs’ needs for special assistance and facilities.

4.2.2 Attitudinal Factors Towards Peers

Pickens (2005) explained that attitude consists of an individual’s thoughts, feelings, and actions, which reflect his beliefs and thoughts towards people or objects. Although attitudes are internal to a person it can be interpreted through the person’s behaviour. Also, even though attitude is influenced by an individual’s surrounding environment, both socially and physically, it can be shaped by experiences, learning, and modeling others. Attitude is therefore a process, which is shaped during an individual’s life and his socialization process.

The participants in this study also formed attitudes towards their peers and this attitude is important in propagating the sense of belonging. The following sub-sections describe the attitude of the visually impaired students towards their peers in terms of their perception on the support provided by their peers, the extent of their communications, the degree of empathy, and awareness amongst their peers.
4.2.2.1 Peers who render support

Strayhorn (2008) declared that a sense of belonging can come about when individuals within a community feel welcomed, accepted, and valued. The community in the context of this section refers to peer relationships and interactions (Hatlen, 1996; Salend, 2004). Supportive peers help to make disabled students feel included.

The participants in this study indicated that it is essential for them to be friends with their sighted peers. Such friendship gives them the opportunity to request for help, especially, when their volunteer readers are not around. The VIPs feel comforted knowing that they can rely on their sighted peers who are also their friends. Also, the sighted peers understand their limitations and avoid misplacing books on the shelves or changing items in the library layout, which could cause difficulties for them.

4.2.2.1.1 Supportive peers

Social support from peers helps to decrease stress improves the psychological well-being, and being about a sense of belonging for people with disability (Samuelsson, 1997; Solomon et al., 1997). Robinson and Wilkinson (1995) observed that the size of the social network and the closeness of the relationship among the members of a community, increase its members’ sense of belonging.

Some of the participants in this study had negative perception towards their peers before registering with the library, but their attitude changed after becoming friends and receiving support from their sighted peers.

“Before I came to the library, I feel fearful of my peers, and expected them not to help me in the library. Now, I feel comforted as I do meet peers who are always...
willing to help me and are nice to me. However, I do also meet peers who are not really nice. Well, we cannot expect all people to be nice!” (Nasir, 21 years old)

Visually impaired students admitted that they feel more comfortable, happy and motivated in the library when they realize that they have the opportunity to receive help from their sighted peers.

“...Uhm, I feel comforted when I lost my way in the library and other peers help me find my way or when I am in the bus station and ask for help from other peers to tell me the number of the bus!” (Yacob, 37 years old)

“In this library, I feel very happy. Our situation is good! Our friends and peers give us lots of cooperation. They are very helpful; they will assist us to find books on shelves. If we need help, they would readily help us even though they don’t know us! They are always respectful, assisted and helped me! I don’t see it as a problem even though sometimes they are not sure of the best way to handle us and sometimes they do it in the wrong way, no problem. It is ok with me!” (Mehran, 29 years old)

“One of the conditions which motivates me to come to the library is having friends who like to help me! I said to myself, “Hey! I have friends who are willing to help me so why should I lose this opportunity?” So I really need their help to find books and ask them for help. This motivates me to come to the library! In the library, I need friends around me!” (Hadi, 22 years old)

“Some of the students in the library are friendly. They always joke with us and bring us anywhere we want to go. So, actually when our volunteer readers are not in the library, other students also help us” (Atifah, 22 years old)
“I think it is important to become friends with other peers in the library, so they can help us. For example, sometimes they help me to find my way to the carrels” (Rahman, 22 years old)

The lack of support from sighted peers not only creates negative perception towards them, but also creates negative feelings such as anger, and feeling of being ignored!

“But sometimes you meet peers who don’t like to help you. I don’t know, maybe because of their negative perception they are reluctant to help us. So when I feel that I cannot ask for help from other peers, I feel frustrated!” (Yacob, 37 years old)

“...There are thousands of people with different behaviours! Sometimes when you encounter any difficulties in the library without uttering a word, you get assistance from other students, but there are times you meet some peers who don’t care. Even when you talk to them, they don’t show any positive action to help you.... An example of a positive action is when I suddenly received a form, which I had to complete, I asked my other peers to read it to me. So they read it and explained to me what the form was about and what information was written on it... a negative action is when they just keep quiet and cross away like they don’t care. This happened to me once at the bus station where nobody stopped to help.” (Louvee, 28 years old)

4.2.2.1.2 Peers who misplace books or other items

Students who are visually impaired faced difficulties when other students misplace books on the shelves or other items away from the usual location in the library layout. This behaviour not only makes it difficult for volunteer readers and library staff to locate books, but could also result in delay in submitting assignments. Also, misplacing
library equipment causes visually impaired users to lose their familiarity with the location of items within the library, and be confused in finding their way in the library.

“We sometimes find it difficult to find books on the shelves when it is being misplaced by peers. That is why we cannot find the books!” (Amir, 31 years old)

“…. The only thing I expect from peers is to not disturb the arrangement of books! You know... this kind of behaviour annoys me! I cannot change people. It depends on them whether they want to respect me or not. It is up to them! But at least don’t mess things around me” (Hadi, 22 years old)

“Sometimes students put the books in the wrong place on the shelves so we cannot find them. Even in front of the library there are some tables, sometimes the students tend to move their tables to a new location and they don’t move them back after they use the table, so it causes some difficulties for us!” (Louvee, 28 years old)

Other difficulties which are created by sighted peers is misusing the facilities meant for the disabled when the library is crowded and there is not enough space. This includes using the special laboratories meant for visually impaired students.

“Oh, sometimes the sighted peers come and use our special lab! They say they do that because all the computer labs are full. Although we have passwords on our computers, there are times when some computers are switched on, when the visually impaired student forgot to shut down the PC. This enables other peers to use the computers. I remember once the library staff saw them doing this and were told that they cannot use the special lab, and they started to argue with the librarian...” (Amir, 31 years old)
Table 4.8 summarizes the emerging themes resulting from the respondents’ remarks about the perceived support received from their student peers.

Table 4.8: Themes Emerging from Attitudes Towards Support Rendered by Peers

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive peers</td>
<td>• Peers would not help even when requested by VIPs.</td>
<td>• Feel fearful of peers.</td>
<td>• Positive attitude toward peers (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Peers who helped willingly.</td>
<td>• Feel comfortable with peers who are willing to help.</td>
<td>• Sense of being included (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Amiable behaviour of peers.</td>
<td>• Feel happy when peers behave amicably.</td>
<td>• Sense of being considered/ accepted (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Peers who are respectful.</td>
<td>• Feel motivated in the library when peers help to show the way.</td>
<td>• Sense of being valued/respected (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Peers who helped to finding the way in library.</td>
<td>• Feel comforted with friendliness.</td>
<td>• Sense of being motivated (trigger)</td>
</tr>
<tr>
<td></td>
<td>• Peers who help at the bus stop near the library.</td>
<td>• Feel helpless when cannot get help.</td>
<td>• Negative attitude towards peers (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Peers who are congenial and joke with the disabled in the library.</td>
<td>• Feel rejected when peers avoid you.</td>
<td>• Sense of being excluded/ ignored (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Peers help to fill form in in the library.</td>
<td>• Feel frustrated when peers are reluctant to help.</td>
<td>• Sense of not being valued (barrier)</td>
</tr>
<tr>
<td></td>
<td>• Peers who are reluctant to help.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Peers who are quiet and move away when approaching the disabled.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Peers who misplace books or other items | • Peers who misplace books.                                                                 | • Feel annoyed when books cannot be found.                                      | • Negative attitude towards peers (barrier) |
|                                        | • Peers who move furniture from their usual places.                                | • Feel hampered and lose sense of bearing when the furnitures are not at their usual location. | • Sense of not being considered/care (barrier) |
|                                        | • Peers who disturb the arrangement of books on the shelves.                      | • Feel disturbed and confused when cannot find the items one is searching for. | • Sense of not being respected/valued (barrier) |
|                                        | • Peers who do not shelve books back after use in the library.                  | • Feel frustrated when peers do not put books in the proper shelf.              | • Sense of not being accepted (barrier)   |
4.2.2.2 Peers who interact

According to McGregor and Vogelsber (1998), one of the advantages of an inclusive setting is the high level of interactions between the disabled persons and their non-disabled peers. This can help the disabled students to improve their social skills beside improving their academic performances. However, the negative attitude of non-disabled peers towards disabled students is one of the main barriers to creating socially inclusive settings (Llewellyn, 1995). Kunc (1992) pointed out that one of the reasons for encouraging interactions between disabled students and their non-disabled peers in the same educational system is to foster the social skills of the disabled students so that they can integrate into society, easily.

The participants in this study have a deep desire to be more sociable and more interactive with their peers. However, they realize that because of their physical limitations they lack social skills, which makes it difficult for them to maintain interactions with their sighted peers, and causes them to avoid communicating and maintaining relationships. Therefore, academic libraries are perceived to be a suitable platform to nurture and improve their social skills and widen their social network.

“Yeah, I do feel deep down in my heart I wanted be more sociable but something always hold me back from interacting with my sighted peers. I never really show my true self in class or in the library. I may seem like a passive person! But I would like to be sociable, or be an actively social person but something unconsciously held me back!!” (Nasir, 21 years old)

4.2.2.2.1 Peers who are accepting

Hatlen (2004) highlighted that most visually impaired students in inclusive settings are socially isolated and often feel lonely as they are poorly accepted by their peers. Moore
(2003) suggested that communication could help both sighted and non-sighted students to increase their understanding of each other’s need. Also, Ross (2002) observed that relationship, interaction, and the feeling of connectedness with other peers in educational settings help disabled individuals to feel that they belong to the community, but the absence of such feelings would cause anxiety.

The visually impaired students in this study expressed their hope to feel accepted by their sighted peers through communicating with them. They informed the researcher that their desire to be in contact with other peers is not just because they need help, but is important to them as human beings.

“I don’t want to be friends with my peers just to ask for help. I want to be friends with them so that they can accept me as well as we can share things like best friends. I mean we can become best friends. Yes, I need friends for company not just for reading a book. I need sighted peers to communicate and share with. Umm, I am not really sure if my peers would accept me, but when they greet me and say Hi, I assume they have accepted me. .... I think greeting is an indication of acceptance! Or, if my peers ask me to attend their group discussion, I considered it as acceptance” (Nasir, 21 years old)

“For me, interaction with normal peers is quite important. We cannot separate normal and disabled students from each other; it is harmful to our ability to interact socially. Sometimes when I come early to the library, I have a chance to see other students. So we talked and through the conversation I become aware about things happening in the university! When you talk with normal peers and they show willingness to talk, I feel accepted by them!” (Louvee, 28 years old)
“I like peers to know that we have feelings. We are also human beings. It’s just that we are disabled! We need them not for sympathy, but to accept us like other people. It is very important for me that sighted peers accept me to join with them in group assignments. I believe it gives me the opportunity to try and socialize!”

(Laila, 23 years old)

4.2.2.2 Building friendships

Evans et al. (1992) indicated that the benefit of integrating disabled and non-disabled students in the educational environment is improving friendship and membership, and this helps in instilling a sense of belonging to the community.

Visually impaired students also expressed the importance of being friends and building friendship with sighted peers, which can help them to get help, and widen at the same time, their social networks.

“One of my suggestions to my juniors in the library is to be brave. You have to be brave and be determined. You have to speak up; you have to make friends because in the university we need friends! Such friends can help us out in the library. You know one of the conditions, which motivates me to come to the library are friends. You know when I need to find information, do my assignments I can do my best when friends help me” (Hadi, 22 years old)

“I wish to be more in contact with other peers; I think it is important to keep in contact with them. We need their help. If we have a good relationship with them, I think we will feel more comfortable” (Rahman, 22 years old)

“I think being friends with other peers is essential for us! If we become friends with them, then maybe we could interest them to become our volunteer readers,
but sometimes I feel that sighted peers are afraid of us. They don’t know how to approach us” (Amir, 31 years old)

4.2.2.3 Difficult to find friends in the library

Participants in this study indicated that they do not have an opportunity to be in contact with their sighted peers in the library environment. They are interested in communicating with other peers, but they understand that most of the students come to the library to do their assignments, have group discussion or to find books, thus, it is difficult to interact with them. They stated that contact with their sighted peers essential for them because through their peers they can find more volunteer readers and support.

“I like to talk with peers; I like to speak to them to find some new friends and experiences! So why not! If I have the opportunity to talk with them I will find some new friends. I like to find some new readers. If we get friends and form a good relationship with them, we can bond with them. We can share our opinions about our life at the university and so on. But I think I don’t have such an opportunity because in the library we are doing our assignments and also peers are busy!” (Farhad, 22 years old)

“I think the library could help inform about us to other sighted peers especially first year students. They can show our carrels to them, say something about our existence because I see some of students until now don’t know about us!” (Atifah, 22 years old)

“I think we don’t have the chance to become friends with other sighted peers in the library as they are from different fields. If we are in the same field it would be easier. I feel it is difficult to find friends in the library in comparison with outside of the library. Here, most of the visually impaired students stay in their carrels
and sighted peers stay upstairs, in the computer lab or in the reading section, so I think it is quite difficult” (Amir, 31 years old)

“I believe in the library we don’t need any relationship or connection but outside of the library we need friends! We come to the library and stay in our carrels and study here but sighted peers share the tables and places where they can meet their friends. I mean in the library, we don’t have the chance to meet sighted peers!” (Mehran, 29 years old)

“It is difficult to find friends in the library. Even at the shelves when we are looking for books, they never talk to us. So, I think they mind their own business! I like to find more friends but as I mentioned the situation in the library makes it difficult to find friends. I have never made a friend in the library! Because of that, I stick to my faculty friends in the library... many of the peers come to the library to search for books, read books or have discussions with their friends. So, I cannot just intrude! .... They will find it awkward and ridiculous. Such an opportunity has never happened to me in the library. Maybe the library is not a good place to make friends.” (Mostafa, 24 years old)

We can conclude that the library plays an important role in creating an environment in which both disabled and non-disabled students can get acquainted with each other, widen their social network, and get connected with each other and the library community. The visually impaired students believe that the library can assist them to have more communication with other peers by making known of their presence, introducing them to new students, considering and designing some programmes or activities for them to interact with their sighted peers.
“During the orientation week for new students they can, besides briefing students on the library services, also give some information about visually impaired students in the library. In this way, maybe our peers will be encouraged to become our volunteer readers! Or during the library open day, librarians can provide some information about volunteer readers for visually impaired students.” (Amir, 31 years old)

“Even if the library doesn’t consider any programme, I believe we as visually impaired students should also be active. Visually impaired students should be encouraged and motivated to communicate with sighted peers.” (Louvee, 28 years old)

“Maybe the library can provide us with some programmes to connect us with non-disabled peers or to encourage them to help disabled students in the library. I think the library maybe for past years never initiated such a program. I never heard about such program from my seniors!” (Mostafa, 24 years old)

Table 4.9 summarizes the emerging themes derived from participants’ responses about their perception towards their peers with regard to their acceptance and friendship.

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Peers who are accepting | • Making friends with peers.  
• Willingness of peers to communicate, greet and interact.  
• Joining in group assignments with peers.  
• Separating disabled- and non-disabled peers. | • Accepted when peers are friendly, greet you or asked you to join discussion group.  
• Happy about being updated about happenings in the university  
• Lonely and need for friends | • Positive attitude towards peers (trigger)  
• Sense of being included/considered (trigger)  
• Sense of being accepted (trigger)  
• Sense of being valued/respected (trigger)  
• Sense of being excluded/ignored (barrier) |
The visually impaired students have indicated that the library can play an important role in helping them to build friendships by organizing some programmes. The interaction between the sighted peers and the visually impaired students would give them the opportunity to learn more about each other. Moreover, sighted students can learn about the nature of disability and be better aware of how to handle, to help or to communicate with the visually impaired friends. The current students abled and disabled, in academic libraries are future leaders, and if they are aware about disableds and their needs, they would take these into consideration when planning services design or formulating policies concerning the disabled. Indeed, such awareness will make the Malaysian society a caring society.

4.2.2.3 Degree of Peers’ Awareness

Copeland et al. (2004) discussed the perception of non-disabled peers towards their disabled peers’ problems in an inclusive setting. They noted that one of the main
problems is the lack of knowledge about disability, which hampers them from forming friendships. In order to create a safe and positive environment for disabled students in an inclusive educational setting, we need peers who understand and accept diversity. Maich and Belcher (2012) in their study on how to increase peer awareness about autism, discussed the main role of peer awareness in successful social inclusion programmes. They found that peers’ awareness help increase empathy and acceptance towards disabled peers, and this leads to the formation of strong friendships.

In this study, the visually impaired students also said that the awareness among their sighted peers’ is obvious. The lack of knowledge and awareness amongst their sighted peers resulted in their peers being afraid to communicate with visually impaired students. This will be discussed more in the following section.

4.2.2.3.1 Shy and afraid

The visually impaired students said that their sighted peers were afraid to communicate with them. They do not know how to talk with them or what they could talk about. Some of the visually impaired students stated that their sighted peers would walk away from them and were reluctant to help them.

“The only thing which I really don’t like is in my relationship with my peers is when they see I am blind, they feel afraid and shy to talk to me. I don’t know why? These things have been going on since I became blind in 2006. So because I became blind, they look at me differently. Sometimes I see when I am with my close sighted friends; the other sighted peers wanted to know my name. Instead of asking me, they ask my sighted friend. Why can’t they ask me, directly? I asked why you didn’t ask me? He told me he felt shy and don’t know how to speak with
me. One of my sighted friends told me in beginning he didn’t know how to talk with me. Don’t know what to talk about with me. You know since they see I am blind, they think I don’t know anything such as I am not aware about the latest movie in the cinema or the latest video games or even music. They think I am not aware of Facebook! The only thing I can say is lack of awareness!” (Hadi, 22 years old)

“Sometimes you meet peers who don’t like to talk with you; I mean they avoided blind people both inside the library and outside of the library. I think this may be due to their lack of awareness, they don’t know us, they are afraid of us! I think peers are scared to speak with blind people! I think the main problem is that they don’t understand us, don’t have enough information about us. Maybe they don’t know how to handle the blind so it makes them feel scared of us! Maybe they have the assumption that the blind are a burden! Maybe they are ashamed to help the blind because a lot of people will look at them!” (Yacob, 37 years old)

“I think non-disabled peers are afraid of us or maybe they don’t know how to approach us, how to communicate with us! We can say this may due to lack of awareness, they don’t know us!” (Amir, 31 years old)

The visually impaired participants believe that if their sighted peers increase their knowledge about the nature of disability, it would make them to be more willing to get acquainted and help the visually impaired students.

“I believe if the peers have enough knowledge about us, they will approach us and would show more interest to become our volunteer readers. I think the library must inform them about us!” (Atifah, 22 years old)
“According to my experience, peers are really helpful and respectful to us but they are aware of how to assist us. Sometimes they guide us or help us in a wrong way, so we have to explain to them the right way to help us! But in general it is ok!” (Mehran, 29 years old)

Table 4.10 summarizes the emerging themes arising for participants’ responses about peer awareness of disabilities.

Table 4.10: Themes Emerging from Attitudes Towards Peer’s Awareness About Disability

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situations</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Shy and afraid  | • Reluctance of peers to communicate.  
                  • Peers are afraid and shy to speak with them.  
                  • Peers enquiring about the disabled from a third party (other peers) instead of directly.  
                  • Behave differently with the disabled. |
|                 | • Slighted by the reluctance to communicate.  
                  • Peers are not interested in knowing them.  
                  • Peers are afraid of them.  
                  • Frustrated by peers’ lack of awareness. Peers feel ashamed to help them |
|                 | • Negative attitude towards peers  
                  • Sense of being excluded/ ignored  
                  • Sense of being worthless  
                  • Lack of being considered |

Based on my experience, the visually impaired students are the best teachers to teach us how to handle them. During my research, I went with them outside of the library many times and asked them to teach me how to help them. They asked me to give my elbow to them and inform them about any barriers in front of them. For example, if there are any stairs, which they need to pass, they must be told in advance. In fact, they know their needs better than us. When you ask them to teach you, you can feel their eagerness and their pride from their face. They take pride in teaching you and are very patient. If you do something wrong, they tell you gently, – “no, this is wrong, you have to do it in this way!” I believe the library should seriously take note of this and use the expertise of the visually impaired students in their disability awareness training.
4.3 Summary

This part of the study explored the perception and experiences of the visually impaired students, and the conditions that can instill the sense of belonging to the library of the University of Malaya. We tried to investigate, which conditions in the library context assist or hamper them from forming a sense of belonging. We divided the findings in two main categories – those based on intrinsic conditions and those based on extrinsic conditions. The current chapter described the former. This chapter elaborated on the intrinsic conditions, which could increase or decrease the visually impaired students’ sense of belonging towards the library. Intrinsic conditions can be divided into two main categories: (i) attitudinal factors towards the library policies and the library staff; and (ii) attitudinal factors towards their peers.

Attitudinal factors towards library staff comprised six sub-categories: (1) perception about support from governance; (2) perception about being consulted by library management; (3) perception of library staff’s support; (4) empathy; (5) communication behaviour; and (6) awareness. Each sub-category also consists of different themes.

Each of these subcategories consisted of different subcategories too. Perception about governance support include six sub-categories (i) supportive library policies; (ii) budget allocation; (iii) extension of borrowing period; (iv) policies that obligate library support; (v) policy that considers and reaffirms VIPs as users, and (vi) policy related to inter-library loan procedure.

