

Stigma, social comparison and
psychological distress in adults with a
learning disability

Lucy Paterson

D. Clin. Psychol.

The University of Edinburgh

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Abstract

Introduction: People with a learning disability are members of a stigmatised group and research has shown that stigmatisation can have a negative impact on psychological wellbeing. The process of social comparison has been shown to be important in the experience of stigmatisation and has been shown to have been used by people with a learning disability. This thesis aims to examine the perception of stigma in people with a learning disability and the relationship it has with their psychological wellbeing. The process of social comparison in this population will be explored and the possible moderating effect it may have on the relationship between stigma and psychological wellbeing will be investigated.

Methods: The study involved a questionnaire-based interview with 43 adults with a mild to moderate learning disability who attended local adult resource centres. Participants completed four self-report measures of perception of stigma, self-esteem, symptoms of psychological distress and social comparison. The social comparison measure was completed twice: once in comparison with other service users and again in comparison with people in the community.

Results: Correlational analyses revealed significant relationships between perception of stigma and self-esteem and symptoms of psychological distress. Perception of stigma was shown to be significantly related to negative social comparisons, and negative social comparisons were significantly related to low self-esteem and high symptoms of psychological distress. No difference was found between social comparisons made with other service users and those made with people in the community. Social comparison was not found to have a moderating effect on the relationship between stigma and self-esteem.

Discussion: The results provide further evidence that greater awareness of stigma is related to lower self-esteem, higher psychological distress and more negative social comparisons. Furthermore, those that compare themselves negatively to others report lower self-esteem and higher psychological distress. Although there was no difference in the way people with a learning disability compared themselves to their peers versus the general population, the way they see themselves compared to others in general has implications for their wellbeing. The significance of this and the relevance for future research is discussed.

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Chapter 1. Introduction

1.1. General introduction

It can hardly be disputed that people with a learning disability are members of a stigmatised category (Edgerton, 1993). They experience explicit stigmatisation, for example in the form of verbal insults (Jahoda *et al.*, 1988), and also more subtle forms of discrimination that lead to difficulties gaining employment or developing personal relationships and place restrictions on their lives (Jahoda & Markova, 2004). Research has shown that for people with a learning disability, as well as for other stigmatised groups, such stigmatisation can have a negative impact on their psychological wellbeing, lowering their self-esteem and affecting their mood (Abraham *et al.*, 2002; Dagnan & Waring, 2004; Szivos-Bach, 1993). It is proposed that one mechanism that may protect against stigmatisation is the way people compare themselves to their peers and to other social groups (Crocker & Major, 1989). This process of social comparison has been shown to be important in the experience of stigmatisation and has been shown to be used by people with a learning disability (Craig *et al.*, 2002; Dagnan & Sandhu, 1999; Dagnan & Waring, 2004; Finlay & Lyons, 2000).

In the last decade, the volume of research into the lives of people with a learning disability has increased considerably and the number of studies looking more closely at the experience of stigmatisation in their lives is growing. This thesis intends to expand on previous research in the field and examine the perception of stigma in people with a learning disability and the effect that this has on their psychological wellbeing. In addition,

the process of social comparison in people with a learning disability will be explored and the ways in which it may protect against the effects of stigmatisation will be considered. It is important to study the experience of stigma for people with a learning disability because it has implications for their vulnerability to emotional disorders and a greater understanding of this would inform clinical practice. Furthermore, if the way people with a learning disability compare themselves to others can protect them from psychological difficulties then this could point towards an effective treatment approach for those with psychological problems or part of a social skills training package as a preventative measure in the community.

The introduction will begin with an overview of current definitions of learning disability and how individuals perceive this identity. Section 1.3 will consider definitions of stigma and how stigma influences the lives of people with a learning disability. Section 1.4 will look at how stigmatisation may affect people with a learning disability. In section 1.5, it will be proposed that the way individuals compare themselves to others may influence the negative effects of stigmatisation and the theory of social comparison will be discussed. In section 1.6, the kinds of social comparison used by people with a learning disability will be considered and section 1.7 will look at the relevance of these processes in relation to stigma. Finally, section 1.8 will summarise the main aims of the thesis and the research hypotheses.

1.1.1. Identifying the studies under review

The studies reviewed in this thesis have been identified by two methods. Firstly, a literature search was carried out using the Psychinfo database between the years 1967 and 2007. The following key words were entered and were combined using the OR function: *mental retardation*, *learning disabilities* and *intellectual disabilities*. This revealed 51,166 results. These results were then separately combined using the AND function with the key words *social comparison* and *stigma* revealing a total of 26 and 39 results respectively. These papers were then studied to determine which were relevant for this thesis. The second method involved reading through the papers identified by the literature search and using their references to find further relevant studies. The term ‘learning difficulties’ was excluded because in the United Kingdom learning difficulties refers to problems such as dyslexia or dyscalculia, which are not relevant to this thesis. Studies that looked at stigma experienced by parents or siblings of individuals with a learning disability were excluded because the current study is specifically investigating the experiences of individuals with a learning disability. Some studies that have examined social comparison and stigma in children and young people with a learning disability have been included. Although the focus of the study is on adults with a learning disability, and despite the likelihood that adults now had quite different schooling experiences from today’s children, some of these studies are still relevant. Papers using both qualitative and quantitative methods have been included.

Table 1.1. provides a summary of the major papers reviewed in this thesis, explaining their relevance and drawing attention to some of the strengths and weaknesses of the design and subsequent analyses of the studies.

Table 1.1. Summary and critique of the major papers reviewed in the study

	Type of paper	Sample size	Why relevant	Strengths	Weaknesses
Jahoda & Markova (2004). Coping with social stigma: people with intellectual disabilities moving from institutions and family home	Exploratory study using content analysis	28 adults with a learning disability	Considers the experience of stigma in the lives of people with a learning disability	Detailed description of the experiences and feelings of people with a learning disability	No measure of IQ. Did not report on visible stigma. No quantitative measures
Jahoda <i>et al.</i> (1988). Stigma and the self-concept of people with a mild mental handicap	Combined phenomenological & quantitative methods	12 adults with a learning disability, 24 carers	Investigates the relationship between self-concept and stigma	Used both qualitative and quantitative approaches	Small sample size. No measure of IQ. No power analysis
Craig <i>et al.</i> (2002). Identity conflict in people with intellectual disabilities: What role do service-providers play in mediating stigma?	Survey, audit and focus group.	6 adults with a learning disability. 31 members of staff	Explores relationship people with a learning disability have with their identity and the impact services have on this	Used different methods to investigate stigma in people with a learning disability and service providers	Small sample size. No measure of IQ. No power analysis
Dagnan & Sandhu (1999). Social comparison, self-esteem and depression in people with intellectual disability	Cross-sectional study	43 adults with a learning disability	Considers relationship between social comparison and psychopathology	Comprehensive statistical analysis. Considered age, IQ and living situation	Small sample size for factor analysis. Errors in table and text data. No critique of study. No power analysis
Finlay & Lyons (2000). Social categorisations, social comparisons and stigma: Presentations of self in people with learning difficulties	Qualitative interviews	33 adults with a learning disability	Investigated perceptions of the social category of learning disability and identified types of social comparisons made	Considered age, day placement and living accommodation. Kept interviews as informal as possible to avoid predetermined response categories	No measure of IQ
Gibbons (1985). Stigma perception: Social comparison among mentally retarded persons	Cross-sectional study	123 adults with a learning disability	Investigated differences in social comparison by people with a learning disability towards people with and without a learning disability	Used IQ as a covariate. Large sample size	Used an American sample. No power analysis
Cooney <i>et al.</i> (2006). Young people with intellectual disabilities attending mainstream and segregated schooling: Perceived stigma, social comparison and future expectations	Cross-sectional study	60 pupils with a learning disability	Compared stigma & social comparison in pupils with a learning disability attending segregated vs. mainstream schools	Considered effect of IQ. Attempted to make interview as user friendly as possible and improve reliability of responses.	Sample of young people. Low reliability of social comparison measure. High refusal rate (almost 50%). No power analysis
Crocker & Major (1989). Social stigma and self-esteem: The self-protective properties of stigma	Review	N/A	Key paper in considering protective factors in the experience of stigma	Broad review of papers and theories	Not learning disability focused. Focus on self-esteem. Primarily research in US populations
Szivos-Bach (1993). Social comparisons, stigma and mainstreaming: The self esteem of young adults with a mild mental handicap	Cross-sectional study	50 students with a learning disability	Early paper looking at stigma and social comparison in people with a learning disability	Controlled for IQ, age, gender and type of day placement. Responses were systematically explored to increase reliability	Student population only. No reliability measures for new questionnaire. No qualitative data reported. No power analysis.
Abraham <i>et al.</i> (2002). Self-esteem, stigma and community participation amongst people with learning difficulties living in the community	Cross-sectional study	50 adults with a learning disability	Looked at self-esteem and stigma in a community sample	Interview tailored to needs of people with a learning disability. Checked for test-retest reliability of measures	Small sample size, used a measure newly modified for the present study, no measure of IQ. No power analysis
Dagnan & Waring (2004). Linking stigma to psychological distress: Testing a social-cognitive model of the experience of people with intellectual disabilities	Cross-sectional study	39 adults with a learning disability	Explored the link between perception of stigma, social comparison and core negative evaluations	Demonstrated theoretical link between stigma and psychological distress and provided a social-cognitive model	Low internal reliability of social comparison scale. No power analysis

1.2. Definition and label of learning disability

Throughout this thesis, the term ‘learning disability’ will be used to refer to the population studied. Other terms, such as ‘mental retardation’ and ‘intellectual disability’, are used in North America and in the literature. However, learning disability is the term used by the British Psychological Society (2000) and therefore it will be applied in this thesis. The term learning disability should be regarded as synonymous with mental retardation and intellectual disability. Some papers quoted in the thesis may use different terms in their study of this population, but in order to keep the terminology consistent throughout the thesis those terms will be replaced with the term ‘learning disability’.