Perception about the library’s initiative in consulting with VIPs comprised four subcategories: (i) being a legitimate member of the library; (ii) being respected and accepted; (iii) being connected through meetings; and (iv) increasing library staff’s awareness about disabilities.
Perception of library staff’s support can be divided into two main categories: (1) positive perception towards support given by library staff; and (2) negative perception towards support given by library staff. Generally, there is positive perception of VIPs towards library support, and this can be divided into three sub-categories: (i) library staff who are friendly; (ii) library staff who are helpful; (iii) library staff who provide positive experiences. Negative perception towards support given by library staff can be divided into five sub-categories: (i) library staff who do not help to find books; (ii) library staff who do not help in inter-library loan request; (iii) library staff who are too busy to help; (iv) being afraid to ask for help; and (v) word of mouth effect.

Library staff’s empathy can be divided into two sub-categories: (i) library staff not communicating about library renovation; and (ii) library staff who do not understand. Communication with library staff also consists of two sub-categories: (i) friendly conversation; and (ii) library staff who interact. Friendly conversation includes three sub-categories: (i) library staff’s tone of voice; (ii) library staff’s greeting; and (iii) library staff who converse.

The last sub-category - attitudinal factors towards the library and library staff - is related to degree of library staff’s awareness of disability. It consists of two main sub-categories: (i) library staff’s awareness about the disabled and disabilities; and (ii) library staff’s awareness the assistive technology.

Attitudinal factors towards peers comprised three sub-categories: (1) perception of peer’s support; (2) peer’s communication; and (3) peer’s awareness. Perception of peer’s support consists of one main sub-category - “peers who render support”, which include two sections: (i) supportive peers; and (ii) peers who misplace books or other items.
Peers’ communication has three sub-categories: (i) peers who are accepting; (ii) building friendships; and (iii) difficult to find friends in the library. The last sub-category is degree of peers’ awareness which indicates that shyness and fear of peers is one of the main factors that affects the VIPs sense of belonging in the library context. Table 4.11 gives a summary of the results of the VIPs about their attitudes towards the library, library staff, and peers which influence or trigger the sense of belonging.

Table 4.11: Themes that Emerged from of the Intrinsic Conditions

<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudinal factors toward the library and library staff</strong></td>
<td></td>
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<tr>
<td></td>
<td>Perception of support from library governance</td>
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<td></td>
<td>Supportive library policies</td>
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<td></td>
<td>Budget allocation</td>
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<td></td>
<td>Extension of borrowing period</td>
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<td></td>
<td>Policies that oblige library support</td>
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<td></td>
<td>Policy that considers and reaffirms VIPs users</td>
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<td></td>
<td>Policy related to inter-library loan procedure</td>
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<tr>
<td></td>
<td>Perception about the library’s initiative in consulting with VIPs</td>
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<tr>
<td></td>
<td>Feel being a legitimate member of library</td>
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<tr>
<td></td>
<td>Feel being respected and accepted</td>
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<tr>
<td></td>
<td>Feel being connected through meetings</td>
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<tr>
<td></td>
<td>Able to increase library staff’s awareness</td>
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<tr>
<td></td>
<td>Perception about support given by library staff</td>
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<tr>
<td></td>
<td>Positive perception towards support given by library staff</td>
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<tr>
<td></td>
<td>Library staff who are friendly</td>
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<tr>
<td></td>
<td>Library staff who are helpful</td>
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<tr>
<td></td>
<td>Library staff who provide positive experiences</td>
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<tr>
<td></td>
<td>Negative perception towards support given by library staff</td>
</tr>
<tr>
<td></td>
<td>Library staff who do not help find books</td>
</tr>
<tr>
<td></td>
<td>Library staff who do not help out in inter-library request</td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Degree of librarians’ empathy</strong></td>
<td>Library staff who are too busy to help</td>
</tr>
<tr>
<td></td>
<td>Being afraid to ask for help</td>
</tr>
<tr>
<td></td>
<td>Word of mouth effect</td>
</tr>
<tr>
<td><strong>Degree of librarians’ communication</strong></td>
<td>Library staff not communicating about library renovations</td>
</tr>
<tr>
<td></td>
<td>Library staff who do not understand the disabled</td>
</tr>
<tr>
<td><strong>Friendly conversations</strong></td>
<td>Library staff’s tone of voice</td>
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<td></td>
<td>Library staff’s greetings</td>
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<tr>
<td></td>
<td>Library staff who converse in friendly manner</td>
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<tr>
<td><strong>Library staff who interact</strong></td>
<td><strong>Awareness amongst library staff about disabled users</strong></td>
</tr>
<tr>
<td></td>
<td>Library staff’s awareness about the disabled and disabilities</td>
</tr>
<tr>
<td></td>
<td>Library staff awareness about assistive technology</td>
</tr>
<tr>
<td><strong>Attitudinal factors towards peers</strong></td>
<td><strong>Peers who render support</strong></td>
</tr>
<tr>
<td></td>
<td>Supportive peers</td>
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<tr>
<td></td>
<td>Peers who misplace books or other items</td>
</tr>
<tr>
<td><strong>Peers who interact</strong></td>
<td>Peers who are accepting</td>
</tr>
<tr>
<td></td>
<td>Building friendship</td>
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<tr>
<td></td>
<td>Difficult to find friends in library</td>
</tr>
<tr>
<td><strong>Degree of peers’ awareness</strong></td>
<td>Shy and afraid</td>
</tr>
</tbody>
</table>
CHAPTER 5

EXTRINSIC CONDITIONS AND STUDENTS’ PERCEPTIONS TOWARDS THE LIBRARY FACILITIES, SERVICES, SITE LOCATION AND INTERIOR LAYOUT

5.0 Introduction

This chapter continues from chapter 4, which explores the intrinsic conditions related to the sense of belonging to the library. This chapter will examine the extrinsic conditions which comprised the perception and experience of students towards the library facilities, services, physical location, and interior layout. From the responses, we will look out for themes that illustrate the conditions which foster or hamper the sense of belonging to the library, among the visually impaired users.

5.1 Extrinsic Conditions

Extrinsic conditions are environmentally generated conditions that are beyond the student’s control. In this context, the extrinsic conditions comprised: (i) facilities (carrel room, special laboratory, special resource centre, special toilets); (ii) services (volunteer readers, special librarian, library website, information skills session); (iii) site location (access to public transportation); (iv) interior layout (accessible routes with tactiles, access to elevator). All these are provided by the library for the benefit of the visually impaired users.

The main emphasis in the analysis is to extricate the common themes, which could have an effect on the visually impaired students’ sense of belonging to the library. Each theme is extracted by interpreting the responses the interviews and focus group
discussions, with supporting information from participants’ answers. These topics will be covered in the following sections.

5.1.1 Facilities

The Oxford dictionary defines facility as a piece of equipment, which has been provided for specific purposes. The origin of the word goes back to the early 16th century (“Facility,” 2011). The Online Dictionary of library and information science defines facility as a physical structure (to make access to library sources and services more convenient. These sources and services include the reading room, cybercafé, instructional laboratories and or part of a library collection or equipment with the personnel who maintain it (“Facility,” 2011).

The library facilities for disabled users in academic libraries can include a wide range of equipment for special librarians who have been trained to assist the disabled users. The main aim of providing these facilities is to help disabled users to have access to information to support their studies (Chelin, 1999). Actually, providing the facilities to access different types of information is part of the social inclusion process to physically integrate disabled users into the library (Todaro, 2005). According to Goodenow and Grady (1993), psychological membership is one of the main influencing factors in creating a socially inclusive environment in an educational context. In fact, when students feel personally respected, accepted, and supported by other members in the system, they feel that they belong to it.

In this study, the visually impaired participants expressed their feelings about the facilities which the library provides for them. They said that such facilities help them to feel more comfortable, respected, accepted, and a sense of being important to the library
authorities. They also provided feedback on other aspects of the library facilities, which need to be improved, and suggested certain facilities to be added.

5.1.1.1 Carrel Room

Most of the participants claim the first thing that motivates them to come and use the library is the availability of carrel rooms. They said that the carrel room is like their second home and they feel comfortable in it. One of the reasons that created the feeling like a home’s view is the privacy and security that the students enjoy in having a safe place to put all their belongings. They also indicated that the carrel room gives them the option to come to the library at any time they wish. This also symbolizes the feeling of acceptance in the library.

5.1.1.1.1 Carrel as a Second Home

5.1.1.1.1 A place that gives comfort and is safe

A number of students described their carrel rooms as their second home. In a way, this term fits, as “home” is rooted in the Sanskrit word “Ksemas” which means safe dwelling (Soanes, Stevenson, & Perasall, 2004). Dobel (2010) defined home as “Koi-m/kei” which means a safe place. From these definitions, a home is taken to be a place where an individual belongs, feels secure, and safe. Feeling comfortable and secure was also reported to be highly desired among students who expressed a strong sense of belonging (Sedgwick & Yong, 2008). The VIPs in this study refer to their carrels as a second home, as the space affords them comfort as well as a safe place to put their belongings. This will, in turn, makes them think positively about the library. For example, Amir (31 years old) expresses his feeling about the carrel room as being second home.
“The carrel room is like my second home. I always go there to study. When I compare it to my bedroom, it is more comfortable! We can put our books, our reading materials and laptop, so we can study and do our assignments. The carrel creates an environment that makes me think and feel positively about the library”

(Amir, 31 years old)

Figure 5.1 shows the carrels that the university library allocates for disabled students.

Freud (2003) described the home as a safe place, which one is familiar with and trusted by the individual. Privacy, intimacy and relationships are important factors that are valued in the home. The home therefore has both physical and psychological connotations. Hadi (22 years old) and Yacob (37 years old), like most VIPs interviewed, claimed that the carrel is like a second home to them and they feel comfortable there. They expressed they feel being relieved and grateful that whenever they go to the library, they are assured of a place to go to. They said that being given a carrel symbolizes their acceptance in the library, and they feel safe about leaving their reading materials and other belongings inside the carrel.
“... I think I am accepted in this library. Yes, because, I am given a carrel ... This means that whenever I am in the library, I am assured of a place, where I know that every time I go to the library, I can come here, it’s my place, I can come here, put my things, my stuff here and do my work, assignments, everything. I put all the necessary equipment in the carrel, such as my laptop, which means I don’t need to carry my study materials wherever I go within the campus in the University” (Hadi, 22 years old)

“... Since I live outside the campus, the provision of a carrel provides me with a place to meet my blind friends or normal friends; it is like my second home...I think the carrel is like a second home for all visually impaired students, even when we go back home or to college, the carrel is always the second place where we can go...” (Yacob, 37 years old)

Laila and Nasir further explained how they obtained the carrels, which provided them with privacy.

“... If we register it means that we can come here at any time that we want and we can put anything here” (Laila, 23 years old)

“... I have this carrel. It is like my small office. I have my own privacy here...” (Nasir, 21 years old)

Figure 5.2 shows the carrel room plaque that the university library allocates for VIPs.
Dekkers (2011) made a distinction between a home and a house. A house is used to relate to geographical object, which is tangible and visible. The term “home” has a psychological context related to the moral, cultural, and social norms of members of the house. Therefore, a house becomes a home when it is a place that shapes or evokes emotions, values, and attitudes. Heidegger (1971) explained that the feeling of being at home is not just related to an individual’s location in a physical space but refers to the person’s relationship with others in the space. When a person says “I feel at home” this indeed expresses his/her comfort, security, well-being, integrity and his feeling of belonging to a place he dwells. According to Orcunoglu (2006) to convert a house into a home, the psychological factor needs to be added, and he opined that when the home satisfies a person’s psychological or physical needs, they would return voluntarily as they are able to bond with the house that has become a home. In other words, they feel a sense of belonging. The VIPs, Fahimeh, and Yacob in this study expressed the feeling of being accepted and respected.

“... I think the library illustrates its respect and acceptance towards us, visually impaired students by providing study carrels as a facility” (Fahimeh, 23 years old)
“... The carrel makes me feel like I am welcomed by the library, it helps me feel comfortable ... I have my privacy here, indeed this privacy motivates me to come to the library as I feel I belong as a member like other students. I use the carrel for various activities such as counseling. Some students come and ask me for counseling, so I use the carrel. It is like my office” (Yacob, 37 years old)

5.1.1.1.2 Place to fulfill spiritual obligations

As a second home, the VIPs use the carrels as a second place to connect spiritually as they would also do in their hostels. All VIPs used their carrel to perform their prayers. Being Muslims, they have to perform prayers at various times of the day and instead of returning to their hosted or going to the prayer room provided by the library on the third floor of the building, they prefer to remain and pray in their carrels. To go to a common prayer room, which they find difficult to access and having to share facilities with other students could disorientate them as items in the prayer room get moved around. Hence the VIPs prefer their carrels as they know the exact locations of their various belongings, where they feel comfortable, peaceful, and less distracted.

Laila explained her difficulty in going to the prayer room. She said that sighted students also use the prayer room, and sometimes they change the location of some of the things such as the prayer mats. This makes it difficult for her, so she prefers to pray in her carrel room.

“... I went to the prayer room once. Now I just pray inside my carrel ... My carrel isn’t far from the WC. I know the place of all the objects inside my carrel. But in the prayer room sometimes other students change the location of certain things and this makes it difficult for me. Also, the prayer room is used by many people ... so, it's difficult for me” (Laila, 23 years old)
Sedigeh and Mostafa also expressed their preference to pray in their carrels, as is more convenient for them to use their carrels to pray.

“... I prefer to pray in the carrel, you know the surau [prayer room] is on the third floor and is not accessible, I feel more comfortable praying here...”
(Sedigeh, 29 years old)

“... I prefer to pray in my own carrel, it is more convenient...the surau is not easily accessible and I am afraid to go there, I don’t feel comfortable in the surau...’ (Mostafa, 24 years old)

Mehran described the carrel as a quiet and peaceful place and therefore prefers to pray there.

“... previously, the prayer room was big and it was on the first level. However, now they changed the location, and I get too distracted there, I don’t know why!
Anyway now I prefer to pray in my own carrel” (Mehran, 29 years old)

McAndrew (1998) pointed out the importance of the physical environment in creating the feeling of belonging, and its effect on an individual’s personal identity. The carrels are special places for the VIPs because they evoke the feeling of being accepted as a member of the library system, and have a familiar and safe place in that environment. The visually impaired students felt that the library authorities have indeed looked into their needs and this has made them feel grateful and evoked a sense of belonging to the library. When the visually impaired people realize that the system cares about their needs and meet those needs, they will feel valued by the members of the system, and this will evoke a feeling of belonging in them (Osterman, 2000).
5.1.1.1.3 Carrel as a Social Place

Kidd and Evan (2011) studied that for 180 homeless youths in Toronto and 100 youths in New York, and found that the home provided them comfort, and is a place where they feel a sense of belonging, as well as being able to connect with friends, the city, and the world. Sjostrom (2008) explored the feelings and experiences of people with psychiatric disabilities who had to change place of residence. He found the disabled people relate the home to a place for activity, for establishing relationships and identity, and a place where they can have control over whom to meet or exclude. Cothran and Ennis (2000) and Syed Jamal (2006) explained that a welcoming environment would stimulate interactions with peers. According to Noll (1997), a sense of belonging to a place is enhanced when VIPs feel comfortable using it as a social place.

The VIPs in this study found their carrels to be suitable as a place where they can meet their friends and their student helpers. The carrels provide the VIPs with the opportunity to interact with non-disabled students, and this helps them to improve their social skills. For example Amir explained that the carrel is like a social space for him.

“When we have our reading sessions, the volunteer readers come here. It is easier and better for me to meet them in this carrel because it is easily accessible. This is my personal space…my visually impaired friends also come to see me in my carrel and I also go to their carrels to chat. During lunch time we can go out to have lunch together... I don’t have any problems about friends visiting especially those whom I already know. But I prefer to meet strangers outside my carrels first.(Amir, 31 years old)

Louvee, Hadi and Nasir, expressed their satisfaction over their own carrel space which they have feel control.
“... sometime my friends come to my carrel to help me as a reader, and sometimes if they say they want to visit me, they just come to library to see me, this is more convenient for them” (Louee, 28 years old)

“...sometimes I bring my friends to my carrel to discuss about assignments or topics in the course” (Hadi, 22 years old)

“... I can concentrate on my reading sessions. I can use this carrel whenever I want to call for a small discussion group. In this cozy room I do my assignments” (Nasir, 21 years old)

Farhad and Yacob lauded the opportunity the carrel gives them to interact with other individuals’ and this has resulted in their positive perceptions of the library. Indeed, such facility motivates them to use the library more.

“I think the positive thing that this library has done is in giving us this carrel, which is a convenient place for us to meet our readers. I think this is a good service” (Farhad, 22 years old)

“... I meet my blind friends or normal friends who live inside campus in my carrel... In fact this facility motivates me to come to the library... I can also meet my volunteer readers, you know the readers’ role in our academic life is very important... also the carrel gives us the opportunity to form friendships with other students and extend our social network...” (Yacob, 37 years old)

The views expressed infer that the VIPs use the carrels to maintain social connections, to keep in touch with their own community. They also have control over their relationship, because they have a say who can or cannot visit them, and this is one of the most important concept of the “home” (Townsend & Wilcock, 2004).
5.1.1.4 Carrel as a Safe and Quiet Haven

Rovai, Wightinga and Lucking (2004) and Salend (2004) indicated that students who feel they belong to the system are more likely to continue and be successful in their studies. The sense of belonging to a system is dependent on the satisfaction with the environment. In this study, the VIPs regarded their carrels to be conducive for studying. They said that they are able concentrate, and complete their assignments in the quiet of their carrels. They feel less distracted by noises and can study better. Mehran, Yacob, Fahimeh, and Mostafa expressed their satisfaction with the carrels and find the space quiet and conducive for studying and reading.

“... My carrel provides me with a safe and quiet place for my reading sessions, for my discussion sessions. It provides me with a quiet place to do my own work and to study. I study here because there are no distractions. Also, it is important for me to have a safe place because I have to hear recordings of my books and if I use it outside my carrel it would cause distractions and can be noisy for other users. The sound would be distracting.” (Mehran, 29 years old)

“... I can put all my stuff here in the carrel. Having this carrel means I don’t need to bring all my braille or printed books and braille machine every time to the library...it helps me to concentrate on my studies. You know, in comparison with sighted students, we have to work harder and we need such a place to concentrate” (Yacob, 37 years old)

“... I feel comfortable in the carrel. It is very quiet, I am in my senior year and I always advise my juniors to come to the library and use the carrel because it is really conducive for studying, compared to studying at the faculty or dormitory. Also, here we have air conditioning...” (Fahimeh, 23 years old)
“...the carrel plays an important role in the visually impaired students’ life. We spend a lot of our time in the carrel after the faculty. It is very comfortable and quiet...” (Mostafa, 24 years old)

According to Dobel (2010), feeling secure in a place is an essential factor in making person to feel at home. When people feel they have a safe place, such perception will promote the feeling of being close, productive, private and cordial with others in the place where they feel at home. When people feel at home, they tend to have a sense of pride that they belong to the place and to society that owns the place. Firooz and Laila expressed being proud to be a student at UM, a sense of ownership of their quiet carrels which provide them with the privacy they need, as well as a place where they can use their braille machine.

“... I just called my friends in secondary school and told them that my university has provided me with a carrel in the library... they were surprised and have shown their interest to come to this university. They told me, Oh! I want to come to your university too” (Firooz, 21 years old)

“... I like to stay in my carrel, because I have my privacy, you know what, in here, nobody can interrupt me” (Laila, 23 years old)

Also, Ahdiyeh was appreciative that the carrel gave her the opportunity to use the braille machines without annoying or upsetting other students.

“... Every time I come to the library, I need to use my braille machine to type my reading material. It may be quite difficult if I wanted to type outside of my carrel, because it will produce a lot of noise...” (Ahdiyeh, 22 years old)
Table 5.1 gives a summary of the emerging themes resulting from responses from visually impaired students about their carrels.

Table 5.1: Themes Emerging from Attitudes Towards Carrel Room

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Types of Space</th>
<th>Types of Feeling</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrels as a second home</td>
<td>Safe space</td>
<td>Protected/secure/safe</td>
<td>Positive attitude towards the library</td>
</tr>
<tr>
<td></td>
<td>Assured place</td>
<td>Relieved</td>
<td>Accepted/respected as a member of the library</td>
</tr>
<tr>
<td></td>
<td>Study/learning space</td>
<td>Comforted</td>
<td>Sense of belonging to the library</td>
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<tr>
<td></td>
<td>Spiritual space</td>
<td>Fulfilled</td>
<td>Sense of being included/considered by the library</td>
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<td></td>
<td></td>
<td>Grateful</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Conveniet</td>
<td></td>
</tr>
<tr>
<td>Carrels as a Social Place</td>
<td>Personal space to see anyone.</td>
<td>At ease</td>
<td>Motivated to go to the library</td>
</tr>
<tr>
<td></td>
<td>Meeting space with peers to chat, meet, discuss and visit.</td>
<td>Comfortable</td>
<td>Happy to be part of the campus community</td>
</tr>
<tr>
<td></td>
<td>Interaction space with student volunteers to discuss, study, read, type, and listen to audio resources.</td>
<td>Cosy</td>
<td>Form friendship and extend social networks</td>
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<tr>
<td></td>
<td>Conveniet space</td>
<td>Connected</td>
<td>Improve social skills</td>
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<td></td>
<td></td>
<td>In control</td>
<td>Regard carrels as a good service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Convenient</td>
<td>Sense of belonging</td>
</tr>
<tr>
<td>Carrels as a Safe and Quiet Haven</td>
<td>Quiet and safe space</td>
<td>Satisfied</td>
<td>Proud to belong to the library.</td>
</tr>
<tr>
<td></td>
<td>Conducive to study</td>
<td>Happy</td>
<td>Proud to be a student in UM</td>
</tr>
<tr>
<td></td>
<td>Comfortable space</td>
<td>Grateful</td>
<td>Able to study</td>
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<tr>
<td></td>
<td>Work space</td>
<td>Appreciative</td>
<td>Able to concentrate</td>
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<td></td>
<td></td>
<td>Comfortable</td>
<td>Feel at home</td>
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<td></td>
<td></td>
<td>Cared for</td>
<td>Sense of ownership.</td>
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<td></td>
<td></td>
<td>Proud</td>
<td></td>
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</tbody>
</table>

5.1.1.2 Special Laboratory

One of the facilities which UM library provides for visually impaired students is the special laboratory. The laboratory has a number of PCs, with installed screen reader software, and connected to the special Embosser printer. The Embosser printer procedures Braille prints from the original PDF files, which is more convenient for the visually impaired students to read, especially when they do not have the PDF file and their volunteer readers are not around to read to them.
Based on the feedback from the visually impaired participants, these facilities help to make them feel more comfortable and more motivated to continue with their studies. They feel proud that the library provides them with such facilities and feel they are respected by the library authorities.

5.1.1.2.1 Feel comforted and proud

Perceiving a sense of comfort with the environment is one of the five dimensions which Hoffman et al. (2002) consider essential in creating a sense of belonging in an educational setting. Nasir, Yacob and Ahdiyeh expressed that the special laboratory provided by the library makes them feel proud to belong to the library, and feel that the library has cared to their special needs. They find the laboratory very comfortable.

“...The facilities which I know the library provide for us, the visually impaired students are the carrel rooms, the volunteer readers and the special laboratory for visually impaired students” (Nasir, 21 years old)

“The UM library is very comfortable and the facilities are good. We have access to the Internet and we can use the special laboratory. Yes, we have special lab, if you go to other university libraries maybe such facilities aren't provided for visually impaired users....” (Yacob, 37 years old)

“In this library we have a special lab which is equipped with screen readers and the Braille printer Embosser which helps us convert the PDF to Braille format. I feel comfortable, it is easy to use!” (Ahdiyeh, 22 years old)

One of the conditions which make the visually impaired students feel like real members of the library is when the library looks into special needs and optimizes the library services to meet those needs. Maesta et al. (2007) stated that the belonging is related to
the perception of the individual as real members of a group or having feeling of group membership. Goodenow and Grady (1993) observed that there is a relationship between feeling of being part of the membership in a group and expectation of educational success.

“Each year you see good changes in the UM library. For example, previously, there wasn’t any lift or any special lab for the visually impaired but now these facilities is provided. Actually the special lab is essential for us because the library provides the computer, internet access and special equipment such as Braille printer and screen readers. Such things help us when we search the OPAC or the Internet and we have access to resources. This special lab is very convenient for us” (Louvee, 28 years old)

5.1.1.2.2 Being respected

Goodenow (1993) defines sense of belonging of individuals in an educational setting as the extent to which individuals feel respected, valued, and supported by the members of the environment. The respondents, Laila, Fahimeh, and Yacob expressed that the provision of the special laboratory evokes in them the feeling of being respected. The laboratory makes them feel that the library respects them. They are appreciative of the equipment which the library had provided for them in the special lab – the PCs with screen reader, Embosser Braille printer - which are essential for their studies.

“For disabled students the library is a very comfortable place because we have the carrels and the special lab! It is very easy to use. . . In providing such facilities like special lab I feel the library considers our need and respect us.” (Laila, 23 years old)
“We use the library for a different purpose in comparison with sighted peers. For example, we go to the library for our reading sessions and to use the special lab for visually impaired students...Providing such facilities establish us as a member, that we exist and this is important.” (Fahimeh, 23 years old)

“The special lab is very important to us as the lab is equipped with screen reader software, special printer such as Embosser which print and convert the PDF files to Braille and also we have access to the internet.” (Yacob, 37 years old)

Louvee, however, indicated that there should be more up-to-date equipment in their special lab, beside providing maintenance support for the existing facilities.

“Some computers in the special lab are outdated and are very old computers! The equipment needs to be maintained. Also, I think the library needs to increase their knowledge about the new technologies available for the visually impaired students....” (Yacob, 37 years old)

Table 5.2 summarizes the themes that emerged from responses about special laboratory in the library for the visually impaired students.

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers/barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel comfortable and proud</td>
<td>• Provision of special laboratory</td>
<td>• Sense of being proud</td>
<td>• Positive attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Provision of screen readers</td>
<td>• Feel comfortable</td>
<td>• Sense of being important</td>
</tr>
<tr>
<td></td>
<td>• Provision of Braille printer</td>
<td>• Feel easy to use</td>
<td>• Sense of being included/considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel satisfied</td>
<td>• Sense of being valued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel convenient</td>
<td></td>
</tr>
<tr>
<td>Being respected</td>
<td>• Consider special lab/equipped with special facilities</td>
<td>• Feel comfortable</td>
<td>• Positive attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Very old computers/outdated computers</td>
<td>• Feel at ease</td>
<td>• Sense of being respected</td>
</tr>
<tr>
<td></td>
<td>• Poor maintenance</td>
<td>• Feel respected</td>
<td>• Sense of being considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel that they exist as members and are important</td>
<td>• Sense of being important/valued</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lack of library staff awareness</td>
<td>• Negative attitude towards library (barrier)</td>
</tr>
</tbody>
</table>

Table 5.2: Themes Emerging from Attitudes Towards Special Laboratory
5.1.1.3 Special Resource Centre

The concept of inclusion refers to creating an environment in which all library users have access to all library materials based on their needs and limitations. Libraries should implement new strategies to increase visually impaired users’ access to new library resources such as talking books, Braille books, accessible e-books, easy-to-read books, and others. Besides allocating adequate budget based on the visually impaired students’ needs, libraries should also consider initiating programmes to train librarians and increase their awareness about applying assistive technologies in libraries. The other aspect which should be considered is establishing a collaborative environment among libraries to operate an inter-library loan system.

Based on the literature on the sense of belonging, individuals feel they belong to community or group based on personal relatedness to the members of other communities. Indeed, when individuals feel that the group is sensitive to their needs, they feel included, and when they receive support from the group, they feel being valued and being respected by the group. This will, in turn, result in them having a sense of belonging (Osterman, 2000; Abedin et al., 2010).

In this study, the visually impaired participants had indicated their pressing need for a special resource centre, which would create in them a sense of belonging. Indeed, the establishment of such centre reflects the library authority's concern and support for their essential needs for different formats of information resources.

5.1.1.3.1 Sense of concern and belonging

The desire to be accepted and to belong to any social setting, is a fundamental need of human beings (Hewitt, 2007). In fact, one of the factors which has an impact on the
individuals’ motivation and perception in an educational environment is the sense of belonging (Baumeister & Leary, 1995).

According to Nasir, one of the facilities in the library which he feels might instill a sense of belonging is having a special resource centre. He expects the library to consider providing for such a facility for the visually impaired students to help in converting printed resources into a more appropriate format such as Braille or PDF. If the library provides such a facility, it indicates that the needs of the VIPs, have been considered, created and this will a sense of belonging among the visually impaired users.

“If the library could provide us the Braille books, we could see that the library considers our needs, is concerned about us. In this way we would feel like we belong to the library! Currently, we have to retrieve the books, scan them and re-edit it so that we can read using our laptop or read to us by our volunteer reader. So because of that I feel that if we have a centre to help us to convert the books to Braille or PDF, it would be easier for us to study.” (Nasir, 21 years old)

5.1.1.3.2 Sense of Support

The degree of support individuals receive from other members of the community affect their sense of belonging (Strayhorn, 2008). Indeed, individuals in a supportive and caring educational environment will feel more connected and valued, and this will affect their sense of belonging, and sense of being motivated to engage in the institutional programmes (Battistich et al., 1995).

A special resource centre is one of the desired facilities. It will create the sense of being supported among the visually impaired users. Fahimeh, Yacob and Sedigeh expect the library to provide a special unit for visually impaired students with a special librarian to
assist in making information resources available in more suitable formats for the visually impaired students by converting the resources to Braille or PDF. Yacob and Sedigeh believe that if the library assists them to make information resources more accessible and suitable for their use, they would feel more comfortable and at ease to continue with their studies. Also, they feel, that such a facility would help them to save their time and energy.

“I think we need a special section which is responsible for converting print resources to Braille or PDF. The section should have a special librarian to help us convert the books! In my secondary school we had a teacher who was in charge of us. Her duty was only to help us to convert all our materials into Braille. In this way it was quite easy for us to learn and study! You know the volunteers can read and we type it in Braille but if we had that special section, we could convert the books in an accessible format for us.” (Fahimeh, 23 years old)

“Yes, we need additional support! For example now in the library, we don’t have any Braille material, right? So we have to ask volunteer readers to read to us or scan for us or try to find the information we need through the internet! Sometimes I ask myself why the library hasn’t established one unit for visually impaired students. Such a unit would really help, it would save our time and energy. It makes it easier for us to study… Actually I am satisfied with other facilities, which the library provides for us but I still think we need additional support.” (Yacob, 37 years old)

“Wait! Wait! It just popped up in my mind! Yes, we need a publishing unit! I mean publishing unit for visually impaired students. I have a friend in UK. He is visually impaired and is doing his PhD there. He told me in his university provide a publishing unit for visually impaired students, where he can convert all his
manual, references which is related to his discipline to the Braille format! Can you imagine! How this could make it easier for us to study.” (Sedigeh, 29 years old)

Hadi informed that he understand the difficulties faced by the library to convert printed information resources to Braille. He indicated that all visually impaired students are aware about the lack of budget and the cost to establish of such a facility, for the library authorities. Hadi realized it would not be logical for him to expect the library to convert all library printed materials to Braille or PDF. Nevertheless, they expect the library to consider establishing such a unit for the visually impaired as it is very important to them. Hadi suggested that the library could concentrate on the disciplines which most of the visually impaired students study.

“If the library cannot provide all the books in Braille format, at least they can concentrate on specific fields! For example the majority of visually impaired students study in the faculty of art, social science and Malay studies, so I think the library has to focus on all books which are related to the reading list assigned by these two faculties. We need to have such a special unit to help us scan books and convert the format of books into an accessible” (Hadi, 22 years old)

Table 5.3 summarizes the emerging themes based on the participants’ responses to the suggestion to have a special resource centre as a facility for the visually impaired students.
### Table 5.3: Themes Emerging from Attitudes Towards Special Resource Centre

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of concern and belonging</td>
<td>- Providing special resource centre</td>
<td>- Feel considered</td>
<td>- Positive attitude towards library</td>
</tr>
<tr>
<td></td>
<td>- Providing Braille books</td>
<td>- Feel concerned</td>
<td>- Sense of being included/considered</td>
</tr>
<tr>
<td></td>
<td>- Converting print resources to Braille or PDF</td>
<td>- Feeling of belonging</td>
<td>- Sense of belonging</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Feel at easy to study</td>
<td>- Sense of being valued</td>
</tr>
<tr>
<td>Sense of support</td>
<td>- Providing special resource centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Support to convert print resources to Braille or PDF</td>
<td>- Feel at ease to learn and study</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Increase access to information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Save time</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Save energy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Feeling of being helped</td>
<td></td>
</tr>
</tbody>
</table>

#### 5.1.1.4 Special WC

One of the facilities which the UM library provides for disabled users is a special WC on the first floor, and located near the carrels. The WC is a standard WC but is equipped with a special handrail for the physically disabled, and both physically and visually disabled students use this WC. This facility makes the visually impaired students feel that the library is concerned about their well-being and needs.

#### 5.1.1.4.1 Sense of being considered

Atifah and Louvee indicated they are very happy and satisfied with being provided with the special WC. They are happy that it is located near the carrels, and this to them shows that the library is sensitive to their needs.

“I feel good when I see that we have our own WC here. It is near our carrel rooms and is convenient for us to use it. We therefore, have our own privacy [laughs]” (Atifah, 22 years old)
“I remember the first day I came to the library, that time the library don’t have any special facilities for disabled students, no special WC for us. But now the situation is different. I am so happy when I see that they have considered us and provide a special WC for us disabled students, for me this consideration is enough [smile].” (Louvee, 28 years old)

Figure 5.3, 5.4 and 5.5 shows the special WC that the university library allocates for disabled students.
5.1.1.4.2 Dirty WC

Mostafa and Laila complained that the special WC is dirty, and the library authority has not maintained it well. They perceive the WC to be a facility that has been ignored and they are upset. Mostafa informed that the special WC is also used by library staff and he wonders why they are doing so, as there is a staff WC right beside it.

“You know, we have our own restroom, I mean WC! It is great and it is only for disabled students but I have noticed that some of the library staff use it. They are not disabled, so why should they use it? Because the restroom for the librarians is just next door to our special WC! Maybe sometimes they see oh, the staff restroom is occupied, so I can use the disabled WC, but it is not right…Another problem is sometimes our WC is dirty, too dirty! So sometimes I get upset!” (Mostafa, 24 years old)

“The WC is ok but sometimes it smells very much, it seems they don’t care about making the place clean! And also sometimes men enter the women’s toilet [laughs].” (Laila, 23 years old)

Figure 5.6 and 5.7 shows the condition of water hose in special WC.
Nasir and Mehran suggested that the number of special WC be increased and made available on the other floors for the convenience of all disabled students especially for physically disabled users who are on wheelchair.

“We have special WC for disabled student on the first floor, it is good but I think we have to ask for more because for example on the second or third floor we don’t have any special WC, so the disabled who use the wheelchair have to come to first floor and it is difficult for them!” (Nasir, 21 years old)

“We have a special WC on the first floor, it is easy to use and I feel comfortable to use it but I think the library should consider installing more on other floors for disabled students who use the wheelchair...” (Mehran, 29 years old)

Table 5.4 summarizes the visually handicapped student’s attitudes towards the special toilets provided for them in the library.
Table 5.4: Themes Emerging from Attitudes Towards Special WC

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Sense of being considered | • Consider having special WC  
• Easily location | • Feel satisfied  
• Convenient  
• Have their own privacy  
• Feel happy  
• Feel being considered | • Positive attitude towards library  
• Sense of being included/ considered  
• Sense of being valued/ important |
| Dirty WC | • Library staff also use the special WC  
• Dirty WC  
• Smelly WC  
• No special WC on other floors | • Feel angry  
• Feel rights have been intruded  
• Feel upset  
• Lack of care  
• Inaccessible  
• Difficult to use | • Negative attitude towards library staff  
• Sense of being excluded/ ignored  
• Sense of not being valued/ respected  
• Sense of not being considered |

5.1.2 Services

Accessible design can be defined as designing of services, products or environment to be as usable as possible for all members of society regardless of their abilities or ages (Association on Higher Education and Disability, 2010). To create accessible services for the disabled users in the library, we have to understand the disabled users’ perception, and expectations and not on our presumption about their needs (Hernon & Calvert, 2006). Indeed, providing accessible services, beside removing accessibility barriers, indicates a welcoming environment for the disabled users, and this will increase their satisfaction (Cole, 2006). Taylor et al. (2009) pointed out the difference between users’ perception of service quality and satisfaction. They opined that positive perception does not occur suddenly but it happens over a long period in the evaluation of the services by customers. In fact, when customers are satisfied over time, it is because of their perception of the quality of service.
5.1.2.1 Volunteer Reader

A majority of VIPs indicated that beside the carrel room, the availability of volunteer readers in the library is another condition, which motivates them to come and use the library. They explained that the volunteer reader's role in their life is not only concerned with their educational goals and study matters, but are also their social connectors. In fact, the volunteer readers provide an opportunity for the VIPs to improve their social skills and expand their social network.

5.1.2.1.1 Volunteers as Academic Saviors

Stainback and Stainback (1990) highlighted the importance of welcoming and being supportive peers for disabled students in an inclusive environment. This makes the disabled students to have a sense of belonging and a feeling of being included. A supportive environment in which non-disabled peers readily support their disabled peers makes the disabled students feel welcomed, respected, accepted and valued (Osterman, 2000; Salend, 2004). Such a feeling also evokes in them a sense of belonging to the community. helps them feel like they belong to the environment. Robinson and Wilkinson (1995) and Samuelsson (1997) highlighted the important role of social support from other members of the community, which can help to reduce decrease the anxiety and stress of their disabled peers and provide for their psychological well-being for them.

In this study, the visually impaired students commended the role of volunteer readers in their educational life. They said that it is difficult for them to study in the library without the volunteer readers’ assistance. Sedige and Yacob pointed out their need for volunteer readers help in particular, in the library. They said that without volunteer readers performance would be lower and they would feel depressed and confused.
“I have cried before! I cried many times in the library when my volunteer readers were not around! Without volunteer readers I cannot do anything in the library. I cannot find books on shelves ... there isn’t any braille sign on the shelves, even if there was braille sign on shelves, the call numbers are not in braille, so how can I find the books I need on the shelves? I remember the last time I was under pressure from my supervisor to submit my progress report, my volunteer reader was not in the library, I needed her assistance! And If I submitted it late my supervisor would scold me! That time I felt very depressed! You know we are postgraduate students, sometimes we need to read a lot of books or articles, we need to read the book from page to page, and the whole article not only one paragraph or the conclusion!” (Sedigeh, 29 years old)

“You know we study differently from sighted students. We have to work doubly hard or sometimes triple times harder than sighted students! We have to transcribe the works from sighted peers, write it to braille and so on. That is why we need volunteer readers! Since here in this library we don’t have braille books or very few books are in braille, we need volunteer readers to find books for us on the shelves, to scan books or documents for us, I mean we need their support!... Even when I want to borrow books, I would ask my volunteer reader to go to the counter to borrow it for me, I give him my matric card. Although I use the OPAC to search for the titles of books through the internet and our software JAWS to read the page for us, but I still depend on my volunteer readers. Sometimes I ask them to read me the book titles and then ask them to borrow this and that book! I am a lazy person to access the internet and OPAC .... When I work by myself through OPAC and internet I am very slow! I have to go one by one, listen and it is a long process! So I prefer to ask my volunteer readers to read it for me, I think it is faster! They read to me all things on the screen and then I make a decision
about the books or articles which I need to download or borrow! We are dependent on the volunteer readers, even if librarians bring us the book.., who would to read the books to us other than the volunteers?” (Yacob, 37 years old)

“We need the volunteer readers to find for us the books on the shelves, so imagine the day our volunteer readers are not in library! We cannot find our reading materials!” (Laila, 23 years old)

Osterman (2000) observed that a sense of belonging is evoked when disabled people receive appropriate support and care from other members of the community. Solomon et al. (1997) emphasized the role of warm and supportive peers, which make their disabled peers feel more connected to their community. For Amir, Hadi, and Louvee, the support and the role of volunteer readers in the library is important. The volunteer readers are friendly, help them in the library and are available to help them whenever they needed. This gives them a feeling of comfort and, at the same time, more satisfied with the library.

“Here in the library I feel comfortable. I have volunteer readers who help me to read, the only way I can see them is in the library, they come to the library to help me and they determine the day they want to come, I look forward to see them, as they help me to study!” (Amir, 31 years old)

“There is a difference between us and sighted students and it is that we are blind, we cannot see! In this library, most books are in print and, we cannot read them. So we need volunteer reader's assistance to search for books we need and locate them on the shelves. They help us to read the books! Like Negar my beloved volunteer reader who help me in the library. The library is very big and there isn’t any tactile inside the library, so it is possible to lose my way in the library.
Volunteer readers also help and guide us in the library... They are very helpful, they are very friendly, they are very supportive! Some of them are our classmates, and some become our volunteer readers after they become aware about our blindness. I mean through the disabled association awareness programme and then they come and register to become our volunteer readers. Also, we identify our volunteers from the notice board which the library has allocated for the visually impaired. We put our schedule form with our pictures and that’s how some of the students in the library register to become our readers” (Hadi, 22 years old)

“So now, I am quite satisfied, honestly quite satisfied. Most of the time, when I need a volunteer reader's help, I just call them or send them an SMS and they will come to help me! ... Sometimes in the library I try to find more volunteer readers, when I interact with any students and see he or she is eager to help me, I will ask them - would you like to be my reader?” (Louvee, 28 years old)

Figure 5.8 shows the volunteer reader board that the university library allocates for VIPs.
5.1.2.1.2 As Academic Motivator

Based on the literature on the sense of belonging, the more the students have a sense of belonging and feel being accepted in the educational environment; the more motivated they will be to participate in relevant educational activities, and thereby increase the frequency of their engagement in the environment (Goodenow, 1993; Osterman, 2000; Solomon et al., 1997; and Salend, 2004).

Yacob, Amir, Hadi, and Firooz indicated that without volunteer readers they do not have any interest or motivation to come and use the library. Volunteer readers motivate them to use the library facilities.