1.2.1. Classifications/definitions

There are several classification systems that are used when defining learning disability and these will be discussed in turn. One of the most widely used is the American Association on Mental Retardation definition, most recently revised in 2002 (Luckasson *et al.*, 2002). It states that learning disability is characterized by significant limitations both in intellectual functioning and in adaptive behaviour and originates before age 18. In addition, five assumptions are considered essential to the application of the definition. They include the importance of considering the cultural environment of the individual when carrying out an assessment and profiling strengths and weaknesses as a means of determining supports. One of the assumptions also states that, with support, the life functioning of the person with

mental retardation generally will improve, suggesting a dynamic rather than static nature of functioning.

The Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychiatric Association, 2000) has more precise criteria for defining learning disability (mental retardation), which fall into three main components. Firstly, the individual must have significantly subaverage intellectual functioning, which they define as an IQ of 70 or below. Secondly, they must have concurrent deficits or impairments in present adaptive functioning in at least two areas, and finally the onset must be before 18 years of age.

The International Classification of Diseases (10th ed.; ICD-10; World Health Organisation, 1992), which is used more widely in the UK, has a broader definition of learning disability (mental retardation). It states that learning disability is a condition of arrested or incomplete development of the mind, which is characterized by impairment of skills, i.e. cognitive, language, motor, and social abilities. The ICD-10 definition does not specifically say whether age is important in determining learning disability but it does state that the impairment of skills is manifested during the developmental period. In addition, it refers to the potential for improvement in functioning over time by stating that intellectual abilities and social adaptation may change over time and may improve as a result of training and rehabilitation.

Finally, the British Psychological Society (2000) highlights three core criteria for defining a learning disability: significant impairment of intellectual functioning, significant

impairment of adaptive/social functioning and age of onset before adulthood. Whilst some of the definitions considered above differ in terms of the exact terminology used, they all appear to agree that the three core criteria, captured here by the British Psychological Society, must be met for a person to be considered to have a learning disability.

1.2.2. Living with the label of learning disability

The previous section illustrates that there are comprehensive definitions that enable services to determine who falls under the label 'learning disability'. However, these definitions do not consider the way in which carrying this label is experienced by the individuals. Edgerton (1993) raises a highly significant point when he comments on the value placed on intelligence in western cultures:

'Of all the attributes of man, mind is the quintessence; to be found wanting in mental capacity – in general intellectual competence – is the most devastating of all possible stigmata.' (p xxi)

In his book, *The Cloak of Competence*, Edgerton argues that due to this dominant attitude in society, individuals are compelled to reject the label of 'mental retardate' and the associated stigma. He reports that the people he studied strove to 'pass' in society as 'normal' by wearing what he calls a 'protective cloak of competence'.

It could be that people with a learning disability reject the label because they do not wish to identify with the associated stigma and therefore attempt to distance themselves from the learning-disabled group. Edgerton (1993) argued that denial or rejection of the label of

learning disability is adaptive in that it enables the stigmatised individual to maintain their self-esteem. Harris (1995) also suggested that people with a learning disability may choose not to identify with the label and therefore distance themselves from their group because of the negative effect it may have on their self-esteem. Davies and Jenkins (1997) found that the young people with a learning disability interviewed in their study did not use the terminology or the category 'learning disability' when talking about themselves. However, their descriptions of experiences and interactions with others indicated that they were affected by being part of that social group and were aware that others treated them differently. Finlay and Lyons (2000) also found that an identity of 'learning disability' was not salient for the individuals with a learning disability in their study and Jahoda *et al.* (1988) showed that many individuals did not see the identity of learning disability as applicable to them, even if their carers did. These studies suggest that people with a learning disability distance themselves from the label.

On the other hand, the same studies may simply be highlighting that many people with a learning disability are not aware of the label, or misunderstand what it means, rather than actively distancing themselves from it. Thomson and McKenzie (2005) found that people with a learning disability did not have a clear understanding of what the term meant and certainly did not refer to the diagnostic criteria of level of intellectual functioning or childhood onset. Only half of those interviewed believed they had a learning disability and they tended to attribute it to problems with academic skills or physical difficulties.

Other studies, which will be discussed in more detail below, have found that whether or not people with a learning disability identify with the label, they do appear to be aware of the stigma attached to their social group (Craig *et al.*, 2002; Jahoda *et al.*, 1988; Rapley *et al.*, 1998; Szivos-Bach, 1993). Consequently, using the term 'learning disability' when discussing stigma experiences with this group may not be appropriate as participants may either not understand the concept, or hold a different understanding from that of the researcher. Rapley (2004) argues that when individuals with a learning disability do not provide descriptions that are in keeping with a diagnostic understanding of a learning disability, then they are deemed to be denying the label or distancing themselves from the social group. He puts forward a case that since the label is socially constructed by society, it cannot be expected that individuals with a learning disability have the same understanding of the label as society has.

In this thesis, a global understanding of the term learning disability is not required since the aim is to ask individuals to compare themselves to people around them, without applying any labels. However, it is important to be aware of the debate surrounding the identification of people with a learning disability with the label because it has implications for the impact the associated stigma has on their wellbeing.

Due to their difficulties with intellectual functioning and adaptive skills, it is not surprising that people with a learning disability are considered part of a stigmatised group. They do not achieve socially valued goals and in most cases cannot 'pass' as 'normal' in society. Some studies have suggested that people with a learning disability are very much aware of

being different, and the next section will consider the impact of living with such a label and being part of that socially defined group.

1.3. People with a learning disability and stigma

This section will begin with a definition of stigma and go on to consider the experience of stigma in the lives of people with a learning disability.

1.3.1. Defining stigma

Erving Goffman is widely acknowledged for his research into conceptualising and creating a framework for studying stigma. His seminal text *Stigma: Notes on the Management of Spoiled Identity* (1963) inspired a wealth of papers and studies investigating the nature and impact of stigma on individuals' lives. Even today, over 40 years later, our models and understanding of stigma are based on his writings. Goffman defined stigma as an 'attribute that is deeply discrediting' (1963; p.3) which reduces the bearer 'from a whole and usual person to a tainted, discounted one' (1963; p.3). The complexity of the lives of people with a learning disability can not, however, be reduced to one attribute and, consequently, a definition which incorporates the social context and process in which the stigmatisation occurs would be more relevant. Link and Phelan (2001) argue that while Goffman's definition was one of the first conceptualisations of stigma, they feel that it, and most definitions used since, are too individually focused and vary considerably depending on the authors and the circumstances considered. Consequently, Link and Phelan (2001) describe

their own revised conceptualisation of stigma, which states that stigma exists when its interrelated components converge. These components include the labelling of differences, applying negative stereotypes, separation into categories and status loss and discrimination. Stigmatisation arises when these components co-occur in a situation in which a difference in power exists between the individuals involved.

1.3.2. Experiences of stigma

There is no doubt that the label of learning disability carries a stigma as described above. People with a learning disability often experience verbal abuse in the community, discrimination when attempting to gain employment, and they often fail to achieve socially valued goals, such as living independently, getting married and having a job (Beart *et al.*, 2005). There are several examples that highlight the extent of the negative evaluations placed upon people with a learning disability by society. Firstly, the laws governing people with a learning disability draw attention to the restrictions that have been placed upon their basic rights. Finlay and Lyons (2000) report that until relatively recently, women with a learning disability were sterilised in several Western countries including Germany, Denmark, Switzerland, Canada, the United States, Sweden and Norway; the latter two countries continued sterilisation into the 1970s. More worryingly, in 1997 *The Times* reported that Austria was still ‘forcing’ women with a learning disability to be sterilised (*The Times*, 1997, 28 August) and *The Independent* claimed in 1998, that mental hospitals in France were sterilising some men and women with a learning disability without their knowledge or permission (Lichfield, 1998, 6 October). A second example of society’s

negative view of people with a learning disability comes from the use of labels for learning disability as insults. Several terms used historically to denote varying degrees of mental deficiency have since been transformed into expressions of abuse. Words such as ‘idiot’, ‘imbecile’ and ‘moron’ were used as psychiatric technical definitions of the degrees of learning disability, yet are now forms of insult and are considered offensive terms in today’s society (Hastings & Remington, 1993). Once words have become associated with intellectual impairment, they often become used as terms of abuse and fall into disrepute (Harris, 1995). Terminology for the condition of learning disability has frequently changed in an attempt to remove the negative values attached to the disability and thus the labels. However, Hastings and Remington (1993) asked seventy-seven undergraduate students to evaluate current labels used for mental handicap and found that almost all of these newer terms already carried negative connotations.