“Actually, I always call my volunteer readers before coming to the library. If they cannot come, honestly I feel unmotivated to come to the library because I don’t have any volunteer reader to help me, to read for me! So it is better to stay at home (laughs). It is very difficult because I tend to sleep if I stay home!” (Yacob, 37 years old)

“One of the conditions which motivate me to come to the library beside other facilities which the library provides such as carrel rooms or the special lab is the presence of volunteer readers. In fact, the volunteer readers motivate me to come to the library every day for reading sessions” (Amir, 31 years old)

“One of my worries is that I couldn’t find volunteer readers to help me, to read books for me but when they are with me, I feel comfortable… when I come to the library I wait till my volunteer readers come to help me…. They help us find information and this allows me to continue with my studies.” (Hadi, 22 years old)
“There are lots of things in this library such as resources, carrel rooms, my visually impaired friends and volunteer readers. I can say we have a positive atmosphere. We need volunteer readers, since in the library we don’t have braille books, we need friends to read books for us, so when I need help, I just call my volunteer readers to come and help me.” (Firooz, 21 years old)

For Mostafa, Fahimeh, and Mehran, the library has a different meaning for them, unlike their sighted peers. The library is not only the physical space in which they can find information or borrow books, but it does more for them. The library is a physical space with a soul and the volunteer readers can be deemed to be the soul of the library! Volunteer readers are the main condition which gives the library extra meaning for visually impaired students.

“For visually impaired students the library is viewed differently from non-disabled students! Maybe they [sighted students] just come to library to pick up some book and then go! But for us it is different. We come to the library to meet our volunteer readers! They help us to search the books we need, they read to us ... These things makes the library extra meaningful for me!” (Mostafa, 24 years old)

“Non-disabled students only go to the library to find books or references, but for us it is different! We go to the library for reading sessions with our volunteer readers; the volunteer readers borrow books and read it for us” (Fahimeh, 23 years old)

“One of my challenges in the library is how to read the books. Even though we have lots of book but I cannot read them by myself. I cannot scan the books by myself or find the location of the books. I mean I can find the call number through
OPAC with the Screen reader software but cannot go to the shelves to find books!
So we need somebody to help us to get the book, because of that we have volunteer readers! That is why I come to the library, yes! To meet my volunteer readers!” (Mehran, 29 years old)

5.1.2.1.3 Volunteers as a Channel for Social Interactions

Sheafor and Horejsi (2006) and Hoyeon (2006) pointed out that one of the fundamental aspects in human life is communication, which involves the exchange of thoughts, beliefs, emotions, and information. Communication is a useful tool for integrating people in the community. Kunc (1992), McGregor and Vogelsber (1998) observed that high level of interaction between disabled and non-disabled peers helps increase the former to improve their social skills besides improving their academic performance.

Nasir, Yacob and Laila voiced their satisfaction and pleasure in interacting with volunteer readers. They consider volunteer readers as the avenue that connects them with the world of the sighted students, thus, improving their social skills. Through the volunteer readers, visually impaired students find themselves a channel of opportunity to make friends and expand their social network.

“... We have many facilities in this library, many positive facilities such as carrel rooms, special lab and the volunteer readers. We as visually impaired people need to interact with other students in the university. I think librarians cannot do anything in this matter for us but volunteer readers are good channels that help increase our interactions with non-disabled students!” (Nasir, 21 years old)

“Yes, I think the readers play an important role in my life and the life of other visually impaired students. Actually, through the volunteer readers we can form friendships and become friends with other people such as their sighted friends.
They also help us come into contact with other possible readers. Through them we widen our social connection too. When I want to go outside to eat, I ask them to come here and join me and then go on outings like friends! I ask them like a friend to join me to go shopping, go for walk, go out for chats and so on.... Occasionally, after some time, my volunteer readers and I become friends and I also become friends with their friends ....!” (Yacob, 37 years old)

“I myself always tell my juniors to come to the library. Here we are comfortable, and we have carrels and volunteer readers! The volunteer reader’s role in our life is not only to find the books or read the books for us, in fact they help improve our communication skills, help us know how to communicate with other sighted students and how not to feel embarrassed or awkward in front of non-disabled students” (Laila, 23 years old)

Nyberg, Henricsson and Rydell (2008) observed the main challenges faced by visually impaired students in an inclusive setting in trying to maintain their interaction with their sighted peers. They said that visually impaired students do lack social skills. Baumeister and Leary (1995) also highlighted the need for visually impaired individuals to have regular contact with other members of the community, and that such interpersonal interaction should be ongoing, affective and stable in order for the individuals to feel like they belong to the community. They pointed out that the sense of belonging is more than just making social contact, in fact, it includes feeling positive and finding pleasure in the interactions with members of the society.

Farhad and Mehran indicated that the only way for them to be in contact with sighted students is through their volunteer readers.
“I feel comfortable in the library, I have my carrel and can find it easily but for finding and searching books I am dependent on volunteer readers. Whenever I need their assistance, I just call them. In the library I am only acquainted with my volunteer readers, I don’t know other sighted students although I would like to become friends with others too! Perhaps, our volunteer readers can be our bridge to connect with the non-disabled students.” (Farhad, 22 years old)

“Actually, when I see that I come to the library and stay in my own carrel. Other sighted students go to the other floors, using and sharing tables, discussing and doing their assignments. So we have very little chance to communicate with them, to form friendships with them. But we are here in the library to see our volunteer readers. At first, they are only our volunteer readers but eventually they became our friends, our best friends! Besides the reading sessions here, volunteers also assist us to get any information we need and help edit our works. When I think about it, I realise that they are our best friends who help us with our research.” (Mehran, 29 years old)

One of the most critical issues for the visually impaired participants was the need to find more volunteer readers. They explained that although the library has allocated them a special board on which they can paste their schedule, and their personal profile and picture to find volunteer readers, it is not enough. They believe that the library should encourage more students to volunteer by providing them with certain privileges, such as allowing them to borrow more books. This was suggested by Yacob.

“I think the library should put more effort to get more volunteer readers for us. Maybe they can give some advantage for those who become volunteer readers, which would motivate other sighted students to get involved in this program. For example, the library can consider giving volunteers longer borrowing period or...
allow them to borrow a few books more than other normal students. Such incentives could motivate more to become our volunteer readers... We try to find our volunteer readers through our own initiatives too, such as making enquiries at colleges and hall of residences. With a larger volume of students visiting the library, the library is in the position to do more. Putting a board in the library to introduce visually impaired students is good idea but is not enough! It is hard for us to find volunteer readers by ourselves since we cannot see other sighted students in library. The library can use Facebook to inform other students about helping out as volunteer readers.”” (Yacob, 37 years old)

Mostafa, Sedigeh and Fahimeh think that the library should be more productive in finding volunteer readers for them by initiating special programmes or using different channels to inform students about the visually impaired and their need for volunteer readers. One of the channels suggested is the use of Facebook or flyers.

“I have never heard of any special program for visually impaired students in this library to find volunteer readers. The only channel, which exists is the board on where we display forms containing information about us, our class schedule and our request for readers. Our photos are on the forms too. I think it would be more helpful if the library considers other channels, informing students about the special programmes or advantages for volunteer readers. The library can inform students about our needs through flyer papers or through Facebook! In this way maybe we can find more readers! ” (Mostafa, 24 years old)

“We proposed that the library be more active in helping us to find more volunteer readers. The library can advertise on Facebook or on boards, through a campaign. I haven’t seen anything more than the board on which we hang our schedule. The library can help us to inform the sighted students what is a
volunteer reader, what do we need, what is their job or tasks as volunteer readers....” (Sedigeh, 29 years old)

“I think the library has to use Facebook to advertise to help us find more volunteer readers. I think Facebook is the best way since now all students in Malaysia uses Facebook” (Fahimeh, 23 years old)

Amir suggested using the library open day to introduce the visually handicapped and their need for volunteer readers.

“The library can play an important role to motivate non-disabled students more enthusiastic to become our volunteer readers. For example, during the orientation week for new students, they can besides giving briefs about the library they could also information about us and our needs for volunteer readers. The library also can provide some information about volunteer readers during the open day of the library!” (Amir, 31 years old)

Firooz and Atifah commented that the special board is good, but it does not work well. They think that since the students in the library are constantly busy, they do not bother to stop and read the notices on the board. Atifah suggested the use of other channels for publicity such as cooperating with other universities to create a supportive policy for volunteer readers. She believes that such methods can motivate more sighed students to become their volunteer readers.

“We found our volunteer readers through the disabled association. They organized a tour, which goes from college to college to inform students about us and encouraged sighted students to become our volunteer readers. Also, we have a notice board in the library, but I think it is not too practical. Students in the library are in a rush. They just come to do their assignments, borrow books or so
on; they don’t care about the notice. Maybe the library needs to consider another way such as putting a poster in the bus station or other space where students are around more” (Firooz, 21 years old)

“Finding the volunteer readers is difficult; I mean it is not easy, so I think the library can help us. I think using Facebook is a good idea. Nowadays, all students have Facebook. I feel the notice board is good but it is not enough because some of the students see our forms on the board and fill it but some of them do not care and may ignore it. The library instead of only relying on the board, they can use Facebook, Perdana siswa email, or they can consider some advantages for volunteer readers. For example students who become volunteer readers can add more credit hours.” (Atifah, 22 years old)

Figure 5.9 shows the location of volunteer reader board that the university library allocates for VIPs.

![Location of Volunteer Reader Board](image)

Figure 5.9: Location of Volunteer Reader Board

Louvee also supports Atifah’s idea about rewording the volunteer readers. He suggested that the library can consider certificates for volunteer readers, allowing them to borrow
more books, and allowing volunteer readers to receive one credit hour at the end of the semester.

“I believe the library should consider giving some advantages for volunteer readers to motivate other students to become our volunteer readers. My suggestion is to consider giving certificates for them from the library, allowing them to borrow more books, considering some penalties for students who return books late to become our volunteer readers (laugh)! The library can negotiate with the university authorities to consider one credit hour for volunteer readers at the end of each semester.” (Louvee, 28 years old)

Table 5.5 summarizes the emerging themes derived from the students responses about volunteer readers.

Table 5.5: Themes Emerging from Attitudes Towards Volunteer Readers

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Types of Space</th>
<th>Types of Feeling</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| As an academic saviour | - Read books  
- Read articles  
- Locate and get books from library shelves  
- Gather resources  
- Scan books/documents  
- Check-out books  
- Search OPAC/Internet for resources  
- Download resources  
- Help in moving around in the library | - Stressed (cried)  
- Helpless  
- Pressured  
- Relieved  
- Grateful  
- Loved | - Being helped  
- Being assisted  
- Being supported  
- Cared for  
- Legitimate member of society  
- Satisfied  
- Loved  
- Accepted |
| As an Academic Motivator | - Makes themselves available promptly | - Motivated  
- Worried when readers are absent | - Motivated to go to the library  
- Comforted |
| As a Channel for Social Interactions | - Interact  
- Converse  
- Make friends  
- Introduce friends  
- Obtain more volunteers  
- Meet socially | - Satisfied  
- Happy  
- Important | - Increase interactions  
- Improve social skills  
- Improve communication skills  
- Socially connected  
- Belong to the student community  
- Widen social circles |
5.1.2.2. Special Librarian

Equality can occur in libraries if the librarians are aware about the disabled people, their needs, and the services the library should provide for them (Vitzansky, 1994; Koulikourdi, 2008). Increasing the librarians’ knowledge about disabled users can also improve their sense of empathy, thus, increasing the quality of the library services to them (Birdi, 2008). Indeed, libraries need empathetic librarians as intermediaries between the library and its users. Such librarians, beside enhancing the library services, would try to include the disadvantaged library users into the library’s mainstream environment (Birdi & Wilson, 2008). The librarians are therefore, valuable resources in the library environment for facilitating cooperation with disabled users and thereby, socially include them (Holmes, 2008). In some libraries, the person who handle the disabled people are special librarians or librarians for a special group of people. Therefore, the appointment of special librarians should be considered an essential service, as the person can become the catalyst to include disabled users into the library community. Also, such service would reflect the value and respect the library authority has towards the disabled users, and this will, in turn increase their sense of belonging. In this study, the visually impaired students expressed that the appointment of a special librarian to serve their needs, would clearly indicated the library’s support and respect for them and their needs.

5.1.2.2.1 Special librarian as a sign of support

Social relationship with teachers and peers has been considered as one of the main factors in creating connectedness between disabled students and the educational setting. In fact, supportive social relationships and the existence of trust between disabled and non-disabled students and teachers, respectively, create an atmosphere in
which disabled individuals feel comfortable, and the result of such feeling could trigger a deep sense of belonging (Cemalcilar, 2010).

Mostafa and Farhad indicated that they need the support from a special librarian who would be in-charge of them. They expect the special librarian to form a team to help search for and find books on shelves or assist in other urgent matters. In fact, they believe with such a service in the library, they would know who they should refer to when they encounter any difficulty in the library.

“As disabled people, we don’t want too much things. Only there are certain things that we cannot do by ourselves like searching for books on shelves! Even I as a low vision person have difficulties in locating books, especially those on the top shelves, so I need help from others... If I am asked about what I would like to see changed in the library is positioning a librarian on each floor to help students to find books” (Mostafa, 24 years old)

“How can I describe it for you? We don’t expect perfect services, but we do need a person in charge of visually impaired students, to help us, to find books on shelves and so on. But now there isn’t any special librarian... I feel we need this service in this library, I mean the special librarian” (Farhad, 22 years old)

Laila and Sedigeh perceived librarians to be too busy to help them in finding books. They realise that librarians have their own duties, and there is no written policy to require them to solely help the visually impaired users. It is quite usual for the librarians to ask the visually impaired students to seek help from their friends or volunteer readers. Because of this, they feel the library should consider the appointment of a special librarian to provide special services and support for them in the library.
“We have two library staff here who are in charge of the carrel rooms and volunteer readers, but I think we don’t have any staff who is in charge of searching for books, finding books on shelves or to support us in the library! Because of that the library staff tell us try to search and find books with our volunteer readers!” (Laila, 23 years old)

“I think the library should hire somebody to help us, because the current library staff seems too busy with their own work. So I think the library should hire somebody to provide more support for us, like a person who is in charge only for the visually impaired!” (Sedigeh, 29 years old)

Atifah and Amir believe that the special librarians would help them know whom to see or complain to whenever they encounter any difficulty in the library. They also suggested that there should be more than one special librarian so that when one is on leave they have access to another librarian.

“The library should consider some librarians to be in charge of us, besides having the help from volunteer readers. We need help to look for books on the shelves or during emergencies. There should be more than one available, so that if one is busy or on holiday we have access to another one. I think we need this.” (Atifah, 22 years old)

“If such a service is provided, we can go to the counter and request for help. However, most library staff are not familiar with disabled people. I mean they don’t have enough awareness. So if we have a library staff trained about disabled people and their needs that would be great. In this way, special librarian can help us meet our needs and also help the library authority to allocate the budget appropriately.” (Amir, 31 years old)
5.1.2.2 Special librarian as a sign of respect

As Maslow (1962), Beck and Malley (1998) pointed out, the sense of belonging in any community is based on the individual’s perception about the degree of acceptance and respect which they receive from other members of the community. In the library context, when the visually impaired users observe that the library authority has considered special facilities such as having a special librarian to meet their needs, they will perceive such service as an indication that the library accepts and respects them.

Mostafa and Hadi informed that they have never heard about a special librarian in the UM library who can help to search and find books for visually impaired students. They regarded such a service as essential to make them feel comfortable in the library, especially, when their friends or volunteer readers are not around. Indeed, having a special librarian will make them feel mentally safe and relaxed.

“I never heard that this library has a special librarian who is in charge for supporting the visually impaired! The only thing I have heard about is the carrel room, special lab and so on... I believe the library can indicate their respect for us by providing a librarian who can help us search and find books on the shelves! If the library does such a thing, I would be satisfied!” (Mostafa, 24 years old)

“The library can consider assign a special library staff to care for the needs of the visually impaired students, especially in finding and searching for books. You know library staff who are willing to help us to find books are essential, so that we can for their help directly, especially when our friends or volunteers are not around us.” (Hadi, 22 years old)

Table 5.6 summarizes the emerging themes extracted from the participants’ responses about the availability of special librarians to help them in the library.
Table 5.6: Themes Emerging from Attitudes about the Availability of Special Librarians

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special librarian as a sign of support</strong></td>
<td>• Special librarian helps to search books</td>
<td>• Feel comfortable</td>
<td>• Positive attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Finding books on shelves</td>
<td>• Feel it is useful</td>
<td>• Sense of being included/considered</td>
</tr>
<tr>
<td></td>
<td>• Help during emergencies</td>
<td>• Essential to have a special librarian</td>
<td>• Sense of being valued/cared for</td>
</tr>
<tr>
<td></td>
<td>• Support visually impaired users</td>
<td>• Feel grateful</td>
<td>• Sense of being important</td>
</tr>
<tr>
<td></td>
<td>• Having a special librarian who is in-charge of VIPs</td>
<td>• Meet VIPs needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Struggling to allocate appropriate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>budget for VIPs</td>
<td></td>
</tr>
<tr>
<td><strong>Special librarian as a sign of acceptance</strong></td>
<td>• Consider having a special librarian</td>
<td>• Feel respected</td>
<td>• Positive attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Willingness of special librarian to help</td>
<td>• Feel satisfied</td>
<td>• Sense of being respected/valued</td>
</tr>
<tr>
<td></td>
<td>• Find books and search for books on shelves</td>
<td>• Feel it is essential</td>
<td>• Sense of being included/considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel easier/Comforted</td>
<td></td>
</tr>
</tbody>
</table>

5.1.2.3 Library Website

To achieve excellent service quality, libraries should consider web accessibility as priority in their service plan. The benefit of web accessibility to both disabled and non-disabled users is that the users can obtain the desired information without having to go to the library (Comeaux & Schmetzke, 2007). Indeed, the social barriers of disabled users in libraries are related not only to the physical aspect of a library environment but also to the virtual and remote environments (Schmetzke, 2002). Although, libraries do not have direct control over the creation of the databases outside of the library, they can, however, make their own library website accessible.

The design of an accessible website indicates the library authorities’ respect and consideration towards the visually impaired users. Finn (1989) found that when students feel welcomed, respected, and valued by the educational system, it increases their
participation in the activities. Also, true learning happens when students feel a sense of belonging to their school (Combs, 1982).

5.1.2.3.1 Inaccessible website

Amir and Ahdiyeh explained their feelings towards the library website. They indicated that when they have difficulties in navigating the library web page with their screen reader software, they feel frustrated and disappointed.

“We use the library website with the screen reader software such as JAWS or Window eye. The screen reads us the content of the website and we navigate through the keyboard on the website, but there are some difficulties in using the library website. I mean the library website is not accessible for us because it is not designed based on accessibility guidelines. Accessible website is very important for visually impaired. With an accessible website we can efficiently navigate and reach the information! ... sometimes you see the graphics or audio files have not been labeled properly, so it causes difficulty for us to navigate at the library website easily. Sometimes you can read but the translation is not as fast as I have expected, ...in such a moment I feel frustrated. The resources are there but you don’t have access to them, you cannot use them.” (Amir, 31 years old)

“I don’t know the procedure of creating a website, sometimes in specific websites we have difficulties with the screen reader, it is quite difficult, because when we move up or down the scroll, the screen reader doesn’t read so we don’t know where we are in the web page... I am not sure maybe it is because of poor accessible web design or uninterpretable data for the screen reader but when I encounter difficulty in using the website, I feel disappointed.” (Ahdiyeh, 22 years old)
Louvee and Mostafa explained that although the screen reader has been designed to read all links and sources, it has some limitations such as it cannot read images, diagrams or some buttons. Indeed, such problems happen because the library website has not been designed based on web accessibility guidelines. Web designers have to add text to icons or images to enable the screen reader software to read them.

“In the library website sometimes the library uses diagrams, which our screen reader cannot read and therefore an error notices issued.” (Louvee, 28 years old)

“The screen reader can read most things but it cannot read images, diagrams or some buttons. You know the software cannot read because it is not text, so many times in the library my visually impaired friends come to me to use the mouse to click the button! Since I am low vision, I can read by magnifiers, but it is quite difficult for those who are visually impaired who are dependent on the screen reader!” (Mostafa, 24 years old)

Mehran explained his main difficulty in navigating in the web based on the use of the screen reader software to find the desired icon.

“I feel the library website is ok but UM website is very complicated to use, You know sometimes it is difficult to find the appropriate icon which you are looking for, for example I have difficulties to find the postgraduate icon in UM website, I don’t know how to locate it with the screen reader, I tried many times but couldn’t, maybe in future I will try to find a solution.” (Mehran, 29 years old)

Table 5.7 summarizes the theme emerging from visually impaired students’ responses towards the library website.
Table 5.7: Themes Emerging from Attitudes Towards Library Website

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Inaccessible website  | • Cannot locate icons.  
                       | • Graphics of audio files have not been labeled and cannot be read.  
                       | • Screen reader cannot read the images or icons.  
                       | • Sources are available but are not accessible through website | • Difficulty in navigating  
                       | • Feel frustrated  
                       | • Feel disappointed | • Negative attitude towards library  
                       | • Sense of being excluded/ ignored  
                       | • Sense of not being considered/ care  
                       | • Sense of not being valued |

5.1.2.4 Information Skill Session

It is essential to create a positive customer relationship in libraries. Establishing such relationship takes time beside developing trust (Broady-preston et al., 2006). One of the key factors in creating such a relationship is communication, as it assists librarians as service providers and users as customers to form a meaningful relationship (Rowley, 2004).