Jahoda *et al.* (1988) interviewed 12 individuals with a learning disability who attended a day centre and discussed with them their views on the topics of stigma and handicap. The authors concluded that for the participants stigma was ‘something with which they had to cope in their everyday lives’ (p.113). From discussions with the individuals, the authors reported that many of them had experienced bullying and teasing when they were at school and that all of them still received mistreatment from school children and peers without a learning disability. The individuals described often being treated unequally in comparison with non-handicapped people and some observed that they had restrictions placed upon them at home that did not apply to their non-handicapped siblings. Finally, most of the individuals were aware of stigma and negative stereotypes attached to the day centre, those

who attended the centre, and even the centre's bus. These issues were illustrated again in a more recent study by Jahoda and Markova (2004). They interviewed 28 individuals with a learning disability as they were going through a transition into living in the community and found that they also reported many instances of stigmatisation. These included being rejected or teased by non-disabled peers, incidences of being discriminated against or victimised, both in social contexts and when trying to gain employment, and being treated like children or not taken seriously.

The examples described in this section highlight that people with a learning disability experience stigmatisation in many areas of their lives and studies have found that people with a learning disability are aware of this stigmatisation (Jahoda *et al.*, 1988; Jahoda & Markova, 2004; Szivos-Bach, 1993). Craig *et al.* (2002) interviewed people with a learning disability and found that when they alluded to the label of learning disability the conversation became 'stilted' and 'awkward' and the authors felt that discussion of their identity was 'associated with obvious discomfort' (p. 65). The authors suggested that this indicated that people with a learning disability are aware of the stigma attached to the label of learning disability. The next section will consider how stigmatisation may affect psychological wellbeing in people with a learning disability.

1.4. The effect of stigmatisation

There is little doubt that being a member of a stigmatised group carries many negative consequences and it is intuitive that the stigmatisation would lead to negative self-

evaluations and a lowered self-esteem. Indeed, some studies have shown that the perception of stigma in people with a learning disability has a negative impact on their psychological wellbeing. Szivos (1991) interviewed 50 adolescents with a learning disability and reported that those who were most aware of being stigmatised had the lowest self-esteem and considered themselves the most inferior compared to their siblings. A further paper based on the same sample reported on different measures (Szivos-Bach, 1993). She reported that adolescents who felt themselves to be most different from others in general had the greatest awareness of stigma and the lowest self-esteem. There was also a significant negative correlation between the young people's aspirations and their perception of stigma, suggesting that those who felt the most stigmatised had the lowest expectations of fulfilling their aspirations.

Cooney *et al.* (2006) interviewed 60 young people with a learning disability and asked them about their perception of stigma and the perceived likelihood of attaining their future goals. Although all the participants reported experiences of stigma, this was not related to the perceived likelihood of attaining future goals as was concluded by Szivos-Bach (1993) above. The difference in findings could be explained by the dates of the research, as the study by Szivos-Bach was carried out 13 years earlier. It is likely that changes in the roles of people with a learning disability in society over the past two decades has allowed today's young people to develop more positive aspirations and expectations about their futures. However, the lives of adolescents are different from those of adults and therefore it may be difficult to generalise these results across the lifespan. Young people with a learning disability have different types of contacts with people without a learning disability and are

going through a stage of identity formation, consequently they may be more susceptible to feeling different in the wider society.

Nevertheless, two studies have found similar patterns in adults with a learning disability. Firstly, Abraham *et al.* (2002) investigated the impact of perceived stigma on self-esteem and their relationship with community participation and social support in adults with a learning disability. The study provided evidence that, in adults, self-esteem was negatively correlated with perceived stigma and the authors concluded that those with the highest self-esteem reported fewer experiences of stigmatisation. Secondly, Dagnan and Waring (2004) investigated the effect of the perception of stigma in adults with a learning disability and they were particularly interested in the role of core evaluative beliefs in this population. They found a significant relationship between negative evaluations people make about themselves and their reports of feeling different on the measure of stigma perception. The authors concluded that core negative beliefs about the self are related to the extent to which people with a learning disability feel different (i.e. are aware of stigma) and they could be 'internalising the experienced stigma'.

1.4.1. Awareness of stigma

The key relationship reported in the studies above is between awareness of stigma, or feeling different, and psychological distress, whether or not people with a learning disability identify with their social category and the attached label. For several decades, research in social psychology has investigated the effects of stigmatisation and

discrimination, such as those described in section 1.3, across a range of different social groups. Crocker and Major (1989) carried out an extensive review looking at the effect of social stigma, and reported that negative stereotypes exist for physically disabled, obese, homosexual and mentally ill people, among many other groups. They also summarise studies that have found evidence for the consequential disadvantages of being members of these groups, both economic and interpersonal, such as lower pay, inferior jobs and difficulties with interpersonal relationships. In their review, Crocker and Major (1989) argue that despite this there is actually little empirical evidence to suggest that members of stigmatised groups have a consistently lower self-esteem than members of non-stigmatised groups and they argue that this is also the case in people with a learning disability. On the one hand, it could be that many people with a learning disability are not aware of the stigma. However, it was argued above that people with a learning disability do report experiencing stigma in their everyday lives and although it was related to lower self-esteem, not everyone with a learning disability reports low levels of self-esteem. Thomson and McKenzie (2005) reported that the individuals they interviewed who believed they had a learning disability were more likely to have lower self-esteem but did not necessarily believe that having a learning disability is negative. They argued that the individuals' reports of feeling negative compared to others indicated that it is not the label that affects an individual's self-esteem but instead the comparisons individuals make with others. It is possible that the way individuals see themselves in comparison to those doing the stigmatising will influence the impact of the negative experience on the individual. This will be discussed in more depth in the following section.

1.5. Theory of social comparison

Leon Festinger's theory of social comparison (1954) is one of the leading approaches to understanding the way individuals see themselves compared to others. Festinger's theory is key to understanding and investigating social comparison processes in individuals and groups, although there have been modifications and additions to his ideas by later researchers. Several papers over the last decade have investigated Festinger's social comparison theory in relation to stigma and psychological wellbeing in people with a learning disability (Dagnan & Sandhu, 1999; Dagnan & Waring 2004; Szivos-Bach, 1993). Festinger's first tenet in his paper was that an individual has a 'drive to evaluate his opinions and his abilities' (p.117). He goes on to argue that when objective means of achieving this appraisal are unavailable, people must 'evaluate their opinions and abilities by comparison respectively with the opinions and abilities of others' (p.118). This statement suggests a predisposition within individuals to compare themselves to other people, and studies have shown that different types of social comparison are used. Finlay and Lyons (2000) differentiated between lateral, downward and upward social comparisons. They defined them in the following ways:

- lateral comparisons: when the self is presented as the same as another person on some attribute
- downward comparisons: when the self is presented as occupying a more favourable position
- upward comparisons: when the other person or persons are presented as being in a more favourable position

1.5.1. Lateral comparisons

Festinger argues that despite a tendency to compare to others, people will avoid comparing with those who are too divergent from themselves, i.e. people who are far below or above their ability. By avoiding comparisons with people who are considerably different from themselves on a certain attribute suggests that people would make comparisons with those more similar to themselves, the in-group. Crocker and Major (1989) argue that in-group comparisons can be protective and that they are made for three reasons. Firstly, there is a 'proximity' effect that arises as a consequence of segregated environments and as such members of the in-group are more available for comparison. Secondly, there is a 'similarity' effect whereby stigmatised individuals look for similarly stigmatised others because as they are considered to be more similar it allows for more accurate self-evaluations. The final reason is a 'self-protective' effect arising from the possibility that comparisons with advantaged out-groups may be unpleasant and potentially damaging.

It would appear that the in-group comparisons described by Festinger, and Crocker and Major, above, could be regarded as lateral social comparison, in which case lateral comparisons could be seen to be protective. However, Miller and Kaiser (2001) argue that continuing to engage in in-group social comparisons may be damaging in the long term for the group's position in society because the individuals are not motivated or challenged to change their devalued status. In addition, Wills (1981) considered that comparing oneself with an equally unfortunate other was a weak comparison strategy and he suggested that making downward social comparisons is more effective for enhancing wellbeing.

1.5.2. Downward comparisons

According to Wills (1981), the theory of downward social comparison posits that individuals can increase their subjective wellbeing by comparing themselves with less fortunate others. If an individual's wellbeing is threatened in a way that cannot be overcome by instrumental action, then one way in which to recover is to compare himself or herself to someone worse off. Wills defines two further principles of the theory. Firstly, downward comparisons tend to be directed at lower-status groups, which he calls 'safe targets', because they are already derogated by society. The second principle states that individuals are ambivalent about social comparison, intimating that it is not considered a pleasurable or admirable process, but necessary in certain conditions. Wills also argues that downward comparisons are elicited by a decrease in subjective wellbeing and, in particular, are more likely to occur in those low in self-esteem. The reason for this is that individuals are more motivated to bolster their wellbeing when it is under threat. However, it has been suggested that downward comparisons can be detrimental because comparisons with the lower status group may highlight that the possibility that their own situation could get worse (Buunk *et al.*, 1990).

1.5.3. Upward comparisons

Finally, Miller and Kaiser (2001) suggest that individuals may need to make comparisons outwith their groups and with higher status groups in order to motivate themselves to change their status. This suggests an adaptive role for making upward social comparisons. However, Miller and Kaiser go on to admit that such upward comparisons may expose

individuals to negative self-comparisons. Furthermore, Swallow and Kuiper (1988) reasoned that comparisons with an advantaged other would force the individual to make negative self-evaluations and could therefore lead to feelings of depression.

The papers reviewed above suggest that lateral comparisons may be considered to be protective but may cause stagnation long term. Downward social comparisons appear to boost an individual's self-perception but may raise fears of how bad the situation may get. Finally, upward social comparison may damage an individual's self-perception by exposing them to negative comparisons but may also generate motivation for change and further development. The way in which people compare themselves to others appears to be important in determining their self-concept and their self-esteem and it is possible this also applies to people with a learning disability. The evidence shows that social comparison processes can influence an individual's self-esteem. If these same processes occur in people with a learning disability then they could play a role in protecting them from the negative effects of stigmatisation.

1.6. *Social comparison and people with a learning disability*

The previous section detailed three main types of social comparison processes: lateral, downward and upward. This section will now review the evidence for the use of these processes in people with a learning disability.

1.6.1. Types of social comparison

Evidence for social comparisons processes in people with a learning disability has been found in several recent studies. Finlay and Lyons (2000) asked 33 people with a learning disability who attended services for adults with a learning disability to describe themselves and their social worlds. When analysing the interviews, they separated the participants' responses into downward, lateral and upward social comparisons, as detailed in the previous section. They also classified the domains used when making the social comparisons into *skills/abilities*, *good/bad behaviour* and *other* and specified who the targets of the comparisons were. Finlay and Lyons found that most individuals made downward and lateral comparisons and few upward comparisons were made. They reported that while most people made downward comparisons based on *skills/abilities* and *good/bad behaviour*, people made lateral comparisons based on the *other* domain, which included a wide range of attributes. Most downward social comparisons were made with other people with a learning disability and most of the lateral comparisons were made with people without a learning disability. In addition, they found that when individuals made downward comparisons towards groups, the groups were either comprised of people with more severe learning disabilities or marginalized groups in society. The results imply that people with a learning disability do not tend to make upward social comparisons because they could have a negative impact on their social identity. Instead, they make lateral and downward comparisons viewing themselves as the same or more favourably than others and thereby protecting their self-esteem. Furthermore, most comparisons made with other people with a learning disability were downward comparisons.

An early study looking at social comparison processes in people with a learning disability looked at evaluations of people with and without a learning disability on dimensions of social desirability (Gibbons, 1985). Participants with a learning disability were presented with a photograph of a person of the opposite sex. Half of the participants were told that the individual in the photograph had a learning disability and that although they used to live in a group home, they now live and work in town. The other half were informed that the individual used to attend high school but now lives and works in town. The participants were then asked questions about the individual's character and social behaviour, including how many friends and dates the person had had and their likelihood of getting married. Gibbons found that the individuals labelled as having a learning disability received more negative evaluations on the social behaviour questions, suggesting they were considered less favourably. Participants were also shown a series of photographs of people apparently with or without a learning disability and were asked to rate their attractiveness. The individuals were rated as significantly less attractive when they were labelled as having a learning disability. As Gibbons discusses, the people with a learning disability in this study appeared to be engaging in downward social comparison processes towards other people with a learning disability.

Gibbons (1985) interviewed the same participants again and this time asked them to evaluate themselves on the same dimensions used previously for the photographs. The participants gave themselves higher ratings than the photographs overall for the smart and friendly items. However, when this was broken down it showed that they saw themselves as smarter than the individuals labelled as having a learning disability but equally smart as

the individuals labelled as not having a learning disability. This is an example of the participants again making downward comparisons towards their peers with a learning disability, in order to put themselves in a favourable position. They also made lateral comparisons with the general population by seeing themselves as similar on certain dimensions. Interestingly, Gibbons found that the participants actually rated themselves worse on the dimension he titled social success (number of dates and likelihood of marriage) than the targets overall. This implies a less adaptive upward comparison where the target was placed in the more favourable position. Gibbons suggests that by the nature of the experiment the participants were forced to compare themselves to the general population on the social success dimension and could not ignore that they were worse off on that dimension. Social comparison is considered an actively selective process whereby individuals chose the dimensions on which to compare themselves with the in- and out-groups so that they can present themselves most favourably. It is possible, therefore, that the participants in Gibbons' study would not have chosen to compare themselves on a social success dimension but were obliged to by the structure of the interview. If that is the case, this study suggests that people with a learning disability will make downward comparisons wherever possible but that they may be more realistic when the choices are restricted.

More evidence of social comparison processes was found in the study by Jahoda and Markova (2004) where the participants made downward social comparisons with other residents in the housing or hospital settings. Some of the individuals made remarks regarding their relative abilities compared to their peers and appeared to view themselves as

superior to the others. All the participants in the study were aware of being stigmatised and therefore the downward comparisons could be a means of protecting themselves from the negative effects of stigmatisation.

Descriptions of social comparison processes have also been found in young people with a learning disability. Cooney *et al.* (2006) interviewed 60 young people with mild to moderate learning disability in their final year of secondary school. Around half of the participants came from a mainstream school while the other half attended a segregated school. All of the young people tended to rate themselves more positively when asked to compare themselves to a peer with a more severe learning disability. This suggests they were using downward social comparison to view themselves more favourably. All of the young people rated themselves marginally more positively when comparing themselves to a peer without a learning disability, although the authors reported that these comparisons were less reliable. Cooney *et al.* did not test the difference between the two comparisons of peers with and without a learning disability but they did report the total mean scores (6.55 and 1.2 respectively) and the authors state that a score above zero indicates that participants were viewing themselves more positively. From the mean scores, they all appear to view themselves much more positively compared to a peer with a more severe learning disability, which the authors interpret as downward comparisons. The participants also appear to view themselves only slightly more positively compared to a peer without a learning disability, which could be interpreted as a lateral comparison. A strength of this study was that the two groups of participants were asked to compare themselves to specific

targets which ensured that the participants were all comparing themselves to the same individual.

Szivos-Bach (1993) used an alternative method of identifying social comparison processes in students with a learning disability. She asked them to rate themselves on a measure of self-esteem and then, on the same measure, to rate others without a learning disability. She proposed that the discrepancy between the participants' rating of themselves and the rating given to the other would give an indication of how they see themselves compared to the other. Participants were asked to rate their best friend on the course (by default another individual with a learning disability); their sibling; an individual without a learning disability (e.g. a neighbour, work colleague or relative) and their ideal self (what they would like to be). Significant differences were found between the participants' rating of themselves and their rating of an individual without a learning disability and their ideal self. Participants generally perceived people without a learning disability to be superior to themselves, indicating an upward comparison. This finding is different from previous studies discussed above which suggested that people with a learning disability tended not to make upward comparisons. However, this study interviewed young people with a learning disability and therefore they may make different social comparisons. Although it was non-significant, Szivos-Bach reported a tendency to rate friends on the course as inferior to themselves, suggesting a downward social comparison. However, Szivos-Bach did not actually ask participants to compare themselves to other people but merely deduced it based on the different ratings. It is therefore possible that this tapped into different evaluation processes from the social comparison measures used in other studies.

A final example comes from Craig *et al.* (2002) who carried out a focus group discussion with six people with a learning disability living in supported housing in the community. They generated discussion around the topics of school, accommodation and day centres and identified several themes from the descriptions. In particular, Craig *et al.* identified two themes: 'a tendency to portray oneself as non-intellectually disabled, and to give other explanations for one's apparent inclusion within a service for people with intellectual disabilities' (p66), and 'a tendency to concentrate on the difference between other service-users and oneself, comparing oneself favourably and rarely acknowledging one's own difficulties' (p66). This suggests that the participants were making downward social comparisons with other people with a learning disability. They placed themselves in a more favourable position, highlighted the differences between themselves and other people with more severe learning disabilities, and emphasised the similarities between themselves and non-learning disabled people.

Most of the studies here suggest that people with a learning disability make downward social comparisons with their peers, placing themselves in a more favourable position. On the other hand, they make lateral comparisons with people without a learning disability thereby presenting themselves as the same as people in the general population. The studies do show that people with a learning disability make different kinds of social comparisons and so we must now consider whether for people with a learning disability social comparison is related to any psychological difficulties.

1.7. The effect of social comparison processes

1.7.1. Social comparison and psychopathology

Several studies have shown that, in people without a learning disability, negative social comparison is related to depression and psychopathology (Allan & Gilbert, 1995; Furnham & Brewin, 2001; Swallow & Kuiper, 1988; Thwaites & Dagnan, 2004). Allan and Gilbert (1995) developed a social comparison scale that tapped into comparisons of social rank, social attractiveness and group fit. They then looked at the association between social comparison and psychopathology in a sample of university students and in a clinical sample comprising of adults with depression and anxiety disorders. For the student sample, all three types of social comparison were associated with measures of psychopathology. However, for the clinical sample only social rank and attractiveness were related to psychopathology. Nevertheless, their study shows that social comparison has implications for psychological wellbeing.