One of the communication channels which librarians can use to improve their relationship with disabled users is the information skill sessions. In fact, through these sessions librarians, beside improving the disabled users’ ICT knowledge, can increase their own awareness of disabilities, and establish a stronger relationship with these disabilities. Such a relationship would provide a welcoming atmosphere where the disabled users feel more comfortable to communicate, make friends, and improve their social skills.

In this study, the visually impaired participants indicated that they have attended special information skill sessions organized by the library. They view this library service as an indication that the library value and respect them, and makes effort to meet their information needs.
5.1.2.4.1 Sense of equality

Unfair behaviours of personnel in an educational setting can affect the young adult's motivation to engage in school activities (Samuel, Kaspar, & Wickrama, 2007). Such discrimination can affect the socio-emotional adjustment of students (Eccles, Wong, & Peck, 2006) and, can also lead to their lack of participation, and eventually, isolating the students from the mainstream education society (Cyr, Euser, Bakermans-Kranenburg, and Van IJzendoorn, 2010). This infers that special information skill sessions for visually impaired users are vital. Indeed, providing such services indicates the library's concern, as well as the value the library has towards them.

Nasir and Laila believed that providing such services shows the library’s equal treatment and non-discriminative attitudes towards all users, and at the same time, the library acceptance of visually impaired users.

“The library should provide us the same information skill session like sighted peers, I heard they have the END Note session which teaches them how to manage their references in different styles, but in our special information skill session the librarian only teach us how to search the OPAC. I expect the library to offer similar programmes for all students.” (Nasir, 21 years old)

“You feel accepted in the library, when you see the library provide the same programme for both the disabled and non-disabled students, I mean the library should consider providing a special information skill session for the visually impaired.” (Laila, 23 years old)

Amir believes such services is essential for visually impaired users and the library has to make it compulsory for all disabled students to attend such sessions.
“We have discussed with librarians in our meetings and gave them our opinion about making the information skill sessions compulsory for undergraduate students. Now we have good facilities in the library such as computer lab and screen readers, so I think now is the time to ask all visually impaired students to attend such courses, you know previously the University told us we can skip this course but based on the difficulties the visually impaired have in searching and accessing information and also since it is necessary for us to learn it to continue our studies, I think now is the time to make it compulsory.” (Amir, 31 years old)

5.1.2.4.2 Being valued

Farhad thinks that librarian's awareness about disabled people motivated them provide special services. He feels valued and a sense of existence when he knows that the library provides such services for visually impaired users. Sedigeh also indicates her gratitude for the services offered such as the management of her volunteer readers, the private and special information skill sessions.

“Yeah, when you see the librarians are aware about the visually impaired, you feel that you exist! For example, from this year they provide for visually impaired students the special information skill session for undergraduate!”(Farhad, 22 years old)

“Last time, I asked my volunteer reader to accompany me in attending the information skill session, because the session was for sighted peers, so I need my friend’s assistance. At the end of the session I asked the librarian for special session for me and she accepted, it was good, it really helped me, and the librarian helped me a lot! I was very happy!” (Sedigeh, 29 years old)
5.1.2.4.3 Inevitable need for special session

The visually impaired participants indicated that they need special session with the librarians. They gave three main reasons: (1) the need to make effective user of the special PCs, which are equipped with screen reader; (2) to have more time; and (3) lack of librarian's awareness about assistive technologies.

Laila, Amir and Mehran indicated that it is difficult to attend the same course with their sighted peers, because they need PCs with screen reader software to follow the trainers’ instructions.

“We need the special information skill session and the librarian should teach us separately. You know it is difficult to attend with sighted peers, also the PCs in the sessions are not equipped with screen reader software such as JAWS or Window-Eyes, and so we cannot follow the course.” (Laila, 23 years old)

“Normally the librarians conduct the special information skill session for visually impaired, it is better because although we use the same program such as END Note but we work differently from sighted peers! In fact, we use the screen reader and it might take a long time for us to navigate it” (Amir, 31 years old)

“... Last time, I didn’t know how to work with END Note but I learnt it through information skill session. It was especially for the visually impaired. You know we need it! Because we work with PC differently from sighted peers, we need such special session! We use the keyboard keys to navigate on web page, we sometimes need more time and effort to follow the teacher!” (Mehran, 29 years old)

Ahdiyeh and Louvee explained beside their need to use PCs with screen reader, they also need more time than their sighted peers to follow and learn the lessons.
“It is essential for us to attend a special information skill session. We cannot integrate with sighted peers, because it takes a lot of time for the teacher to teach us and also for the visually impaired to learn! So it is vital to separate the information sessions for special students” (Ahdiyeh, 22 years old)

“... We cannot use the normal computers. The session is in our special lab in the library, and we work with PCs which are equipped with screen readers! Another point is since we are visually impaired, we need more time to figure out the programs and the teaching progress is slow but we don’t have any another choice. Mostly the librarian needs to assist all visually impaired students to make sure all students understand the process. For me the information skill session is quite useful, during the course we obtain the basic information and after that we explore it by ourselves.” (Louvee, 28 years old)

Librarians’ lack of knowledge about assistive technology adversely affects the visually impaired users’ life in the library. Mehran said that one of his difficulties in the information skill sessions is the librarians’ lack of awareness of the visually impaired users. He explained that librarians are not familiar with the use of the screen reader, and their sessions are special and need more time.

“... also one of our difficulties is lack of librarians’ awareness. Actually they are not familiar with screen reader and how to work with it. Sometimes we first have to explain to them about the way we navigate in the internet, our sessions are different, we explore together, we train the librarian and they train us, so it takes a lot of time! Because of that we cannot share the session with sighted peers.” (Mehran, 29 years old)
Yacob also confirmed that the quality of the special information skill sessions are affected when the librarians are not familiar with the screen reader and when they conduct the librarian combine the information skills programme together for both the visually impaired students and their sighted peers. He feels that these combined sessions will not work.

“I have attended a few information skill sessions and saw unfortunately the librarians teach the visually impaired same as sighted peers, since they are not familiar with screen reader and cannot work with it! I think this is not suitable, it doesn’t work, they don’t have any experiences on how to use the voice of screen reader, I understand it is very difficult, but you know during the sessions we cannot get any information!” (Yacob, 37 years old)

Table 5.8 shows the emerging themes based on the participants’ responses with regard to information skill sessions offered by the library.

Table 5.8: Themes Emerging from Attitudes Towards Information Skill Sessions

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
</table>
| Sense of equality        | • Providing information skill session on using ENDNOTE for both visually impaired students and their sighted peers.  
                          | • Providing special information skill session for VIPs  
                          | • Make information skill session compulsory for undergraduate VIPs  | • Positive attitude towards library and librarians  
                          | • Sense of being equal  
                          | • Feel accepted  |
| Being valued             | • Providing special information skill session                           | • Librarians awareness about disability.  
                          | • Presence is felt  
                          | • Feel happy  | • Positive attitude towards library and librarians  
                          | • Sense of being included/valued  
                          | • Sense of being respected/valued  |
| Need to be given special session | • PCs installed with screen reader  
                          | • Lack of librarians’  | • Feel being considered  
                          | • Feel being  | • Positive attitude towards library and librarians  
                          | • Sense of being included/valued  |
5.1.3 Site Location

There is a clear relationship between the sense of belonging and the lack of consideration of physical facilities and amenities (Cemalcilar, 2010). Studies carried out after World War II had considered the effect of physical amenities on students' motivation to engage in school activities (Sarason & Klaber, 1985). The physical qualities of an educational setting have not been considered as an influencing factor of students’ performance in industrial societies, because they have been greatly improved in recent decades. However, in less developed societies, it can still be considered as one of the main barriers Battistich et al. (1995) found that the lack of physical amenities has negative effect on an individual's performance, so it seems reasonable that to improve an individual’s sense of belonging to any environment, the quality of the physical amenities must be considered.

5.1.3.1 Access to Public Transportation

In this study, the visually impaired participants commented on the important role that accessible public transportation plays in invoking their sense of belonging to the library. Based on their responses, accessibility to bus stations, the ability to cross the road safely, and accessible routes with tactile effects will increase their sense of belonging. This will be discussed further in the following sections.
5.1.3.1.1 Inaccessible bus station

One of the main challenges of visually impaired students to reach the library and the bus station, is the car park. The car park is located beside the library building is a barrier to them. There is no tactile along the path from the bus station to the library entrance, and the car park is full of cars during the day. As a result, most of the visually impaired students cannot find their way in that space. For instance, Farhad, Louvee, and Mehran voiced their concern towards the library and their feelings when they cannot find their way through the car.

“Each time I want to cross the car park, I get very angry with the library management and feel sad for myself! Why do they create such difficulties for us! I think it is around 30 years that UM registered the visually impaired students, so why didn’t they consider our needs, why create such difficulties for us! The parking space is full of cars and there isn’t any tactile for us, so how can we reach the library or bus station through the car park?” (Farhad, 22 years old)

“I still have difficulties with the parking space; most of the time we cannot find our way in that space and I have unhappy moments! Imagine I have walked a long way from the college to the library but when you are right beside the library you cannot find your way! Also in front of the library's main entrance there are a few tables. Sometimes students change the positions of the tables or move them to a new location ..., so at such moments we hit them and fall down!” (Louvee, 28 years old)

“I can say one of our main problems [to access the library] is the car park space! Every time I want to cross it, I feel very distracted; it is one of my challenges! Each time I come to the library, I spend a lot of time trying to find my way,
because there isn’t any person to ask for help and also there are a lot of cars. In such moments, I cannot find my way, I feel frustrated! If the library could improve it, all of us would be happy!” (Mehran, 29 years old)

Figure 5.10, 5.11, 5.12 and 5.13 shows the different views of parking lot in front of the university library.

Figure 5.10: View of Parking Lot  
Figure 5.11: Cars in Parking Lot  
Figure 5.12: Parking lot behind the bus station  
Figure 5.13: Cars in Parking lot
Yacob and Sedigeh commented that besides the architectural barrier to the bus station such as the lack of tactiles, there are also some obstacles at the end of the car park which sometime causes them to fall down.

“There are some architectural barriers to access the bus station or from the bus station to the library entrance. For example, behind the bus stop, you should go down the stairs and walk along the road, but that area is a car park space with a lot of cars and no tactile sign road! Can you imagine our situation? Also at the end of the car park there are some barriers like bars. I myself have accidentally kicked the bars many times and fell down.” (Yacob, 37 years old)

“I have difficulty in crossing the car park lot; there isn’t any tactile path in that area and we cannot find our way through the cars to have access to the bus station!” (Sedigeh, 29 years old)

Figure 5.14 and 5.15 shows the architectural barriers at the end of parking lot in university library.

Figure 5.14: Architectural barrier at the end of the car park
Figure 5.15: Architectural barrier at the end of the car park
In Ahdiyeh’s opinion, the bus stop is not easily accessible. She prefers to come to the library by taxi because the taxi stops in front of the library's main entrance. She indicated that as the bus stop is behind the library building, it is sometimes difficult to find her way to the library entrance.

“For me the location of the bus station is not accessible; my friends also agree with me. They told me it is easier to use the taxi in comparison with the bus! Because the taxi stops right in front of the main entrance but the bus station is behind the library building. If the driver stops at the same position it is ok for me to find my way but when the driver changes the place every time, you cannot find your way, you don’t know where you are!” (Ahdiyeh, 22 years old)

Figure 5.16 and 5.17 shows the location of tables in front of the library entrance in university library.

Figure 5.16: Tables in front of library entrance

Figure 5.17: Tables in front of library entrance
5.1.3.1.2 Afraid to cross the road

Crossing the road is one of the biggest challenges for the visually impaired students. They explained their difficulties and the fear they feel each time they have to cross the road. For example, Atifah expressed her fear when she reaches the traffic light.

“When I reach the traffic light in front of the library, I feel very scared. I am afraid of the traffic light! Maybe because there are a lot of cars or motorcycles, I don’t know, but I feel quite afraid!” (Atifah, 22 years old)

Fahimeh also thinks that it is very dangerous to cross the road and such a feeling sometimes causes her to stay in her room in the dormitory instead of going to the library.

Figure 5.18 and 5.19 shows the location of traffic light in front of library.

Figure 5.18: Traffic light in front of library  Figure 5.19: View of road in front of library
“The time I have to go to the library, I have difficulties to cross the road, it is very dangerous, I think it is very scary and I am afraid to cross the road! Actually, it is one of the reasons why I don’t like to go to the library. It is not safe, and so I prefer to stay in my room!” (Fahimeh, 23 years old)

Figure 5.20 and 5.21 shows the view of road in front and behind of the library.

![Figure 5.20: View of road in front of library](image1)

![Figure 5.21: View of road behind of library](image2)

Farhad described his anxiety feeling during his first year of his degree programme. He said that he was always worried about crossing the road, but now he is no longer worried about it.

“At the beginning, I felt very scared to go to the library. I was afraid of cars and crossing the road. I was worried if I can see the road, can I cross the road, and how I can cross the road! But now I feel better, I learned how to go to the library [laughs]” (Farhad, 22 years old)

The low vision participants also confirmed that they had this fear. Although they can see a little, they are still afraid of crossing.
“I have difficulties in crossing the road to have access to the bus station. It is very dangerous, I think so! I can see a little but most of the time I think about my totally blind friends and how it is very dangerous for them to cross the road especially in rainy weather! Some of my junior friends are afraid to come to the library. They are afraid to cross the road and worry about finding the library! Although we have tactile road but it is not expanded in the whole university and there is a short cut in some paths” (Laila, 23 years old)

“I as a low vision student don’t have to worry to cross the road, for me I still can see but for my visually impaired friends it is totally difficult, they are dependent on the sounds of cars to cross the roads! I think the university should find a good solution for us especially at the bus stop area to make it safe for us to cross the road and have access to the library and bus station” (Mostafa, 24 years old)

5.1.3.1.3 Accessible Tactile Paving

Tactile is defined as a range of paving which is designed to be detected by both sighted and visually impaired individuals. There are six different types of tactile paving such as blister tactile, offset blister tactile, lozenge tactile, corduroy hazard warning tactile, cycle way tactile and directional or guidance tactile. In fact, the tactiles help visually impaired people to receive important information about the environment such as directional guidance and hazard warning (Loo-Morrey, 2005).

Mostafa, Farhad and Firooz commented that the tactiles are very important to them because without them, they cannot move about in the university. Mostafa and Farhad raised their concern about the lack of tactile path in the university campus; low quality
tactiles, low maintenance of the tactiles; and the short-cut tactile paths. All these are barriers which impede their mobility on the campus.

“I walk to the library; I can say it is like a journey for me! There are some difficulties for me such as crossing the road, short cuts in the tactile path and some of them are broken! You know it is not quite long time since they provided the tactile path. I think it should be around 4 or 5 years but the maintenance is not good and I think the university also is not aware about it, despite our reports till now nothing happened! ” (Mostafa, 24 years old)

“I find it very difficult to go to the library, the tactile pass is not enough and the quality is not good too! I mean the quality of yellow block is not good, sometimes we cannot feel them with our legs, also there are short cuts in the tactile path, so sometimes we thought the path has ended and we cannot find our way properly ” (Farhad, 22 years old)

Figure 5.22, 5.23, 5.24, 5.25, 5.26 and 5.27 shows the location of tactile behind and in front of the bus station, lack of tactile, and short cut of tactile near the bus station and library entrance.
Figure 5.22: Tactile behind the bus station

Figure 5.23: Lack of tactile in front of bus station

Figure 5.24: Lack of tactile near bus station

Figure 5.25: Short cut of tactile paving
Firooz also explained that one of his worst experiences in the university was caused by the lack of tactile path. He emphasized the importance of the tactiles in their life, without which they cannot move around the campus.

“One of my bad experiences in UM was the time I lost my way to come to the library, there wasn’t any tactile path and I lost my way! Suddenly I found myself in the middle of the street! [He paused for a second] It was a scary time! The tactile is vital for us, without the tactile it is really difficult to walk around the University.” (Firooz, 21 years old)

“There are some barriers around the library such as drains, which are very dangerous. Also there are some stairs from the motor parking, and this is not suitable for us, and it is one of the challenges we face when coming to the library!” (Mostafa, 24 years old)

Table 5.9 shows the emerging themes based on the participants’ responses about access to public transportation.
Table 5.9: Themes Emerging from Attitudes Towards Access to Public Transportation

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inaccessible bus station</td>
<td>• Difficulty in crossing the parking lot</td>
<td>• Feel angry</td>
<td>• Negative attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Lack of tactile in parking lot</td>
<td>• Feel sad</td>
<td>• Sense of being excluded/ ignored</td>
</tr>
<tr>
<td></td>
<td>• Inaccessible bus station</td>
<td>• Feel unhappy</td>
<td>• Sense of being unimportant/ unvalued</td>
</tr>
<tr>
<td></td>
<td>• Cannot find the way in the parking lot</td>
<td>• Feel distracted</td>
<td>• Sense of not being respected</td>
</tr>
<tr>
<td></td>
<td>• Architectural barrier at the end of parking lot</td>
<td>• Feel frustrated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mishaps when kicking the barriers and falling down.</td>
<td>• Feel happy</td>
<td></td>
</tr>
<tr>
<td>Afraid to cross the road</td>
<td>• Difficulty in crossing the road</td>
<td>• Feel scared</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Difficulty at the traffic light</td>
<td>• Feel dangerous</td>
<td>• Negative attitude towards library</td>
</tr>
<tr>
<td></td>
<td>• Worry about how to cross the road</td>
<td>• Feel not safe to cross the road</td>
<td>• Sense of being excluded/ ignored</td>
</tr>
<tr>
<td></td>
<td>• Avoid going to the library</td>
<td>• Worry about how to cross the road</td>
<td>• Sense of being inconsequential</td>
</tr>
<tr>
<td></td>
<td>• Not sure how to cross the road</td>
<td>• Avoid going to the library</td>
<td>• Sense of not being considered/ cared</td>
</tr>
<tr>
<td>Accessible tactile paving</td>
<td>• Short cuts in tactile paving</td>
<td>• Difficulty in going to the library</td>
<td>• Negative attitude toward library</td>
</tr>
<tr>
<td></td>
<td>• Lack of tactile paving</td>
<td>• Feel scared</td>
<td>• Sense of being excluded/ ignored</td>
</tr>
<tr>
<td></td>
<td>• Poor quality of tactile paving</td>
<td>• Feel not safe to cross the road</td>
<td>• Sense of being unvalued</td>
</tr>
<tr>
<td></td>
<td>• Poor maintenance of tactile paving.</td>
<td>• Worry about how to cross the road</td>
<td>• Sense of being inconsequential</td>
</tr>
<tr>
<td></td>
<td>• Losing way due to short cuts created in tactile paving.</td>
<td>• Avoid going to the library</td>
<td>• Sense of not being considered/ cared</td>
</tr>
</tbody>
</table>

5.1.4 Interior Layout

Nowadays, digital communication channel provides the opportunity to have access to information through the Internet (Bailin & Grafstein, 2002). However, libraries still have a role in society. Users go to the library to retrieve and use information in different formats for various purposes (Antell & Engel, 2006). Human behaviour is strongly related to their physical environment (Russel & Pratt, 1980). Individuals respond to the environment in two inverse ways: (1) approach it; and (2) avoide it (Mehrabian & Russel, 1974). To foster the “approach” way, a service provider such as the library should create a welcoming environment, and in which customers can satisfy their
information needs, and have pleasant experiences. Thus, the physical environment can increase the individual’s “approach” behaviour and decrease the “avoid” behaviour. This infers that the library's physical environment needs to be improved to fulfill the needs of both disabled and non-disabled users, and at the same time motivating them to visit the library.

In this study, the visually impaired participants consider two main conditions concerning the library interior layout that make them feel more comfortable about the library – cited accessible routes with tactiles; and access to elevator. These issues will be discussed further in the following sections.

5.1.4.1 Accessible routes with tactiles

Accessible routes with tactiles inside the library is one of the essential needs of visually impaired users. In this study, the participants indicated that the lack of a tactile path is one of the challenges they face inside the library building. The lack of tactiles causes the visually impaired users to have difficulties to find their way inside the library. The inclusion of such aids in the library interior layout will reflect the library authority's sense of understanding towards the visually impaired users’ needs within the library, and also the library's efforts to satisfy these needs.

5.1.4.1.1 Lack of tactile inside the library

Hadi, Amir and Mehran commented that the UM library is very large when compared with their high school libraries. Therefore, the library needs tactiles inside the library for the visually impaired students find their way inside the library.

“There are no tactile in the library, I mean inside the building! The library is very big and it is difficult for us to find our way in the library, so we need the help
of our friends or volunteer readers... if I could change something in library, the first thing was considering tactile inside the library!” (Hadi, 22 years old)

“UM library is very large in comparison with our high school library; it is quite big for me, so most of the time I cannot find my way inside the library! There is no tactile inside the library. It is correct that we get familiar after about 2 or 3 months but I think it is better for the library to consider tactile path for places we use a lot” (Amir, 31 years old)

“Inside the library also we cannot find our way easily! There isn’t any tactile and if they change the place of the furniture, it can be a big problem for us! Now I can find my way because I have more experience but it is difficult for new students” (Mehran, 29 years old)

Figure 5.28 and 5.29 shows lack of tactile path inside the university library.

Figure 5.28: Lack of tactile path inside library

Figure 5.29: Lack of tactile path inside library

Ahdiyeh said if she were to be asked what she would change in the library, she would like to add tactiles along the walking “path” inside the library. This is to enable the
visually impaired users to have easy access to their study carrels, special toilet, prayer room and etc.

“If I want to change something in the library, it would be to include tactile inside the library. I’ll put it from the entrance to the carrels, WC, praying room and the lift! I think it is possible, I mean the library can do it for us!” (Ahdiyeh, 22 years old)

Figure 5.30 and 5.31 shows lack of tactile path inside the university library.

Farhad broached the problem VIPs face to go the praying room due to lack of tactile cues.

“Sometimes I like to pray in the praying room instead of my carrel room but it is too difficult, you can say impossible [laugh]! You have to spend lots of time to find your path, since there isn’t any tactile, it is quite difficult!” (Farhad, 22 years old)
Mostafa, who is a low vision user, said that one of his challenges in the library is the stairs, which is not visible, thus, sometimes he falls down.

“Inside the library there are some stairs which are barriers for us, for example in front of the cafeteria, I have low vision and cannot feel it, so most of the time I forget there is a stair and I fell down!” (Mostafa, 24 years old)

Figure 5.32 shows optimizing invisible stair with ramp in the university library.

According to Mostafa, the library had previously tried to optimize the “non-visible” stairs by installing a ramp at the entrance of doorway (Figure 5.32).

5.1.4.1.2 Sense of understanding

Nasir informed that the tactiles inside the library is one of the favourite topics among visually impaired users. He said that the VIPs are aware of the high cost of installing
tactiles. He believes, however that the library should find alternatives if installing tactiles is not within its budget.

“There is a debate always between visually impaired students about considering the tactiles inside the library! Yeah, we know the main problem is its cost and it is not allocated within the library budget! But I think if the library cannot do such a thing for us, at least they can consider some alternative options to make it easier for us to move inside the library! As I told you before, we need library sense of understanding!” (Nasir, 21 years old)

Table 5.10 shows the emerging themes based on the participants’ respondents responses regarding the access routes inside the library.

Table 5.10: Themes Emerging from Attitudes Towards Accessible Routes with Tactiles

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of tactile path</td>
<td>• Walking areas with no tactile. <strong>Large area in library to move around.</strong>  • Difficulty in finding prayer rooms, carrels, lifts, toilet.  • Spend a lot of time to find intended location within the library.  • Presence of drains around library  • Hidden stairways along walking path.</td>
<td>• Anxious because no cues given by lack of tactiles  • Feel challenged/ Worry about not able to move freely inside the library.  • Feel it is impossible to move around inside library</td>
<td>• Negative attitude towards library  • Sense of being excluded/ ignored  • Sense of being inconsequential  • Sense of not being considered/ cared</td>
</tr>
<tr>
<td>Sense of understanding</td>
<td>• Considering tactile path  • Lack of library budget  • Providing some alternative option to move inside library</td>
<td>• Sense of understanding</td>
<td>• Negative attitude towards library  • Sense of being excluded/ ignored  • Sense of being inconsequential  • Sense of not being considered/ cared</td>
</tr>
</tbody>
</table>

5.1.4.2 Access to Elevator

In order to create a welcoming environment for disabled people anywhere, service providers should have respect for users’ in mind when designing their services. Respect arises from both the physical and the social components of the environment (Baker, et
In this study, the visually impaired participants perceive accessible elevator in the library layout as one of the conditions which can create a sense of belonging to the library. Indeed, they interpret having on accessible elevator as an indication of being considered by the library authority.

5.1.4.2.1 Sense of being considered

Firooz feels proud of the UM library for all the facilities and services that the library provides for visually impaired users such as the special elevator. He expressed his satisfaction and happiness about having such a facility.

“Actually I think University of Malaya has a very good library, yes, they have provided lots of facilities for disabled students. Do you know we have a lift here in the library? I mean special lift; it has sound and tells you in which floor it stopped, also it has Braille buttons! It really helps us! I am very happy in the library and think it is good enough!” (Firooz, 21 years old)

Louvee expressed his satisfaction at the improvements made each year to the library accessibility. These improvements reflect the library authority's consideration and respect towards disabled users and their special needs.

“The library lift wasn’t accessible in my first year and second year of bachelor programme. I mean there wasn’t any voice to inform you on which floor you are but after I started my Master, they changed the lift to an accessible one! They changed it to a disabled friendly one! When you see the progress in physical accessibility for disabled, it signals to you that the library considers the disabled student’s needs. At such a moment I feel very satisfied!” (Louvee, 28 years old)
Figure 5.33 and 5.34 shows lift braille button in university library.

![Figure 5.33: Lift Braille Button](image1)

![Figure 5.34: Lift Braille Button](image2)

Yacob commented that the UM library is different from other libraries in Malaysia including the national library, because of the supporting facilities provided for the visually impaired students. He said that this shows that the library authority's awareness of their special needs, beside their willingness to support them to achieve their educational goals.

“One thing which differentiates the UM library from other libraries even national library is the additional support that they have provided for us, I mean visually impaired students! I think for disabled people the support system is very important. When you see the library authorities consider providing special lifts, disabled friendly lift, the barrier free space; it makes the library different for us! It changes everything; they are willing to help us to be successful in our studies!”

(Yacob, 37 years old)

Table 5.11 indicates the emerging themes extracted from participants’ responses regarding the provision of special elevator in the library.
Table 5.11: Themes Emerging from Attitudes Towards Access to Elevator

<table>
<thead>
<tr>
<th>Emerging Themes</th>
<th>Situation</th>
<th>Types of feelings</th>
<th>Triggers /barriers to Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of being considered</td>
<td>• Providing accessible lift</td>
<td>• Feel happy</td>
<td>• Positive attitude towards the library</td>
</tr>
<tr>
<td></td>
<td>• Providing audio prompts and Baille buttons in the lift.</td>
<td>• Feel supported</td>
<td>• Sense of being included/considered</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Disabled-friendly</td>
<td>• Sense of being valued/ respected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Feel satisfied</td>
<td>• Sense of being accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proud of the library</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Makes the library a special place for VIPs</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Summary

This chapter explores the perception and experience of visually impaired students towards their sense of belonging to the library of University of Malaya. We tried to find out which conditions in the library context assist or prevent them in having a sense of belonging. Based on the responses from the participants, the findings have been reported in two separate chapters. The intrinsic conditions are presented in chapter 4. It presents the intrinsic conditions which increase or decrease the visually impaired student’s sense of belonging towards the library. The extrinsic conditions presented in this chapter consist of four main categories: (i) facilities; (ii) services; (iii) site location and (iv) interior layout.

This facilities comprised four subcategories: (i) carrel room; (ii) special laboratory; (iii) special resource centre; and (iv) special WC. Each of these sub-categories has further subcategories, too. The Carrel room includes three sub-categories: (i) carrel as a second home; (ii) carrel as a social place; and (iii) carrel as a safe and quiet haven. The special laboratory sub-category consists of: (i) feel comforted and being proud; and (ii) being respected. The special resource centres sub-category consists of: (i) sense of concern
and belonging; and (ii) sense of support. The special WC subcategory consists of two sub-categories: (i) sense of being considered; and (ii) dirty WC.

Service is the second theme of extrinsic conditions which comprised four main categories: (i) volunteer reader; (ii) special librarian; (iii) library website; and (iv) information skill session. The first category, volunteer reader category consists of three sub-categories: (i) volunteers as academic saviors; (ii) volunteers as academic motivators; and (iii) volunteers as social connectors. The Special librarian category has two sub-categories: (i) special librarian as a sign of support; and (ii) as a sign of respect. Library website category has one sub-category: (i) inaccessible website. The last category, information skill session has three sub-categories: (i) sense of equality; (ii) being valued; and (iii) inevitable need for special session.

Site location is the third theme and consists of one category “access to public transportation”, and three sub-categories: (i) inaccessible bus station; (ii) afraid to cross the road; (iii) accessible tactile paving.

The last theme of the extrinsic conditions which emerged through data analysis is the interior layout which has two main categories: (i) accessible routes with tactiles; and (ii) accessible elevator. Accessible routes with tactile comprised two sub-categories: (i) lack of tactile; and (ii) sense of understanding. The elevator sub-category also consists of only one subcategory - sense of being considered.

Table 5.12 gives a summary of the results of the VIPs about their attitudes towards the library facility, services, site location, and interior layout.
# Table 5.12: Themes that Emerged from the Extrinsic Conditions

<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
</tr>
<tr>
<td>Carrel room</td>
<td>Carrel room as a second home</td>
</tr>
<tr>
<td></td>
<td>Carrel room as a social place</td>
</tr>
<tr>
<td></td>
<td>Carrel room as a safe and quiet haven</td>
</tr>
<tr>
<td>Special lab</td>
<td>Feel comforted and being proud</td>
</tr>
<tr>
<td></td>
<td>Being respected</td>
</tr>
<tr>
<td>Special resource centre</td>
<td>Sense of concern and belonging</td>
</tr>
<tr>
<td></td>
<td>Sense of support</td>
</tr>
<tr>
<td>Special WC</td>
<td>Sense of being considered</td>
</tr>
<tr>
<td></td>
<td>Dirty WC</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
</tr>
<tr>
<td>Volunteer Reader</td>
<td>Volunteers as academic saviours</td>
</tr>
<tr>
<td></td>
<td>As academic motivator</td>
</tr>
<tr>
<td></td>
<td>Volunteers as a channel for social interactions</td>
</tr>
<tr>
<td>Special librarian</td>
<td>Special librarian as a sign of support</td>
</tr>
<tr>
<td></td>
<td>Special librarian as a sign of respect</td>
</tr>
<tr>
<td>Library website</td>
<td>Inaccessible website</td>
</tr>
<tr>
<td>Information skill session</td>
<td>Sense of equality</td>
</tr>
<tr>
<td></td>
<td>Being valued</td>
</tr>
<tr>
<td>Site location</td>
<td>Inevitable need for special session</td>
</tr>
<tr>
<td>Access to public transportation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inaccessible bus station</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>Afraid to cross the road</td>
</tr>
<tr>
<td></td>
<td>Accessible tactile paving</td>
</tr>
</tbody>
</table>

**Interior layout**

<table>
<thead>
<tr>
<th>Accessible routes with tactile</th>
<th>Lack of tactile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sense of understanding</td>
</tr>
</tbody>
</table>

| Access to elevator            | Sense of being considered |
CHAPTER 6
DISCUSSION AND CONCLUSION

6.0 Introduction

This chapter presents a brief overview of the study in several sections. The first section gives an overview of the study including a statement of the problem. The second section explains the methodology. It continues with a discussion of the major findings in chapter four part A (Intrinsic conditions) and part B (Extrinsic conditions) to answer the research questions. Finally, the last section discusses the study’s limitations, recommendations, and contribution.

6.1 Summary of the Study

This section recaptures the problem statements, present a short review of the methodology, how the research was conducted and answer the research questions by reporting the major findings described in chapter four in part A (Intrinsic conditions) and part B (Extrinsic conditions).

6.1.1 Main Barriers Faced by the Disabled

There are two major perspectives in disability studies - the medical model, and the social model of disability. The medical model of disability defines disability as a person’s own tragedy, which is related to his/her physical or mental impairment, and the person has to adapt to their conditions through medicines or rehabilitation (Oliver, 1996; Darke, 1999; Carr et al., 2008). Unlike the medical model, the social model of
disability considers disability as an interaction between an individual’s limitation and the environmental situation which has been created by non-disabled people. Based on the social model of disability, disability is not an individual’s tragedy but it occurs because of the limitations created by the environment (Oliver, 1996; Darke, 1999; Ball et al., 2005; Samaha, 2007).

The literature in library and information science (LIS) shows the current trend in assimilating the social model of disability and reports on the library’s inclusion programmes for disabled users by optimizing the library’s physical environment (Joint, 2005) to accommodate the mobility needs of the disabled. The main barriers, which hamper participation by the disabled people in the library environment, are the physical and attitudinal barriers. Previous studies have reported that the physical dimension such as the accessibility of a library building, supportive equipment, transportation system, and site location, plays an important role in motivating disabled people to be engaged with the library (Kuh & Vesper, 1997; Taylor, 2004; Todaro, 2005; Forrest, 2006). There were suggestions that libraries as sub-categories of public buildings need to comply with international accessibility guidelines as laid out by the American with Disabilities Act (ADA), Disability Discrimination Act (DDA), and International Federation of Library Association checklist (IFLA) to make library buildings more disabled-friendly (Noll, 1997).

Another main barrier is empathy among library staff, librarians and the library authority. The lack of awareness about the disabled people, their needs, and supportive technologies, influences the level of support and empathy the library displays in formulating disability-friendly policies, monitoring and keeping count of the numbers of disabled users, and allocating appropriate budget to provide appropriate equipment,
services, and disabled-friendly environment (Boone, 2003; Taylor, 2004; Barth, 2005; Todaro, 2005; Forrest, 2006; Galdi, 2007).

Previous studies have also focused on making the library environment more accessible to users, including disabled users, and promoting inclusion, which is more than physically integrating disabled and non-disabled users in the same environment (Pinder, 2005; Baker et al., 2007). One dimension, which has been overlooked, is examining the psychological feelings of disabled users and their perception towards the library environment. In the educational context, the concept of inclusion refers to the integration of the disabled and non-disabled people in the same environment and providing them with the opportunity to connect socially (Peters, 2007). In this context, inclusion means the provision of supportive systems, a welcoming culture, and an atmosphere of acceptance for disabled people to evoke the feeling of being socially included (Peters, 2007; Symeonidou & Phtiaka, 2009; Langeland & Wahl, 2009).

Social inclusion is also seen as a process in which individuals voluntarily or involuntarily includes or exclude themselves from the community based on their experiences, perceptions, beliefs, and interpretation of their surrounding environment (Burchardt et al., 1999; The Ministry of Social Development in New Zealand, 2007; Oxoby, 2009). A sense of being excluded might affect on individual’s four fundamental psychological components of well-being such as a sense of belonging, sense of control, self-esteem and meaningful existence (Krill et al., 2008).

This study focuses on the visually impaired students and their sense of belonging towards the university library. Here, a sense of belonging is not only related to supporting an individual’s psychological well-being but also to the motivation to include or exclude himself from the rest of the library community or environment. The degree of feeling “belong” is expected to be affected when there are conflicts between
an individual’s experiences, perceptions, and needs and the degree of support they receive from their environment to meet their needs (Ryan & Stiller, 1995; Osterman, 2000). Studies in education have indicated that students who experience a sense of belonging are found to have higher interest, happiness and motivation to participate in school activities, while those who lack it are found to have level of stress and school anxiety, which might result in decreasing a student’s feelings of self-worth, school engagement and retention (Goodenow, 1993; Osterman, 2000; Furrer & Skinner, 2003; Dorman & Ferguson, 2004; Upton, 2010).

Published studies about disability in Malaysia indicates that the main barriers which disabled users encounter in the library environments are: inaccessibility to library buildings; lack of budget; lack of awareness about disabilities among librarians; and librarians’ attitudes towards disabled users. Most of the studies in Malaysia have concentrated on optimizing the physical dimension of the library to provide the opportunity for disabled users to integrate with the library environment (Wang, 1994; Zahra, 1994; Pak, 2007). This study investigated the nature of sense of belonging among the visually impaired users and to determine, which conditions in the library environment create or hamper this feeling.

6.1.2 Overview of the Study

This study used the phenomenology qualitative approach to explore the essence of sense of belonging based on the experiences and perception of visually impaired students in the context of an academic library. The researcher used the social model of disability as her perspective lens for this study. The social model of disability defines disability as the interaction between an individual’s impairment with his social and physical environments. This perspective gave the researcher the opportunity to explore this concept from all angles. This model highlights the disadvantages that people with
disabilities face resulting from a combination of environmental and individual traits (Oliver, 1996; Tremain, 2001).

Also, in this study, a sense of belonging is considered not as an individual matter, but encompasses both social relationships and structural conditions in an educational setting (Wentzel & Looney, 2007). A conductive social climate can create a welcoming atmosphere for individuals to fulfill their need to feel a sense of belonging (Goodenow & Grady, 1992; 1993). This study tried to relate the services and facilities provided by an academic library to perceptions and feelings of belonging amongst visually impaired students who use the library. In the context of this study the services and facilities are, very much entrenched on the quality of the physical facilities and services, which is expected to trigger or dampen the sense of belonging towards the library. The sense of belonging relates to the emotional connection to a place, such as attachment to the library, to the home, feeling comfortable, feeling safe, being respected, and being cared for (Cemalcilar, 2010; Fox, 2002).

This study also aims to find out the type of barriers, which exist in a library environment that hamper visually impaired students who are enrolled at a university library from feeling being welcomed, valued, respected and accepted or in brief, hampers their sense of belonging to the library. The objectives of this study are as follows:

(a) To understand visually impaired students’ experience of sense of belonging in a university library;

(b) To explore conditions that fosters sense of belonging among visually impaired users in a university library;

(c) To explore conditions that hampers sense of belonging among visually impaired users in a university library.
This study adopted the phenomenology approach which allows the researcher to explore the essence of belonging among visually impaired students based on their daily experiences and perceptions towards the library, and its resources and services. In this study, the visually impaired students who are enrolled with the University of Malaya constitute the study population. The participants comprise eighteen visually impaired students who are registered users of the university library. Semi-structured interviews were used as the main data collection method, with focus group discussions as an auxiliary method. The researcher established rapport with the participants by meeting them separately in their own carrels in the library, special labs in the library, and special labs in their hall of residence. The researcher also sent the participants information sheets to familiarize them with the study, its aims, types of participants in the research, type of questions that will be asked, and the researcher’s expectations. Consent forms were signed by all participants and the issue of anonymity, their right to withdraw from the research at any stage, and permission to publish the findings were explained to them.

6.2 Discussion of Main Findings

This section presents the findings of the research, which provide answers to the following three research questions:

(1) How certain condition can foster a sense of belonging among visually impaired students based on their experiences and perceptions in the library community?

(2) How certain condition can hamper a sense of belonging among visually impaired students based on their experiences and perceptions in the library community?
6.2.1 The Conditions that Foster a Sense of Belonging to the Library Community (RQ1)

Based on the findings, the visually impaired students’ attitudes towards the library staff, their peers, and environmental conditions influence their sense of belonging to the library. In this study, we categorized the attitudinal factors as Intrinsic conditions, and the environmental factors as Extrinsic conditions.

*Intrinsic conditions* which can influence a visually impaired student’s sense of belonging can be categorized into two broad themes - attitudinal factors towards the library and library staff; and attitudinal factors towards peers.

*Attitudinal factors towards the library and library staff* consists of six themes: (1) perceptions towards the library governance support; (2) the library’s initiative to consult them; (3) the support given by the library staff; (4) library staff’s empathy; (5) the degree of communication with the library staff; and (6) awareness of disability among the library staff.

1) *Perceptions towards library governance.* This relate to the formalization of disabled-friendly policies in the library. Participants of the study revealed that the library policy related to the visually impaired students is essential in making them feel accepted, respected, valued and important. They said that full access to library facilities or services, such as these provided to other sighted students, should be provided through supportive policies. Indeed, when the visually impaired students feel that their needs are met by the library, they perceive it as a positive sign and that the library considers their needs to be important. For example, the extension of the borrowing time for visually impaired students is considered as a disabled-friendly policy, and is perceived as the library’s awareness of their disabilities, and this, in
turn, triggers positive perception towards the library governance. Therefore, positive experiences of visually impaired students during their visits to the reference desk, circulation desk or other sections of the library, evoke positive feelings towards the library, and this help to strengthen their sense of belonging to the library.

2) **Library staff consulting** with visually impaired students is one of the most powerful conditions, which can influence the visually impaired students’ sense of belonging to the library. This feeling is fostered, especially, in situations when the library staff arrange for periodic meetings, and in these meetings solicit their opinions and suggestions on how to improve the quality of the library services, resources and facilities. As Syed Jamal (2006) indicated, sense of belonging comprises different dimensions of feelings such as being a member, having some influence, and feeling being integrated into the community. Hence, being consulted by the library staff makes the users feel that they are legitimate members of the library, besides being respected and accepted. The participants informed that providing an opportunity for them to express their views at such meetings makes them feel connected to the library and at the same time to increases the library staff’s awareness about their disabilities and their different needs compared to other normal students.

3) **Supportive library staff** is another conditions that the visually impaired students felt important to evoke a sense of belonging to the library. Moore (2003) suggested that there is a relationship between the type of emotional and social support received by disabled students and their success, in the educational system. The participants indicated that the friendliness of the library staff is important in making them feel they belong to the library. This infers that although a physically accessible environment is appreciated a warm and friendly atmosphere is considered important
to make the disabled students feel connected to the environment (McAulay, 2005). In this study, support is also provided through the staff giving help to search and find books on the shelves or to guide the visually impaired users in the library. These assistance from the staff leaves positive feelings, such as being valued and accepted, and help in reducing the sense of isolation. Cothran and Ennis (2000) noticed that one of the main factors, which “freed” the disabled students from isolation in an educational system, is the acceptance and the welcoming feeling shown by the staff.

4) **Empathy of library staff** can evoke a sense of belonging among the visually impaired users. This refers to the library staff’s sense of understanding about the visually impaired users’ abilities and limitations. The participants emphasized that the degree of the library staff’s understanding about their disability contributes greatly to their sense of comfort in the library. The participants had shared that they were angry at being scolded by library staff for returning books late or for not informing them about any changes in the library layout, which affects their movement in the library. They view this behaviour as an indication of the lack of empathy. They expected the staff to inform them of any changes in the layout of the furniture or when renovations are being carried out in the library, as this will affect their movement in the library and a threat to their safety. Moore (2003) also observed that it is essential for visually impaired users to be informed about any changes in the library since it creates in them the sense of being safe.