For people with a learning disability, there are many studies looking at the use of social comparison as described previously, but there are few looking at the effects of negative social comparisons on the individual. Dagnan and Sandhu (1999) investigated the relationship between social comparison, self-esteem and depression in 43 adults who attended adult training centres. They adapted the social comparison scale developed by Allan and Gilbert (1995) for use with this population, but retained the same factors of *rank and achievement, social attractiveness and group belonging*. The authors first subjected the results to correlational analysis and found several significant relationships. Firstly, the

more negative individuals were on the *social attractiveness* and *group belonging* factors of the social comparison scale, the higher the reported depression. Secondly, the more negative individuals were on the *rank and achievement* social comparison factor, the lower they scored on the positive self-esteem factor. Finally, the more negative the total social comparison score, the lower the reported total self-esteem and the higher the reported depression.

In order to examine these relationships further, the authors used regression analysis to regress depression onto the self-esteem and social comparison factors. They found that only the social comparison factors of *group belonging* and *social attractiveness* were significant independent predictors of depression. Dagnan and Sandhu concluded that self-esteem and social comparison are associated with depression in people with a learning disability. However, the analysis in this paper showed that social comparison on the group belonging and social attractiveness dimensions are the most important in predicting depression in people with a learning disability.

However, this study failed to state with whom the participants should compare themselves. The authors asked the participants to complete the sentence 'When I am with other people I generally feel...' but did not specify who the 'other people' should be. By omitting this, it is possible that the participants could have compared themselves to a wide variety of individuals with differing social status. For example, if they had had the questioner in mind then they may have compared themselves poorly. Alternatively, if they had thought of a salient individual at the centre with whom they did not get on, they may have inflated their

comparison. Cooney *et al.* (2006) go some way to tackling this issue by describing the comparison subject in detail using photographs and vignettes in order to improve understanding. However, this could be too specific as it narrows the comparison down to an individual and not to the wider social group.

It was not possible to find any other studies that directly investigated the relationship between negative social comparisons and psychopathology. The studies outlined above however, suggest that negative social comparisons are related to lower self-esteem and higher levels of depression. Studies reported previously indicated that high perception of stigma is also related to lower self-esteem and higher depression (Abraham *et al.*, 2002; Dagnan & Waring, 2004; Szivos-Bach, 1993). The next section provides evidence for the relationship between perception of stigma and social comparison.

1.7.2. Social comparison and stigma

Dagnan and Waring (2004) used the adapted social comparison scale (Dagnan & Sandhu, 1999) to investigate the relationship between social comparison and perceived stigma in adults with a learning disability. They found that a greater perception of stigma was associated with increasingly negative social comparisons. The authors report that a greater perception of stigma was related in particular to increasingly negative comparisons on the *social attractiveness* factor. Dagnan and Sandhu (1999) had claimed that *social attractiveness*, along with *group belonging*, was one of the important factors for predicting depression and indeed, Dagnan and Waring reported a stronger correlation between

perceived stigma and *group belonging* than the *rank and achievement* factor, although it was not significant.

In addition to exploring social comparisons in young people, Szivos-Bach (1993) also asked her participants about experiences of stigma. She found that participants who perceived the most stigma, saw themselves to be more inferior to individuals without a learning disability. This implies that those people who were sensitive to stigmatisation were more likely to make upward social comparisons by placing others in a more favourable position.

1.8. Conclusions

1.8.1. Summary

The introduction has shown that stigma exists in the lives of people with a learning disability and that they are often aware of the stigmatisation. Perception of stigmatisation has been associated with lower self-esteem and psychopathology in people with a learning disability and in other stigmatised groups. However, despite reports of such negative experiences, studies do not report that self-esteem is consistently lower across stigmatised groups, or that *all* people with a learning disability experience higher levels of psychological problems. It has been proposed that the way individuals, including people with a learning disability, compare themselves to other social groups may influence their self-esteem and thereby serve to protect individuals from the negative effects of

stigmatisation. A number of studies have shown that there is a relationship between increased perception of stigma and low self-esteem and increased psychological distress. There has also been evidence presented above that indicates that negative social comparisons are related to low self-esteem and increased psychological distress, and, furthermore, that increased perception of stigma is related to negative social comparisons with others. Dagnan and Sandhu (1999) argue that social comparison is an important concept for explaining the psychological wellbeing of people with a learning disability. They note that Goffman (1963) talks about the effects of primary deviance, when stigmatised individuals recognise that they are devalued and accept that evaluation. Dagnan and Sandhu propose that negative social comparison could be the psychological presentation of this social process. If that were the case social comparison could have a moderating effect on the relationship between perception of stigma and self-esteem. This thesis hypothesises that individuals may be aware of stigma or feeling different but that those who compare themselves more negatively with others will have more difficulties with self-esteem. Consequently, this thesis will examine whether the impact of perception of stigma on self-esteem varies according to the type of social comparison made.

There are few studies that have investigated the relationships between social comparison, stigma and psychological distress and as such, this thesis is a potentially valuable addition to the field. The thesis differs from previous research in that although studies have argued that social comparison influences both the experience of stigma and self-esteem, no one has yet drawn the three variables together in a combined analysis. In addition, many of the studies described above have not defined with whom the individuals should compare

themselves. By specifying the target group, it is possible to look at the differences between how individuals see themselves compared to different social groups. In this thesis, the participants will be asked to compare themselves to other service users and to people in the community. This distinction will allow an insight into whether people with a learning disability make different kinds of comparisons with their peer group than they do with the general population. People with a learning disability may attempt to distance themselves from their peers (the out-group) by rating themselves more positively on the social comparison measure. Furthermore, people with a learning disability may rate themselves more negatively when comparing themselves to people in the community because they are being forced to make an upward comparison. Alternatively, participants may engage in lateral social comparisons and rate themselves as the same as people in the community. Nevertheless, it is likely that social comparisons with service users will be more positive, i.e. people with a learning disability will see themselves as better compared to their peers. It is important to ask participants to compare themselves to 'other service users at the centre' rather than to 'people with a learning disability' because studies have shown that people with a learning disability do not identify with the label. Furthermore, it has been suggested that using the term 'learning disability' may encourage individuals to think of someone with severe disabilities which may therefore cause them to make downward social comparisons.

1.8.2. Aims of thesis

The thesis will firstly investigate whether the relationships previously found in the literature between the perception of stigma, self-esteem and psychopathology are supported in this group; namely, that higher perception of stigma will be associated with lower self-esteem and greater psychopathology. Secondly, the types of social comparison processes used by people with a learning disability will be explored by asking them to compare themselves to their peer group (other service users) and to the general population (people in the local community). Subsequently, the social comparison processes will be analysed with the perception of stigma measure, self-esteem and psychopathology to explore whether there is support for previous research showing relationships between these variables. The literature would suggest that negative social comparison would be related to higher perceived stigma, lower self-esteem and greater psychopathology. Finally, the thesis will examine whether social comparison has a moderating effect on the relationship between perceived stigma and self-esteem.

1.8.3. Hypotheses

The specific hypotheses are that:

- 1 There will be a significant association between perception of stigma and self-esteem and psychopathology, i.e. the higher the perceived stigma, the lower the reported self-esteem and the higher the reported psychopathology.

- 2 There will be a significant association between perception of stigma and social comparison with both service users and people in the community, i.e. the higher the perceived stigma, the more negative social comparisons with both groups.
- 3 There will be a significant association between social comparison made with both service users and people in the community and self-esteem and psychopathology, i.e. the more negative social comparisons with both groups the lower the reported self-esteem and the higher the reported psychopathology.
- 4 There will be a significant difference in the social comparisons made with service users and with people in the community, i.e. social comparisons made with service users will be more positive than comparisons made with people in the community.
- 5 Social comparison will have a moderating effect on the relationship between perceived stigma and self-esteem.

Chapter 2. Method

2.1. Design

The study was quantitative and used a cross-sectional, within-subjects correlational design.

2.2. Ethical issues and approval

Ethical approval for the current study was granted from the University of Edinburgh Research Ethics Committee. The study did not have to be submitted to the NHS Research Ethics Committee because the participants were not NHS patients or recruited via NHS services. However, the local NHS Research Ethics Committee did stipulate some requirements regarding data storage on NHS premises. Permission was obtained from the local council in which the study took place, to allow access to the departments' premises and to approach service users to ask them to take part. Copies of the documentation demonstrating ethical approval and permission can be found in appendices I-III; all identifying information has been removed.

The main ethical issues concerned the use of the questionnaires employed in the study. As some of the questionnaires ask direct questions regarding mental health, there may have been a risk of participants identifying personal psychological difficulties. Furthermore, as the study is focusing on the perception of stigma in people with a learning disability, some

participants may experience some distress if recalling stigmatising experiences during the interview. These concerns were addressed in a number of ways.