5) **Communication with library staff** refers to library staff’s friendly conversation and interaction. In this study, the participants indicated that the friendly manner the library staff greet them inside and outside of the library, their tone of voice, and the
verbal communication are essential to make them feel accepted, respected, and comfortable in the library. Previous literature indicated that although the visually impaired users cannot see the facial expression of a person who is communicating with them, they can perceive their expressions, emotions, and attitudes from the tone of the voice (Laplante & Ambady, 2003; Boas et al., 2012). Indeed, the friendly manner of the library staff during the verbal communication provides a positive experience for them and making them feel valued and respected. Also, the participants believe that friendly interactions give them the opportunity to approach the library staff for more help.

6) **Library staff awareness** of disability can fosters a sense of belonging when the disabled students perceive that the library staff are aware of their condition, it will make them feel welcomed. The library staff will be aware of their short-comings and more willing to accommodate their special needs in such as fetching books from the shelves and locating books that could not be found. They will feel being taken care of, like other members of the library. Indeed, previous literature also indicated that library staff’s awareness plays an important role in creating a welcoming environment as they know the disabled users real needs, how to meet those needs, more willing to create an accessible and friendly environment for them (Pinder, 2005; Katsivannis, Zhang, Landmark, and Reber, 2009). Also, the library staff’s awareness about assistive technology will make the library provide, appropriate and up-to-date equipment for visually impaired users in the library.

**Attitudinal factors towards peers** are the second theme emerging from the intrinsic conditions and comprise three sub-themes: peer support; interaction with peers; and awareness of peers.
1) **Peers who are supportive** – This refers to the degree of support visually impaired users receive from their peers in a library environment. Social supports by peers help reduce stress among the visually impaired users and increase their sense of belonging to the library community (Samuelsson, 1997; Solomon et al., 1997). The visually impaired users lauded their supportive peers, who are mainly their readers, for motivating them to use the library, and they can count on receiving the appropriate support from their peers whenever they need it. The VIPs expressed feeling more comfortable and having a sense of belonging if there is support from peers. This provides them with positive experiences, which, in turn, motivates to use the library more frequently. Previous literature had similarly reported that supportive peers help disabled students to feel included, connected, accepted and valued (Hatlen, 2004; Salend, 2004; Strayhorn, 2008).

2) **Peers who interact** refers to the degree of peers’ verbal communication with visually impaired users, and this can affect their sense of belonging. The participants said that they need to communicate with non-disabled peers not only for the purpose of getting help, but also to improve their social skills and expand their social network. One of the main difficulties of visually impaired students in an inclusive setting is loneliness, which sets in, especially if they are not readily accepted by their peers (Hatlen, 2004). In fact, relationship, interaction and feeling of being connected with non-disabled peers affect the visually impaired user’s sense of membership and belonging (Palombo et al., 1992; Ross, 2002). This act of having conversations with peers in the library gives them the opportunity to form friendships, and indirectly, provides the opportunity to request for volunteer readers to assist them in their assignments, and to prepare notes.
3) **Degree of peer’s awareness** about disabled students and their various disability conditions can make the visually impaired users think positively about the library. Peer awareness helps to foster friendships, and reduces feelings of awkwardness among students with visual disability (Copeland et al., 2004; Meadan & Amaya, 2008).

Figure 6.1 summarizes the intrinsic conditions, the main themes, and sub-themes that foster sense of belonging among visually impaired participants in the study.

![Diagram of intrinsic conditions](image)

**Extrinsic conditions** refer to conditions which are beyond the control of the individual VIPs, but are thrust upon them by the library. This includes the provision of library facilities, services, site location, and the interior layout of the library. The VIPs experiences in the library environment help to foster a sense of belonging to the library. McAndrew (1998) noted that the physical environment plays an important role in
creating a sense of belonging and the individuals’ personal identity, but this role has often been overlooked by libraries.

**Facilities** provided by the library help to create a sense of belonging as they are important in the daily life of the VIPs in the library. The facilities, that can foster a sense of belonging in this study include: carrel rooms, volunteer readers, special laboratories, and special WCs.

1) **Carrel rooms** service is extended to all VIPs registered as members of the library. Most of the library’s carrel rooms are reserved for the handicapped users. A few participants regarded their carrels as their “second home”, a social place, and quiet haven. The visually impaired students are grateful and consider it a privilege to be given a carrel room because they have a special and a safe place to study and complete their assignments. The provision of this a physical amenity within an educational environment can trigger a sense of belonging. This matter has received limited attention in recent educational researches, which is mainly focus on developing sense of belonging measurement scales (Cemalcilar, 2010).

The feeling of belonging to the library was highlighted by the visually impaired students’ use of the term “second home,” to describe the carrels. This “home” provides each student with physical shelters. They also have emotional ties to these shelters because of the feelings of comfort, security, and sense of belonging they provide (Fox, 2002). The allocation of the carrels to the visually impaired students by the university library had caused them to feel that their needs are being attended to, and that they belong as members of the library. Carrels provide these students with special spaces that can help them to feel at home. Oldenburg (1991) stated that the first place in an individual’s life is the house or home, the second is his/her place
of work, and the third is a space where the individual feels relaxed and where he/she can foster social interactions. The carrels in this study were used by the students as “second places” (according to Oldenburg, a place of work) where they can study and complete their assignments, as well as “third places” (according to Oldenburg, a place for social interactions), where they could congregate to meet old friends, new peers, and their readers, within their own timeframes. The carrels represent spaces where experiences can be shared, and conversations can take place in a relaxed and happy ambience. Therefore, the reference to the carrels as “second homes” is appropriate. The term bears connotations of new places within the context of these students’ lives. For visually impaired students, the carrels seem to be their home, and they meet their physical, academic, and social needs. In their second home, these students feel safe and their belongings secure, and give them privacy and comfort. The carrels are quiet places where they can study, read, pray, and conveniently meet friends. In this context, they feel that the library has considered their needs and cared for them. As a result, they feel they belong to the library, just like other sighted students. They are proud to be students of a caring university. They also stated that they would recommend the university as the place to study to other future studies.

The visually impaired students feel that the carrels have given them the quiet, convenience, a comforting space they need to interact with their student volunteers. They also feel that the carrels are appropriate places to use their Braille machines. The carrels are suitable for holding meetings and discussions with peers, and would not disturb other library users. Although the library budget has increased, the purchasing power has been reduced, yet the library continues to make conscious efforts to provide carrels for the disabled students. The responses from this study indicate the appreciation
of the visually impaired students for the facilities provided for them. The library governance could use this positive feedback to justify proposal to the university management for future expansion.

According to Heidegger (1971), the expression “I feel at home” implies that the home has a psychological dimension. Other expressions such as “comfort, safety, well-being, and belonging” naturally accompany it. The visually impaired students in this study are proud of their “ownership” of their carrels in a manner similar to the ownership of a house. The students feel they possess their own keys to access the spaces. They also consider the carrels as places that connect them with their peers and with the outside world. They also feel better able to control their private and social lives in these spaces. They could control whom they like to meet in their carrels. They consider the carrels their work place, second home, and social spaces. Therefore, they feel being valued and being connected to the library and to their peers and other sighted students. Thus, the provision of the carrels acts as a catalyst to evoke a sense of belonging to the library environment among the visually impaired students. As a result, this helps to improve their personal identity and well-being in society and is valued as much as other library users. The visually impaired students feel proud to be members of the library and of the university. These positive feelings are shared with their friends outside the campus.

2) Special laboratory is the fourth sub-theme under facilities, which has a strong effect on the visually impaired users’ sense of belonging. The laboratory was also equipped with special screen reader software such as JAWS or Embosser to assist the printing of PDF files in Braille format. The participants’ appreciated these facilities and perceived this as a sign that the library respected and were aware of their needs. This in turn influences their sense connectedness with the library environment increase their motivation to frequent and use the library.
3) **Special wash room** for the handicapped, including visually impaired students, influences the participants’ sense of belonging. The participants perceive the provision of a special wash room for them in the library as an indication that the library is sensitive to their physical needs, and this also influences on their sense of belonging to the library. The library also thought about their convenience by locating the wash room close to their carrel rooms.

**Service**, the second theme under the extrinsic conditions, fosters a sense of belonging among visually impaired users. Services encompass the provision of special information skill programmes, special elevators in the library, etc. The participants of this research indicated that the type of services and the quality, had been designed to meet the needs of visually impaired users. This evokes a sense of belonging to the library among them.

1) **Volunteer reader** is a sub-theme and refers to students who volunteer to help the VIPs in the library. Participants in this study spoke passionately about their student volunteers and the feelings and sense of belonging this service has brought to them. Based on the participants’ view points, volunteer readers are one of the most important conditions in motivating them use the library. The presence of volunteer readers creates a welcoming and supporting environment for them, and this influences their perception towards the library. Such feelings were also reported in other studies (Robinson & Wilkinson, 1995; Samuelsson, 1997; Osterman, 2000; Salend, 2004).

In this study, the visually impaired participants considered the volunteer readers as their academic saviour, motivator and social connector. The VIPs indicated that volunteer readers are essential in their academic life. It would have been difficult for them to study in the library without the assistance of volunteer readers. In the VIP’s world, anyone who helps to alleviate their stress is God sent, a saviour. The volunteer readers
help to read course and reference materials to them, get books and articles from the shelves, borrow the books for them, and help them search for items from the Internet as well as scan or download resources they need. They confessed that without their volunteer readers to help them in the library, their academic performance would suffer, and they would feel anxious and stressed. The volunteers, therefore act both as the “reader” and the resource gatherer. The VIPs feel relieved, grateful, satisfied, cared for and accepted to have this service. These are traits of a sense of belonging. The university library managed the volunteer service and the visually impaired students are very grateful for this service. They feel that the library has taken care of them, just as the library has catered to the needs of other non-disabled students. This is especially true in an environment where the non-disabled peers support their disabled peers, resulting in the latter feeling respected, accepted, valued, and subsequently have a sense of belonging to the library and to the university community.

The VIPs indicated that the volunteers also act as their social connectors. In this study the VIPs interact actively with their student volunteers socially. There are readers who have become their friends and have also introduced them to other sighted students. Also, as these volunteers are the VIP’s main contact with sighted students, they welcome such interactions both formally during the reading sessions and socially when they meet their volunteers for meals at eateries within and outside the campus. The volunteers made them feel “connected” to the sighted community, and help to increase their sense of control, self-esteem, self-worth and their sense of belonging as to the library and the university (Krill et al., 2008; Upton, 2010). Volunteer readers also act as a social bridge for the VIPs to interact with other sighted peers. Such a relationship besides improving the disabled peers’ social interaction skills, help them to extend their social network beyond the volunteering sessions. This opportunity to interact outside the circle of the “study carrels” makes the VIPs feel connected and belonged. These
interactions between the VIPs and their non-disabled peers have helped to increase their social skills (Kunc, 1992; McGregor & Vogelsberg, 1998). Therefore, from the visually impaired person's viewpoint, volunteer readers play an important role in their life, and the quality and level of the relationship with them has an effect on their sense of belonging to the library. Nyberg et al. (2008) noted that this feeling of belonging to the community should help the VIPs to sustain affective and stable interpersonal relationship with other members of society.

2) **Information skill session** is one of the sub themes of services which, from the participants view point is essential in creating a sense of belonging. The participants view having this session for them as a sign of being valued and evoke in them a sense of being accepted as equal with the non-disabled users.

The participants commented that since they cannot see, they are unable to follow the normal information skill programmes offered by the library. The VIPs need to use their screen reader software and they need more time to follow the instructions of the trainer. Occasionally, the VIPs would help the trainers who are not familiar with the screen reader software during the information skill session, and such interpersonal relationship between the trainers and the visually impaired users create a sense of being valued and a sense of having meaningful existence (Rowley, 2004).

**Interior layout** is the last theme under extrinsic conditions. It refers to the interior design of the library which could foster a sense of belonging.

1) **Accessible Elevator** is one of the sub-themes under interior layout. Visually impaired participants perceive the provision of special elevators in the library as important as it make them feel welcome. The provision of special elevators for the visually impaired users differentiates the University of Malaya library from other
libraries. The participants spoke about it with passion and feel proud of the facility, and reflecting their positive experiences and perception of the library.

In summary, through both the interviews and focus group discussions, the participants indicated that both physical and social conditions are vital to make them feel important, comfortable, respected, valued and accepted by the library. As Baker et al. (2007) observed, a sense of belonging and respect arises from both the physical and social aspects of the environment. All VIPs indicated that it is impossible to foster social inclusion or a sense of belonging without an accessible library building and a congenial environment. They said that physical integration is an important initial condition or precondition of social inclusion and a sense of connectedness with other members in the library environment. Therefore, in order to help visually impaired users to have a sense of belonging, libraries need to consider both intrinsic and extrinsic conditions in the planning and implementation of their services and facilities.

Figure 6.2 summarizes the extrinsic conditions, the main themes, and sub-themes that foster sense of belonging among visually impaired participants in the study.

Figure 6.2: Extrinsic conditions which foster sense of belonging
6.2.2 The Conditions that Hamper a Sense of Belonging to the Library Community (RQ2)

The conditions that hamper a sense of belonging to the library community can similarly be categorized into intrinsic and extrinsic conditions.

The **Intrinsic conditions** can be grouped under main themes: attitudinal conditions towards the library and library staff; and attitudinal factors towards peers.

**Attitudinal factors towards the library and library staff** that can have a negative effect on visually impaired users in the library are: the lack of disabled-friendly policies; lack of supportive policies for inter-library loan; unwillingness of library staff to help find books; library staff who are too busy to help; afraid to request for help; and library’s insensitivity on not informing its disabled users about renovations or changes made inside the library, especially arrangement of furniture along the path to the carrel rooms.

1) **Lack of disabled-friendly policies** in the UM library is one of the main conditions, which frustrated the visually impaired students. The participants said that they depend a great deal on the goodwill of library staff to help them in the library because there is no official policies that require the library staff to help the handicapped as part of their official duty. Therefore, for example, if the library staff were to give excuses when asked to look for books, the VIPs cannot do anything. Despite their handicap, the VIPs cannot claim their right to have such service. A few of the participants had not received such service voiced their concerns and frustrations.

**Lack of supportive policy for inter-library loan** is another problems faced by the VIPs in the library. The participant’s spoke of the frustration they have when trying
to borrow books through the inter-library loan process. The procedure involves locating the ILL form, filling the form and making the request. The absence of policies that require library staff to support the VIPs throughout inter-library loan the process frustrates them and leave them with the feeling of being not valued. Katsiyannis et al. (2009) confirmed that the lack of clear written policies in libraries confines and disappoints the disabled users especially, when they fail to receive the help they have requested.

2) **Lack of support given by library staff** refers to situations when library staff refuse to help find books when the VIPs cannot locate books they need or in those situations where the librarians are “too busy” to render help. The failure to get such support will frustrate the VIPs, and makes them feel dejected.

*Library staff who do not help to find books* in the UM library causes the visually impaired participants to perceive this as one of their main challenges in the library. They could find the call numbers from the OPAC by using their special software but the main challenge is in finding the books on the shelves, especially when their volunteer readers or friends are not around. The participants view this unsupportive behaviour negatively and reported feeling disappointed, ignored, and not being valued. This evokes a feeling of not being accepted, and hampers them from experiencing a sense of being welcomed in the library. As Peters (2007) noted, the real meaning of inclusion is providing adequate support for disabled users in the form of staff who are knowledgeable and who are welcoming. Therefore, in order to motivate disabled people to make frequent use of the library, libraries need to remove both physical and perceptional barriers (McAulay, 2005).
**Library staff who are too busy to help** is another negative perception, which hinders the participants from feeling a sense of belonging. They perceive some of library staff as being too busy to assist them. This negative perception towards the library staff is mostly effected by the type of behaviour and tone of voice of the library staff. Hatlen (1996) observed that visually impaired people perceive their surroundings and their interactions with non-disabled people in different ways. Therefore, when library staff are reluctant to help them or they reply curtly to the visually impaired users’ request, they perceive that perhaps the library staff are too busy. In this situation, it seems that the VIPs tried to pacify their feeling of disappointment by attaching excuses to such behaviour of the staff.

**Being afraid to request for help:** This comes about as a result of visually impaired participants’ negative experience. This fear reduces the feeling of belonging. The participants had uttered about being afraid to request for help from library staff. Based on their own or their friends’ negative experiences. The participants expressed fear that their request for help would anger the library staff. They perceived the library staff to be too busy to help them. The library staff also realized that are not obligated to help them because helping the handicapped users to find books, for example, is not part of the library policy. Bostick (1992) constructed a library anxiety scale, which links sense of anxiety among library users to the negative perceptions towards library staff as being too busy or inaccessible in the library. In this study, some participants were observed to solve problems they counter in the library by seeking help from their volunteer readers or their friends, instead of asking for help from the library staff
“Negative Word of Mouth Effect” is another condition, which hampers the visually impaired users from feeling welcomed in the library. This situation is effected when VIP’s seniors assist the juniors during the familiarization sessions in the university and in the library. At these sessions, seniors are bound to share with their juniors share their negative experiences about the library and library staff, and this negativism will inevitably be transferred to newly enrolled VIPs, as well. As the seniors are the closest people in the juniors’ life, and they, are dependent on the seniors, it is easy for such negative perceptions to spread among them through word of mouth.

3) **Lack of empathy amongst library staff** can affect the visually impaired participants’ sense of connectedness. Indeed, the degree of the library staff’s understanding about the visually impaired users’ limitations, abilities and conditions, greatly affects their sense of being welcomed, understood, and considered. The lack of empathy is apparent when library staff do not inform them of renovations in the library. The VIPs felt unsafe and not being valued when they are not informed of any renovations in the library, which might affect their safe movement around the library. As Moore (2003) contended that informing the visually impaired about changes to the layout or arrangement gives them the sense of being safe. Therefore, when visually impaired users encounter such changes in the library layout without being informed, before and, they feel uncomfortable, and this affects their sense of being valued, considered, and secure.

4) **Lack of awareness among library staff**: The lack of awareness among the library staff’s about students’ disabilities and the types of assistive technology they need in the library, can reduces the visually impaired users’ sense of comfort in the library. The participants believe that when library staff do not know about their disabilities
and their special needs, the staff would be less empathetic and less keen to help them in the library. The library staff would also not be aware of the importance of proper maintenance of the equipment in the special laboratories or in the special wash rooms.

**Attitudinal factors towards peers** encompass the lack of support from peers who misplaced books or other items in the library, and lack of the peers’ awareness about their disability.

1). **Lack of peers’ support** is one of the main conditions, which can cause frustration to the visually impaired users. The visually impaired participants commented that misplacing the books and other related behaviours is one of their big challenges with the peers. Such inconsiderate and negative behaviour causes them to feel uncomfortable, and not being valued by their peers. The participants declared that misplacing books can result in both, the library staff and volunteer readers not being able to find the books on the shelves. This could result in delay in submitting their assignments. Also, peers who change the location of furniture such as chairs inside or outside of the library causes the visually impaired users to lose their familiarity with the environment and become confused. Indeed, visually impaired participants perceive such inconsiderate behaviour to be one of the main conditions, which prevents them from feeling being welcomed in the library.

2) **Degree of peers’ awareness** about visually impaired users’ disability is another condition which can affect the visually impaired users’ sense of belonging. The participants of the study perceived most of their non-disabled peers to be **shy and afraid** to befriend them. They explained that based on their experiences, most of the sighted peers are afraid to communicate with them or during any communication, avoid asking them questions directly. Therefore, the visually impaired participants attributed
such behaviour to their sighted peers lack of awareness about their disabilities and this reduces the frequency of communicating with their peers. The participants also, believed that to feel more comfortable in the library, it is essential to have peers with high awareness of their disability, and who would then be more willing to talk to them and are more supportive of their educational and social needs.

Figure 6.3 summarizes the intrinsic conditions, the main themes, and sub-themes that hamper sense of belonging among visually impaired participants in the study.

Figure 6.3: Intrinsic conditions which hamper sense of belonging
Extrinsic conditions can affect the visually impaired participants’ feeling of being connected to the library. These conditions include the lack of appropriate facilities (no support from a special librarian, and no special resource unit); unsupportive design of the library’s website and OPAC; and presence of barriers for access to public transportation, and lack of tactile guides inside and outside of the library building.

Appropriate Facilities, in this context, refers to the lack of support from a special librarian, and the lack of an information resource centre to convert printed contents of materials into accessible formats for the visually impaired users.

1) Special librarian. The participants of the study suggested that a special librarian be assigned to look after services and facilities for the handicapped. This has become very important as there has been an increase in the enrollment of visually handicapped students in the University. The special librarian could think on ways of helping the VIPs to gain access to needed resources, effectively. Knowing there is such a person in-charge will make the visually impaired users feel that the library has considered their needs, and this can enhance their sense of belonging.

2) Special resource centre. Participants voiced their concern about the lack of support for converting printed resources into visually impaired people friendly format. Currently, the VIPs make their own notes in Braille from printed resources read to them by volunteers, but this is time-consuming. Therefore, high on their wish list of the visually impaired participants is the establishment of a special unit where printed materials can be converted into different and accessible formats, for example in Braille or talking books. The VIPs felt that the lack of a special resource centre in the library hampers them from feeling that the library is concerned with their needs. Abedin et al. (2010) contended that when individuals in the community feel that their needs are
considered important by other members of the group and are given appropriate support, the individuals would be more likely to feel being valued and respected.