Firstly, individuals were approached and asked if they would like to participate in the study by keyworkers who knew them well and who were aware of the nature of the study. They were very unlikely to have approached individuals for whom they felt participation would be detrimental or distressing. All participants had verbal, written and pictorial information about the study and the areas it covered, as well as the opportunity to think about whether they wished to participate or not. Those people who were likely to find the topic distressing were unlikely to have offered to participate. The voluntary and confidential nature of the study was emphasised both in the information sheet and verbally to the participants when they were informed about the study and then again at the consent interview. They were also made aware of their right to refuse to participate or withdraw from the study at any time without giving a reason and they were assured that there would be no adverse effects on their placement as a consequence of that. Participants were provided with a consent form, informing them of all these rights, which they were asked to read, or have it read to them, and sign in the presence of the researcher prior to participation. Therefore, the participants were well informed of the nature of the study, of their own rights and of where to access support should this be required. All questionnaires were completed in a setting that the person knew well and was comfortable with e.g. the adult resource centre. There they had access to staff and peers they know well and from whom they could have gained support if distressed. The researcher completed the questionnaire with the participants and, therefore, would have been able to quickly spot if a

participant had become distressed and could have stopped the process and offered support. The researcher has received training in both working with people with a learning disability and helping them to deal with psychological distress.

2.3. Power and sample size calculations

The first step in estimating the power and sample size for this study was to determine the effect size required. None of the relevant literature in the field reported power and effect sizes in their papers therefore it must be established from the results reported. Szivos-Bach (1993) used the same measure of stigma perception but an alternative measure of self-esteem and on examining the relationship between the two, Pearson's r correlations revealed a large effect size ($r = 0.55$). Post-hoc analysis using the computer program G*Power showed that given $\alpha = 0.01$, $N = 39$ and effect size = 0.55, as reported in the study, the correlation achieved a power of 0.99. Dagnan and Sandhu (1999) compared the same measures of self-esteem and of social comparison as this study and Pearson's r correlations revealed a medium effect size ($r = 0.34$). Post-hoc analysis using the computer program G*Power showed that given $\alpha = 0.05$, $N = 43$ and effect size = 0.34 as reported in the study, the correlation achieved a power of 0.75. Finally, Dagnan & Waring (2004) compared the same measures of stigma perception and of social comparison as this study and Pearson's r correlations revealed a medium to large effect size ($r = 0.40$). Post-hoc analysis using the computer program G*Power showed that given $\alpha = 0.05$, $N = 39$ and effect size = 0.40 as reported in the study, the correlation achieved a power of 0.85.

Based on the above calculations, an effect size between medium and large would achieve acceptable power. According to Cohen's (1992) tables for power calculations, when performing correlational analyses to achieve a power of 0.80, $\alpha = 0.05$, an N of 28 will detect large population effect sizes and to achieve a power of 0.80, $\alpha = 0.05$, an N of 85 will detect medium population effect sizes. Alternatively, looking at Clark-Carter's (2004) tables for power calculations, when performing correlational analyses to achieve a power of 0.80, $\alpha = 0.05$, an N of 25 will detect large population effect sizes and to achieve a power of 0.80, $\alpha = 0.05$, an N of 70 will detect medium population effect sizes. For the moderator analysis, according to Cohen's (1992) tables for performing multiple regression with three predictor variable, to achieve a power of 0.80, $\alpha = 0.05$, an N of 34 will detect large population effect sizes and to achieve a power of 0.80, $\alpha = 0.05$, an N of 76 will detect medium population effect sizes. As only 43 participants were recruited in the present study, it would only be possible to detect large population effect sizes with adequate power.

2.4. Participants

Forty-three adults with a mild to moderate learning disability were interviewed. Sixty-five people were identified as potential participants by the managers or keyworkers at the centre; of these, 13 refused to take part, 8 were unable to understand fully the consent procedure, and 1 chose not to complete all the questionnaires. It was not possible to collect any further information on those who refused to take part.

2.4.1. Inclusion and exclusion criteria

The sample was restricted to adults over the age of 18 years old and any individuals currently experiencing mental illness or who were suffering from dementia were excluded. All participants had to be able to consent to taking part in the study. These criteria were clarified with the managers and keyworkers to ensure that they did not select anyone to be approached if it was not appropriate. The data from anyone who withdrew consent during the study was excluded.

2.4.2. Recruitment

Participants were recruited from Adult Resource Centres in a local health board in Central Scotland. Firstly, the managers of each location were contacted and given information both verbally and on paper about the proposed research; an example of this information is shown in appendix IV. All of the managers agreed that the research could be carried out in their centre. They and the centres' keyworkers were asked to identify which service users they felt would be able to comprehend and respond to the study materials. This approach is used frequently when carrying out research with people with a learning disability (for examples see Cooney *et al.*, 2006; Dagnan & Waring, 2004).

2.5. Procedure

Once potential participants had been identified, they were approached by the researcher who explained about the study and talked them through the patient information sheet (see

appendix V). It was emphasised that participation was completely voluntary and that individuals could withdraw at any time without having to give a reason. Furthermore, potential participants were assured that choosing not to take part would not have any negative repercussions on their placement at the centre. The participant was asked to take the information away to consider and was encouraged to discuss the study with their keyworker or carer. The participant was also given a letter to their carer explaining why they had been approached and what the study was about (see appendix VI). The researcher's contact details were included in case any queries or concerns arose.

The word 'stigma' was not included in any of the explanations given to the potential participants. This was decided because discussion of the word stigma may influence the responses given by the individual and furthermore it makes an assumption that the individual is indeed stigmatised. Instead, the potential participants were told that the study was interested in finding more about their lives, how they feel about themselves and how they feel about and get on with other people at the centre and in the community.

The participants were approached again on a separate occasion, after at least 24 hours, to see if they were interested in participating in the study and if so they were invited to take part in the consent interview. At the consent interview, the participant again had the study explained to them and the right to choose to participate or withdraw at anytime was again emphasised. If they were able to provide consent and they agreed to participate in the study, then they completed the consent form (see appendix VII) and the researcher proceeded with the interview.

In order to put participants at ease, a general discussion was held at the start of the interview about what the individual does at the centre and during the rest of the week and who they live with. This also served to provide descriptive information about the participant's living arrangements and daily activities. Afterwards, the participants were given four questionnaires exploring their perception of stigma, social comparisons, self-esteem and any symptoms of psychopathology. The questionnaire interview was conducted by the researcher, who is trained and experienced in assessing and interviewing people with a learning disability. It was carried out in private on the premises of the relevant resource centre with individual participants and lasted about one hour.

Finally, participants completed the British Picture Vocabulary Scale II (BPVS 2nd edition; Dunn *et al.*, 1997) in order to assess their level of receptive vocabulary. Vocabulary tests are believed to be a good predictor of general cognitive ability (Wechsler, 1974). The BPVS II was designed for use with children under the age of 16 and therefore it is not possible to convert the raw score to a standardised score for people with a learning disability. Despite this, the BPVS II has been widely used as a measure of receptive vocabulary in research with people with a learning disability (e.g. Dagnan & Waring, 2004; Sams *et al.*, 2006).

2.6. Measures

The questionnaires used in the study are detailed as follows:

2.6.1. The Stigma Perception Questionnaire (Szivos, 1991; Szivos-Bach, 1993)

This measure was developed for use with individuals with a learning disability by Szivos (1991). It contains 10 items which assess participants' perceptions of their own stigmatisation, such as being treated like a child, being made fun of or feeling reluctant to identify with the adult resource centre; a list of the questions is shown in appendix VIII. Szivos-Bach (1993) indicates that participants should be encouraged to 'talk around' (p. 224) each item before deciding on a score in order to ensure more accurate responses. The participants were asked to rate how often the items occur using five-point visual analogues as well as written and spoken response options. These consisted of drawn blocks of decreasing size with the words 'nearly always', 'often', 'half the time', 'sometimes' and 'never' underneath them (see appendix VIII). These responses were assigned a score from 1 to 5 so that higher scores represented lower perception of stigma.

Szivos-Bach (1993) reported that the scale had item-total correlations between 0.34 and 0.61 and a scale alpha of 0.81. Dagnan and Waring (2004) repeated this analysis and found a mean item-total correlation for the scale of 0.42 (range = 0.22 - 0.57) and a scale alpha of 0.75. Szivos-Bach (1993) also reported a factor analysis of the scale that revealed it has three main factors that were labelled as: (i) Feeling Different, (ii) Anxiety and (iii) Poor In-Group Concept. However, Abraham *et al.* (2002) failed to replicate this factor structure and challenged the reliability of the scale. They first identified that 5 of the 10 items could be used to form a reliable scale with an alpha of 0.75, however, they stated that three of the

items had poor test-retest reliability. Consequently, they used the remaining items to form an abridged stigma scale and they reported that it had acceptable test-retest reliability.

Despite Abraham *et al.* (2002) questioning the reliability of the stigma scale, the full version is included in this study for the following reasons. Firstly, it is the only scale that has been developed to look at the experience of stigma in people with a learning disability. Rather than design a new questionnaire for the purpose of the current study, it was considered more practical to use a measure that was already in use. Secondly, although the scale was developed in the early 1990s, it has been used again in recent research in 2002 and 2004 (Abraham *et al.*, 2002; Dagnan & Waring, 2004). Only one of these papers questioned the reliability of the scale (Abraham *et al.*, 2002).

Cronbach's alpha coefficient and item-total correlations were calculated for the present sample. Alpha for the full scale = 0.70 and mean item-total correlation for the scale = 0.36 (range 0.14 – 0.57).

2.6.2. Adapted Social Comparison Scale (Dagnan & Sandhu, 1999)

This scale was originally developed by Allan and Gilbert (1995) but was adapted by Dagnan and Sandhu (1999) for use with people with a learning disability. The adapted scale examines the way in which people with a learning disability evaluate themselves through comparison with others along three separate dimensions: *group belonging*, *social attractiveness*, and *rank and achievement*. Participants are presented with an incomplete

sentence ('When I am with other people I generally feel') followed by six bipolar constructs (different/same, worse than other people/better than other people, not as good at things/better at things, less friendly/more friendly, more shy/less shy and on my own/with other people). Responses are marked on a 12.5 cm visual analogue scale (as used in the original), which is divided equally into 5 segments. Each participant was asked to point to where they thought they lay along this line for each of the six bipolar constructs. A score between 1 and 5 was assigned to each response on this basis. This has been shown to be a reliable response format for people with a learning disability (Dagnan & Ruddick, 1995). An example of the questionnaire and response formats can be found in appendix IX.

The scale was adapted further for the purposes of this study and in a similar way to the changes made by Cooney *et al.* (2006). In their study, participants were asked to complete the scale twice, comparing themselves firstly to 'a peer with more severe ID (intellectual disability)' then to a 'non-disabled peer'. In the current study, a distinction was made between other service users at the adult resource centre and people in the general population. Participants were asked to complete the scale twice, firstly using the incomplete sentence 'When I am with other *service users* I generally feel', then using the incomplete sentence 'When I am with other *people in 'name of city'* I generally feel'; the second sentence was adapted depending where the resource centre was located and the words 'people in the community' was also added verbally for further clarification. The meanings of the labels 'service user' and 'people in 'name of city'/the community' were discussed with each participant so that they had an understanding of who they were

comparing themselves too. It was also emphasised that they were to compare themselves to people in general and not to anybody in particular.

Dagnan and Sandhu (1999) report a mean item-total correlation for the scale of 0.28 (range = 0.01 - 0.47) and a scale alpha of 0.56. Cooney *et al.* (2006) report a scale alpha of 0.65 for comparisons with ‘a peer with more severe ID (intellectual disability)’ and a scale alpha of 0.31 for comparisons with a ‘non-disabled peer’. Alpha and item-total correlations were calculated for the present sample for both the social comparison with service users and again with the community. Cronbach’s alpha coefficient for the full scale with service users = 0.71 and mean item-total correlation for the scale = 0.44 (range 0.11 – 0.63). Cronbach’s alpha coefficient for the full scale with the community = 0.76 and mean item-total correlation for the scale = 0.50 (range 0.25 – 0.65).

2.6.3. Adapted Rosenberg Self-Esteem Scale (Dagnan & Sandhu, 1999)

This scale was originally developed by Rosenberg *et al.* (1989) but was adapted by Dagnan and Sandhu (1999) for use with people with a learning disability. The scale measures an individual’s self-esteem on six items and while Dagnan and Sandhu (1999) simplified the wording of the items, they retained the original meaning. The participants were asked to rate how much they agreed with the items, using a five-point visual analogue scale as well as spoken response options. These consisted of drawn blocks of increasing size with the words ‘never true’, ‘hardly ever true’, ‘sometimes true’, ‘often true’ and ‘always true’ underneath them. These responses were assigned a score from 1 to 5 so that higher scores

represented a greater level of self-esteem. An example of the questionnaire and response formats can be found in appendix X.

Dagnan and Sandhu (1999) report a mean item-total correlation for the scale of 0.34 (range = 0.24 - 0.48) and a scale alpha value of 0.62. They also argued that the scale has reasonable concurrent validity. They carried out a tentative factor analysis of the scale and found a two-factor structure. The first factor contains the 4 positive self-esteem items and the second factor contains the two negative items.

Alpha and item-total correlations were calculated for the present sample. Cronbach's alpha coefficient for the full scale = 0.66 and mean item-total correlation for the scale = 0.40 (range 0.31 – 0.51).

2.6.4. The Brief Symptom Inventory (BSI; Derogatis, 1993)

The BSI measures self-reported general symptomatology that is typical of people experiencing psychiatric problems. The BSI contains 53 items pertaining to nine primary symptom dimensions and three global indices of psychopathology. Participants are told they will be asked questions about problems they may have experienced over the past 7 days. They were then asked 'How much were you bothered by...' each item and were shown five-point visual analogues as well as written and spoken response options. These consisted of drawn blocks of increasing size with the words 'not at all', 'a little bit',

moderately’, ‘quite a bit’ and ‘extremely’ underneath them. The responses were assigned a score from 0 to 5 so that higher scores represented a greater level of distress.

The nine primary symptom dimensions comprise somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism. The symptoms that these dimensions measure are shown in

Table 2.1.

Table 2.1.
Primary symptom dimensions of the Brief Symptom Inventory

Symptom scale	# of items	Description	Example item
Psychoticism	5	measures both positive and negative symptoms of psychoticism	‘The idea that someone else can control your thoughts’
Somatization	7	measures distress arising from bodily sensations	‘Pains in the heart or chest’
Obsessive-Compulsive	6	measures symptoms that are considered to be indicative of an obsessive-compulsive type disorder	‘Having to check and double check what you do’
Interpersonal Sensitivity	4	measures perceptions of personal inadequacy and inferiority particularly in comparison to others	‘Feeling very self-conscious with others’
Depression	6	measures the broad range of manifestations of clinical depression	‘Feeling hopeless about the future’
Anxiety	6	measures symptoms associated with a diagnosis of general anxiety	‘Nervousness or shakiness inside’
Hostility	5	measures symptoms of the affective state of anger	‘Temper outbursts that you cannot control’
Phobic Anxiety	5	measures symptoms that reflect a persistent fear response to a specific person, object, place or situation	‘Feeling afraid to travel on buses, subways or trains’
Paranoid Ideation	5	measures symptoms of disordered thinking	‘Feeling that you are watched or talked about by others’

There are also 4 additional items that did not load onto any of the above factors but still have clinical significance and are included in the global dimensions of psychiatric distress.

The three global dimensions are as follows:

- *Global Severity Index (GSI)*: combines data on the number of symptoms and the intensity of distress and can be used as a global measure of symptomatology
- *Positive Symptom Distress Index (PSDI)*: measures the intensity of distress experienced by the symptoms
- *Positive Symptom Total (PST)*: measures the number of positive symptoms made by the participant

The BSI is a shortened version of the Symptom Checklist 90-Revised (SCL-90-R; Derogatis, 1983) and both versions have been shown to have high reliability and validity for measuring symptomatology in people without a learning disability. It has been shown that the SCL-90-R also has high reliability and validity for people with a learning disability, when used in an assisted completion format (Kellett *et al.*, 1999). Kellett *et al.* (2003) investigated the utility of the BSI in the assessment of psychological distress in people with a learning disability. Their study population was made up of three groups enabling investigation of the reliability of the BSI in clinical, community and forensic populations. They reported a satisfactory level of internal consistency reliability of the symptom dimensions across the three groups (alpha ranging from 0.63 - 0.78) and discriminant validity as the BSI showed a clear distinction between the clinical and community samples. However, they questioned the reliability of the psychoticism scale in people with a learning disability and advised that it should be interpreted with caution. They finally raise a

concern that the BSI may not retain the same structure and symptom domain specificity for people with a learning disability as it had for the general population. Consequently, Kellett *et al.* (2004) carried out an exploratory factor analysis of the BSI with people with a learning disability and found an 8-factor structure that had a high degree of overlap with the original factor solution. Their findings do not compromise the utility of the global dimensions of psychiatric distress because they are calculated on composites of all 53 items of the scale. Kellett *et al.* (2004) also found that of the three global dimensions, the PST index was the only one to discriminate between all three groups and proposed that it is the best summary index of psychopathology. Consequently, the PST index shall be used in the analysis.

The BSI was purchased for use in this study and the associated scoring materials were used. A copy of the scale for illustrative purposes and an example of the visual analogue scale are shown in appendix XI.

2.7. Statistical analyses employed in the current study

Firstly, Pearson's r correlations were calculated to examine relationships between the variables. Secondly, a t -test was carried out to investigate the difference between social comparisons with other service users and with people in the community. Finally, regression analyses were calculated to examine the potential moderating effect of social comparison on the relationship between perception of stigma and self-esteem. The approach described in Holmbeck (1997) and Baron and Kenny (1986) for testing moderated

effects was used. A moderator is a variable that ‘affects the relationship between two variables, so that the nature of the impact of the predictor on the criterion varies according to the level or value of the moderator’ (Holmbeck, 1997, p. 599). The results were analysed using SPSS version 14.