**Library services** and its quality of design and planning are important in creating or reducing a sense of belonging among visually impaired users to the library. The participants uttered that inaccessible library website and OPAC is one of the factors which can cause to be disappointed with the library.

**Library website and OPAC:** The participants in this study found it difficult to navigate the library website with their screen reader software. This could be because the website design does not comply with the website design principles for the visually handicapped users. An example of design weakness is embedding too many images and links on a page, which hinders navigation. The participants also suggested that the library OPAC be made more accessible for them, such as providing options for text enlargements or including the use of speech synthesizers. These suggestion are consistent with the reported needs found in previous studies, which indicated that VIPs would feel comfortable and welcomed when provided with such services. (McAulay, 2005; Koulikourdi, 2008). In this study, the participants pointed out the importance of an accessible OPAC in their educational life. They suggested that the OPAC should be designed based on web accessibility guidelines to minimize their navigational problems. They would feel frustrated when they encounter difficulties in extracting information from the OPAC.

**Barriers related to access to public transportation and finding the library’s entrance** is one of most important extrinsic conditions, which can affect the visually impaired user’s sense of belonging to the library. The participants found it frustrating and difficult to get through the car park located beside the bus station due the lack of tactile pavings in the car park area. This lack of tactile cues often causes in the VIPs to lose
their way and taking a lot of time to go to the library’s main entrance. The participants complained that when faced with such difficulties, they feel angry and disappointed for the lack of sensitivity to their needs.

*Problems with the interior layout* often cause the participants to lose their way in the library due to the lack of tactile cues along the route from the library entrance to their carrels. The lack of tactile path inside the library was one of the challenges that the participants faced when moving inside the library, and this makes them dependent on their friends and volunteer readers. They view the lack of tactile path as an indication of the library authority’s lack of awareness and lack of understanding about the needs of the visually impaired users.

Figure 6.4 summarizes the extrinsic conditions, the main themes, and sub-themes that hamper sense of belonging among visually impaired participants in the study.

![Figure 6.4: Extrinsic conditions which hamper sense of belonging](image-url)
The findings of this study also support the concept of social model of disability. As discussed in chapter two, according to social model of disability, disability occurs because of the interaction between individual’s impairment and their social setting such as social, economic, politics, cultural values and architectural factors (Oliver, 1996). Psycho-emotional dimension of disability is also one of the most important additions to the social model of disability which refers to the barriers arising from the relationship between individuals in the society based on their daily experiences.

The findings of this study indicate that although the lack of vision of visually impaired students to what extent can effect on the perception of VIPs toward library, library staffs and peers but the main barriers for emerging the sense of belonging toward library environment mainly related to the library context. For example, lack of written policy to enforce library staff to provide appropriate support for visually impaired or to consult with them in designing library services and facilities is one of the main barriers.

At the same time, lack of disability awareness among library staff especially frontline staff makes the conditions of visually impaired user deteriorate. Indeed, the origin of lack of communication skills of library staff in encountering with VIPs or presenting their sense of understanding toward them is lack of their disability awareness. In fact, as mentioned before, lack of disability awareness causes the front-line librarian unable to transfer the VIPs request, desire, and needs to library authorities.

Therefore, library authorities would not design practical and appropriate services or facilities for disabled users such as considering special librarian, special resource center, accessible library website, and considering tactile inside the library layout. Also, lack of disability awareness among library staff not only effect on library service and sources quality but even on the behaviour of non-disabled peers toward their disabled peers. Indeed, the non-disabled peer patterns the library staff behaviour especially front-line
The findings of the study also support the psycho-emotional aspect of social model of disability which refers to the negative experience of disabled people via relationship with non-disabled people in the society. Indeed, negative experiences of VIPs in making friendship or communication with library staff and non-disabled peers because of lack of their disability awareness, effect on their perceptions toward library atmosphere and emerging sense of belonging.

In general, negative perceptions of VIPs toward library staff which effect on emerging or hampering sense of belonging toward library environment is the mixture of VIPs vision impairment and the barriers which exist in the University library environment.

6.2.3 The improvements proposed in the library to support the needs of the VIPs

Baumsteir and Leary (1995) pointed out the effect of a sense of belonging on the life of individuals such as their perception, relationship, motivation, and even their learning process. Studies in the field of education have also highlighted the importance of sense of belonging on the individuals’ psychological well-being and their motivation (Weiner, 1990; Ryan & Stiller, 1995). The findings of this study also support the effect of sense of belonging on motivating the visually impaired participants.

This study found that the physical, social, governance and economic conditions can influence the creation of the feeling of belonging among visually impaired students. The
participants connoted the feeling of belonging to finding comfort in the library space allocated for them. Accessibility inside and outside the library is another condition the visually impaired users deemed important in making it possible for them to integrate with the rest of the library community. Therefore, without any physical integration to the library environment, they would not have the opportunity to build friendships, become members, and be connected to other member community.

The results of this study indicate that there are two fundamental conditions, which influence all dimensions of the library environment - emplacement of disabled-friendly policies, and the degree of awareness of disability among the library staff and the library authority.

The existence of a disabled-friendly policy has a positive effect on the real needs of visually impaired users. These encompass designing supportive systems; officially requiring the library staff to help disabled users in searching for books on the shelves; considering the assigning of a special librarian to cater for the special needs of the VIPs; the provision of a special information resource centre; improving the library’s publicity to find more volunteer readers; and allocating adequate budget for the provision of accessible equipment, resources and services.

The participants of the study perceived the existence of appropriate facilities (carrel room, volunteer readers) and minimizing of inappropriate facilities (lack of special librarian, lack of special information resource center) as reflected by existing or non-existence of supportive library policies. They perceived that the absence of any disabled-friendly policy in the UM library has resulted in the inability of the library to improve the library environment for the disabled users. The lack of supportive official policies perpetuated the dependency culture of students with visual disabilities. For example, the lack of tactiles inside the library makes the VIPs dependent on their
sighted peers or library staff to assist them when moving inside the library or when making their way to their study carrels. The lack of facilities to help create a disabled-friendly reading resources centre means that the VIPs will continue to be dependent on their friends or volunteer readers to read for them. This situation is in violation of the basic rights of the visually impaired users as member of the library system. To upheld the social theory, the library should therefore should ensure that the facilities and services it offers to the VIPs do not violate the right of the VIPs for access to learning resources in print, digital or other suitable formats for the VIPs. To enable the VIPs to continue their education in a university lauded as most suitable for the disabled students, the library should create an environment where the VIPs become independent members of the student community and society. In other words, all forms of dependencies should be reduced or eliminated. This can only be achieved with the formulation and enactment of disabled people-friendly policies. It is through such policies that meeting the real needs of the VIPs becomes obligatory on the library staff, and VIPs can confidently claim their rights for support from the library. The policies could make it mandatory offer awareness programmes, which could raise the staff’s awareness of disability of VIPs and their needs as well as increase their empathy.

This awareness is especially beneficial to the front-line library staff. Indeed, knowledgeable library staff, especially front-line library staff, are essential for creating a welcoming and congenial atmosphere that can motivate visually impaired users to make frequent use of the library. Front-line staff who are supportive, empathetic and who converse with the VIPs in the right tone of voice would definitely win the good will of the VIPs, who will also hold them in high regard The findings of the study indicate that most of the participants had negative experiences with the front-line library staff, but have attributed this to the lack of understanding.
The participants also came out with a few good ideas about the ways to create awareness, such as through workshops or training sessions where the VIPs themselves could be the facilitators. They are the most qualified to talk about their disabilities and their special needs. The participants also suggested: holding awareness programmes for their non-disabled peers during the library open day, and having disabled people international days during the library orientation programmes for new students. Such programmes will foster social integration, and communication between the disabled and non-disabled users, and thus, bridge the social gap between them.

In this regard, the Royal National Institution for the Blind (1997), UK, highlighted a definite policy is essential for creating and realizing a supportive system for the visually impaired users in libraries. In fact, the existence of disabled-friendly policies provides the opportunity for disabled users to be recognized as legitimate members, which could influence their perspectives of life in the library environment.

In summary, it is concluded that the key condition which could motivate visually impaired users to frequent the library and evoke a sense of belonging to the library, is increasing the library staff’s awareness of disability. Indeed, such awareness among the library staff will affect all dimensions of the library’s role, and thus, influence the formulation of its disabled-friendly policy, services, facilities, staff’s communication skill training, empathy, and degree of support towards visually impaired users.

6.3. Contribution of the Study

The findings of this study contribute to a better understanding of the conditions, which encourage or hamper the creation of a sense of belonging among visually impaired users in a university library. All conditions elicited are based on the perceptions and experiences of visually impaired users themselves, and more importantly, this study is
relevant to the Malaysian context. Most of the disability studies on disability in LIS are focused on examining the barriers, which hamper disabled users from integrating into the library environment. Previous LIS studies on disabled users have often overlooked the psychological perspectives of disabled users in the library environment, which were based on their perceptions and experiences.

Sense of belonging is a fundamental need of human beings, and can affect their decision to include or exclude themselves from mainstream society (Goodenow, 1993; Osterman, 2000; Pittman & Richmond, 2007). Few studies in LIS had examined the importance of a sense of belonging among disabled users in libraries, the conditions which effect a sense of belonging based on perceptions and experiences of disabled users in the library context have not been clearly discussed. What is not yet clear, are the conditions which influence a disabled users’ perception of belonging in the library environment. In this regard, it is hoped that the findings of this study will enrich the existing literature on sense of belonging research in the library environment through the visually impaired user’s perspectives, besides an understanding what motivates them to use the library to achieve their educational goals.

It is important to note, although in qualitative approach we cannot generalize the findings to other context but there are some key message of this study which seems can be useful for other libraries in other contexts.

The first and most important point is considering written policy for disabled users (with vision and mission of library for disabled users) firstly gives the library authority the legitimacy to allocated budget for establishing disability awareness workshops, courses; enforcing the library staff to attend the courses to improve their disability awareness; cooperating with NGOs and other disability associations, and finally provide the opportunity for disabled users to claim their own right. Indeed, increasing the library
staff disability knowledge causes they be aware how to support, consult, communicate and present their sense of understanding toward disabled users especially VIPs which effect on their motivation to come and user library sources to achieve their educational goals.

The findings of the study also indicated the important role of considering appropriate facilities for VIPs. For example, the best facility which library under study provided for VIPs through their viewpoint was the carrel room. Indeed, carrel room provide them the safe and secure place to besides putting their stuff there, feel have enough privacy and consider it as their second home.

Through opinion of VIPs in this study, receiving support from volunteer readers also was the most useful services which library consider for them. In fact, volunteer readers besides assisting the VIPs to do their assignment, caused they get connected with non-disabled peers and create their own social network. On the other words, the volunteer readers act such as a bridge which connects VIPs with the non-disabled people’s life.

The physical accessibility to the library environment both outside and inside of the library was also important for the participants of the study. Indeed, lack of accessibility to public transportation or short cut of tactile outside and inside of the library made them disappointed, demotivated them to come to the library, and finally exclude themselves from library mainstream.

It is hoped findings of this research will make the library and university governance more sensitive and more considerate towards the visually impaired students by formulating policies, regulations and adequate budget allocation to meet their needs. Also, it is hoped that findings will empower and assist the service designers in the
library environment to consider the psycho-emotional aspects when in designing new services for the visually impaired users’ perceptions.

6.4 Practical Implication

The studies on disability in LIS are mostly focused on the integration of disabled users with non-disabled users in the library environment. Most of the studies overlooked the disabled users’ psychological perspectives such as their sense of belonging.

Sense of belonging is a mixture of cognitive and affective dimension in which one dimension influences the other. An individual’s perceptions and feelings towards his/her position in the community has an effect on his/her behaviour (Hagerty et al., 1992; Strayhorn, 2008). Hence, an individual’s perceptions of being valued, respected and accepted by the members of their community are expressions of their feeling of being connected, and feeling of belonging to the community. In this regard, the library authorities need to understand and consider the visually impaired users perceptions towards library resources, services, equipment in order to effect better services.

The findings of this study indicate the importance of all dimensions of the library to create a sense of welcoming and belonging among visually impaired users. However, it should be noted that increasing awareness of disability among library staff, especially front-line library staff who are constantly in contact with disabled users. As discussed previously based on findings of this study, awareness of disability could influence all aspects of the library environment. Indeed, knowledgeable library staff, besides providing supportive services, showing their sense of understanding, and using appropriate skills to communicate with visually impaired users, reflect an empathetic library system. Although the front-line staff do not have the authority to formulate library rules, they do communicate the real needs of visually impaired users to the
library authority. In summary the main suggestion of this study is that the real needs of disabled users must be fully understood, and should not be based on mere speculations.

6.5 Limitations

This study is limited firstly by the methodology used. A qualitative phenomenological approach has been used, and this approach emphasizes understanding of the core concept of sense of belonging among visually impaired users based on their daily experiences and expectations in the University of Malaya library. This study used a homogenous study population, therefore, the findings hold true only for the visually impaired participants in the UM library. This means the findings cannot be generalized to cover other library users or other disabled students with different types of disability.

Secondly, the participants of the study declared that they are not comfortable with the self-recording of their experiences (audio-diary), hence, the researcher used semi-structured interview and focus group discussion approach for data collection. This approach is based on the assumptions that the visually impaired students will provide their honest opinions and feelings, aside from the researcher’s ability to prompt for further clarifications and for more details.

Every research has its own difficulties and limitations. In this study, the researcher encountered different types of difficulties, which forced her to change the topic and type of research approach - from quantitative to qualitative. The first reason was the lack of accurate statistics on the number of disabled students pursuing both the undergraduate and postgraduate programmes in the University of Malaya. The second difficulty was the inaccurate number of disabled students and the type of their disability. Indeed, the statistics which the library provided only include those visually impaired students who have been assigned the library carrels. The last reason is the non-cooperation of the
university’s registration sections. In fact, despite the researcher’s repeated attempts to obtain the list of disabled students in the university through official letters from her thesis supervisor and the Dean of the faculty, the researcher often encountered difficulty in getting information required, and sometimes even faced hostility. The main reason given was that the number and list of disabled students are confidential, and it is a form of discrimination to ask their students about the type of their disability. Despite the researcher’s explanation about the benefits which could be derived from the findings of the research, the staff at one of the universities requested the researcher to remove their university from the list of target samples. The staff further emphasized that even if an official letter from the Higher Education Ministry was produced, the university would never disclose the list of disabled students. Therefore, as the researcher was keen to pursue research concerning the disabled, she changed her research approach to a qualitative approach to extract data from the visually impaired user’s perspectives, which could be realized from a smaller group of focused participants, using interviews and focus group discussion.

6.6 Recommendations

This study has shown that the use of a qualitative approach such as phenomenology can result in deep understanding of disabled users’ psychological feeling through exploring their perceptions and experiences as disabled users in the library context. Therefore, use of such qualitative approach is strongly recommended for similar researches. In this regard, researchers can select other qualitative approaches such as ethnography or case study depending on the aim and objectives of their research.

In this study the researcher had only focused on visually impaired users to answer her research question, but this could be extended to gather feedback from the library staff.
and the service designers. Such researches could provide insights of the movers and barriers to providing appropriate services through the perspectives of different stakeholders of the library.

Another possible approach is the use of mixed qualitative and quantitative method such as exploratory or explanatory mixed method to obtain a better picture of disabled users’ difficulties in the library environment. For example, the exploratory mixed method could help researchers identify the most effective variables, which influence their life based on norms, values, experiences, and perceptions of individuals in a certain environment. In this study, they can improve their conceptual framework by designing the appropriate questionnaire and test the framework. Indeed, the shortage of time, prevented the researcher from designing an exploratory mixed method. Future studies could also cover the views and attitudes of students with different types of disabilities.
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Appendix A
Interview Questions

General

1. How often do you go to the library?

2. What is in the library that motivates you to make the visit?

3. What is the first thing that comes to your mind when thinking about the library?

Library Staff

1. If you encounter any problem in the library, who is the first person to whom you will consult? Why?

2. How do you evaluate the library staff awareness or knowledge about disabled users?

3. If the library authority had the opportunity to provide a training session for the librarians or library staff, what would be the content of that course?

Services/Facility/Collection

1. How do you become aware about the new resources or services that the library provides?

2. Which resources or services do you prefer in library more?

3. Which facilities does the library provide for visually impaired users?

4. How do you evaluate the current situation of library services for visually impaired users?

5. How do you evaluate the current situation of library facilities for visually impaired users?

6. How do you evaluate the current situation of library collection for visually impaired users?

7. If you could change something or add anything new to the library services, facility or collection, what would be it?

Site Location/Interior Layout

1. Have you encountered any difficulty in locating the library building? If yes, what was it?

2. Have you encountered any difficulty in crossing the library parking? If yes, what was it?

3. Have you encountered any difficulty to access to public transportation space? If yes, what was it?

4. Have you encountered any difficulty in locating the library entrance? If yes, what was it?

5. Have you encountered any difficulty in locating the library lift? If yes, what was it?

6. When you encounter any difficulty in library building, how do you feel such a moment?

Sense of Belonging

1. How do librarians show their respect toward visually impaired students?

2. How do peers show their respect toward visually impaired students?

3. What and which type of resources, services or anything in the library that can make them feel like they have a place in the library?

4. Can you describe any situation in which feel you are welcomed or belong to the library?

5. If you could change something in the library what would you change?

6. Would you describe the ideal library for visually impaired students to enter, engage and attend?
**Appendix B**  
**Focus Group Questions**

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
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<tbody>
<tr>
<td>1</td>
<td>Would you please introduce yourself to others? What is your field of study? What are you doing currently?</td>
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<tr>
<td>2</td>
<td>What is the definition of belonging to you?</td>
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<tr>
<td>3</td>
<td>Have you ever felt that you belong in the library?</td>
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<td>4</td>
<td>What does it mean to you, to feel to belong in the library?</td>
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<tr>
<td>5</td>
<td>How important is it to you to belong, to be part of the library community? Why? Why not?</td>
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<tr>
<td>6</td>
<td>How do you know when you fit in/ do not fit in? What experiences have you had to feel like this?</td>
</tr>
<tr>
<td>7</td>
<td>What condition in the library made you feel as if you have a place in the library, and how do they help?</td>
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<tr>
<td>8</td>
<td>Imagine you are allowed to wish for only one thing in the library which is very important to make you feel comfortable and feel welcome, what would it be?</td>
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14 December 2012

Sense of Belonging among Visually Impaired Students in University Library in Malaysia
INFORMATION SHEET FOR PARTICIPANTS

What is the aim of the project?
This Project is being undertaken for the Ph.D. research for the Department of Library and Information Science at the University of Malaya. The aim of the research is to understand disabled students experience and perceptions of University library usage.

What type of participants is being sought?
The participants being sought for this project are all the visually impaired students who are studying in University of Malaya.

What will participants be asked to do?
Should you agree to take part in this project, you will be asked to answer some questions relating to your background and your experiences in library. The interview will last 1 hour maximum.

What data or information will be collected and what use will be made of it?
I will be collecting information your previous experiences, as well as information about your age, gender, level of education and place of residence. This information is collected in order to understand what the critical components of emotions during the library experiences are.

Raw data will only be available to myself (Nahid BAYAT BODAGHI). The data collected will be securely stored in such a way that only those mentioned above will be able to gain access to it. At the end of the project any personal information will be destroyed immediately except that, as required by the University’s research policy, any raw data on which the results of the project depend will be retained in secure storage up to the end of Ph.D. research, after which it will be destroyed. All the information you provide will be treated in strict confidence. The results of the project may be published and available in the library but every attempt will be made to preserve your anonymity.

You are most welcome to request a copy of the results of the project should you wish from the address below.

What if participants have any questions?
If you have any questions about our project, either now or in the future, please feel free to contact either:
Nahid BAYAT BODAGHI
Ph.D. Student
Department of Library and Information Science
Faculty of Computer and Information Science
University of Malaya
HP: +601 42278160
Nahid_bb54@yahoo.com
Nahid.bayatbodaghi@gmail.com
APPENDIX D
CONSENT FORM

Sense of Belonging among Visually Impaired Students in University Library in Malaysia

CONSENT FORM

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

1. My participation in the project is entirely voluntary;
2. I am free to withdraw from the project at any time without any disadvantage;
3. The data will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage up to the end of Ph.D. Research, after which it will be destroyed;
4. The results of the project may be published and available in the library but every attempt will be made to preserve my anonymity.

I agree to take part in this project.

………………………………………
(Signature of participant)  …………………
(Date)

This project has been reviewed and approved by the Department of Library and Information Science.
APPENDIX E
DEMOGRAPHIC INFORMATION FORM

Participants Demographic Information

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Name:  
Nationality:  
Age:  

Field of study:  
Degree:  
Gender:  

- [ ] Male  
- [ ] Female  

Marital Status  
- [ ] Single  
- [ ] Married  
Type of Disability:  

Phone Number:  

Email:  

Recorder File Name:  

Comments:  

### APPENDIX F

**List of Publication/ Presentation**

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<td>Post Graduate Research Excellence Symposium (PGReS) 2012. Department of Library and Information Science, Faculty of Computer Science and Information Technology, University of Malaya, Kuala Lumpur, Malaysia.</td>
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<td>Winner of Best Paper Presentation for Post Graduate Research Excellence Symposium (PGReS) 2012. Department of Library and Information Science, Faculty of Computer Science and Information Technology, University of Malaya, Kuala Lumpur, Malaysia.</td>
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