Chapter 3. Results

3.1. Examination of the data

The data were initially examined to check for normality of the distribution. Measures of skewness indicated that all of the data were normally distributed except for items from the social comparison measure. When participants were asked to compare themselves to service users, social comparison (*total score*) and the factors of *group belonging* and *social attractiveness* were found to be slightly skewed. When participants were asked to compare themselves to people in the community, the factor of *social attractiveness* was found to be slightly skewed. However, to transform all of the factors from the social comparison measure resulted in skewness in those factors that were originally normally distributed. Parametric tests are known to be robust under departures from normality (e.g. Yangihara & Yuan, 2005) and since parametric tests are generally more powerful and flexible than non-parametric, it was decided to continue to use parametric analyses. As a check, non-parametric tests were also carried out and are reported in appendix XII. Skewness and kurtosis summaries for all the variables can also be found in appendix XIII. The data were also examined for outliers and none was found.

Despite several correlations being performed on the data set, it was decided not to use a Bonferroni correction. This is because the method reduces the power and as the sample

size in this thesis is relatively small, a reduction in power would have had a large effect on the results.

3.2. Sample characteristics

Forty-three adults with a mild to moderate learning disability participated in the study. The participants consisted of 25 (58%) women and 18 (42%) men. The group had a mean age of 40 years (SD = 12.7; range 20 - 66 years). At the time of the present study, 34 (79%) lived in their family home, 6 (14%) lived in supported accommodation and 3 (7%) lived independently. Thirty-two (74%) participants attended the day centre full time, 6 (14%) also attended college and 5 (12%) worked part-time in some form of supported employment. The group had a mean British Picture Vocabulary Scale II (BPVS 2nd edition; Dunn *et al.*, 1997) raw score of 87.1 (SD = 26.9; range 36 - 168). In addition to their learning disability, 10 (23.8%) participants in the present study were noted as having a physical disability (e.g. cerebral palsy), a verbal disability (e.g. aphasia) or identifiable physical characteristics synonymous with a genetic disorder (e.g. Down's Syndrome). These demographics are summarised in table 3.1 below.

Table 3.1.

Mean, standard deviation and range for age and BPVS raw score, and distributions for gender, living arrangements and daily activities

Age		Mean = 40	SD = 12.7	Range = 20 - 66
BPVS raw score		Mean = 87.1	SD = 26.9	Range = 36 - 168
Gender	Male (%)	25 (58%)		
	Female (%)	18 (42%)		
Living arrangements	Family home (%)	34 (79%)		
	Supported accommodation (%)	6 (14%)		
	Independent living (%)	3 (7%)		
Daily activities	Full time day centre (%)	32 (74%)		
	Part time college (%)	6 (14%)		
	Part time supported employment (%)	5 (12%)		

No significant relationships were found between age or the BPVS raw score and stigma, self-esteem or psychopathology. On the social comparison measure, significant negative relationships were found between the BPVS raw score and the social comparison factor *achievement and rank* for both comparisons with service users ($r(41) = -.31, p < 0.05$) and the community ($r(41) = -.39, p < 0.05$). This finding indicates that as the BPVS score increased, i.e. as receptive vocabulary improved, then the participants' rating of how capable they saw themselves compared to others decreased. Table 3.2. shows the means and standard deviations for each of the measures and the results of the correlations between age and BPVS score and each of the measures.

Table 3.2.

Mean and standard deviation for each measure, and the Pearson correlation results for age and BPVS score with each of the total and subscale scores of the measures

		Mean (SD)	Correlations	
			Age	BPVS score
Stigma	Total score	41.93 (5.36)	0.12	0.06
	Total score	23.43 (4.05)	-0.21	-0.19
Self-esteem	Positive	16.02 (3.02)	-0.15	-0.23
	Negative	7.40 (2.00)	-0.20	-0.03
BSI	Positive symptom total	55.71 (9.52)	0.05	-0.16
	Total score	23.43 (4.69)	-0.20	-0.15
Social comparison with service users	Group belonging	3.83 (1.31)	-0.30	-0.16
	Social attractiveness	12.19 (2.74)	-0.16	0.01
	Achievement and rank	7.81 (1.63)	-0.06	-0.31*
	Total score	22.71 (5.56)	0.02	-0.22
Social comparison with the community	Group belonging	3.67 (1.49)	0.15	-0.07
	Social attractiveness	11.55 (3.23)	-0.01	-0.11
	Achievement and rank	7.81 (1.74)	-0.05	-0.39**

* Correlation is significant at the 0.05 level (two-tailed)

** Correlation is significant at the 0.01 level (two-tailed)

A high score on the stigma scale indicates that participants are reporting less perception of stigma. High scores on the self-esteem measure and the social comparison measure indicate that participants are reporting higher self-esteem and more positive social comparisons. A high score on the BSI indicates that participants are reporting a greater number of symptoms of psychological distress. No significant differences were found

between gender and stigma, self-esteem, psychopathology or social comparison. The results of these comparisons are detailed in Table 3.3..

Table 3.3.

Means and standard deviations for total and subscale scores for the measures by gender, and independent sample t-test results for each measure by gender

		Gender		<u>t-test result</u>	
		Mean (standard deviation)		t	p
		Males (n=18)	Females (n=25)		
Stigma	Total score	41.72 (5.05)	41.96 (5.59)	0.143	0.887
	Total score	23.67 (4.42)	23.48 (3.93)	-0.146	0.885
Self-esteem	Positive	16.67 (3.05)	15.72 (3.05)	-1.005	0.321
	Negative	7.00 (2.50)	7.76 (1.51)	1.242	0.221
BSI	Positive symptom total	56.28 (9.04)	55.60 (9.95)	-0.229	0.820
	Total score	24.61 (3.81)	22.60 (5.06)	-1.420	0.163
Social comparison with service users	Group belonging	4.00 (1.14)	3.64 (1.44)	-0.880	0.384
	Social attractiveness	12.83 (2.18)	11.76 (3.00)	-1.290	0.204
	Rank and achievement	8.06 (1.73)	7.72 (1.60)	-0.657	0.515
Social comparison with the community	Total score	23.89 (4.96)	21.76 (5.81)	-1.258	0.215
	Group belonging	3.67 (1.37)	3.60 (1.61)	-0.142	0.887
	Social attractiveness	12.17 (2.60)	11.04 (3.55)	-1.142	0.260
	Rank and achievement	8.28 (1.60)	7.52 (1.78)	-1.434	0.159

3.3. Hypotheses one – three: relationships between variables

Hypothesis 1. There will be a significant association between perception of stigma and self-esteem and psychopathology, i.e. the higher the perceived stigma, the lower the reported self-esteem and the higher the reported psychopathology

The relationship between perception of stigma with self-esteem and psychopathology was investigated using Pearson product-moment correlation coefficient and the results are shown in Table 3.4. There was a strong positive correlation between perception of stigma and reported self-esteem (*total score*), which supports hypothesis one that higher perception of stigma is related to lower reported self-esteem. There was no significant relationship between the *positive* self-esteem factor and the total stigma score. However, there was a strong positive relationship between the *negative* self-esteem factor and perception of stigma. There was also a strong negative correlation between the *positive symptom total* from the BSI and perception of stigma. These results show that the more people with a learning disability report feeling stigmatised the more likely they are to have a negative view of themselves and report symptoms of psychopathology.

Table 3.4.

Correlations of perception of stigma with total and subscale scores for self-esteem and psychopathology

	Self-esteem: total score	Self-esteem: positive	Self-esteem: negative	BSI: positive symptom total
Perception of stigma	0.41*	0.26	0.45*	-0.61**

* Correlation is significant at the 0.01 level (two-tailed)

** Correlation is significant at the 0.001 level (two-tailed)

Hypothesis 2. There will be a significant association between perception of stigma and social comparison with both the service users and people in the community, i.e. the higher the perceived stigma, the more negative social comparisons with both groups.

Table 3.5.

Correlations of perception of stigma with total and subscale scores for social comparison with service users and the community

		Perception of stigma
Total score		0.29
Social comparison with service users	Group belonging	0.10
	Social attractiveness	0.28
	Achievement and rank	0.30
Total score		0.34*
Social comparison with the community	Group belonging	0.07
	Social attractiveness	0.35*
	Achievement and rank	0.34*

* Correlation is significant at the 0.05 level (two-tailed)

The relationship between perception of stigma and social comparison with service users and the community was investigated using Pearson product-moment correlation coefficient and the results are shown in Table 3.5. Looking at social comparison with service users first, no significant relationships were found between perception of stigma and social comparison (*total score*) or any of the social comparison factors. Correlational analysis of the social comparison scores with people in the community revealed a positive association between perception of stigma and social comparison (*total score*). There were also positive

correlations between reported perception of stigma and the social comparison factors *social attractiveness* and *achievement and rank*.

The results show that the extent to which people with a learning disability report feeling stigmatised has no relationship with how they compare themselves to other service users. However, the extent to which they report feeling stigmatised *is* related to how they see themselves compared to people in the community. In particular, the more they report perceiving stigma, the less socially attractive and less capable they rate themselves compared to people in the community. The results partially support hypothesis two. It is worth noting that closer inspection of the correlation table reveals that the relationships between comparisons with service users and stigma show a tendency towards a similar pattern to that found for comparisons with people in the community. These correlations were significant in a one-tailed analysis.

Hypothesis 3. There will be a significant association between social comparison made with both service users and people in the community and self-esteem and psychopathology, i.e. the more negative social comparisons with both groups, the lower the reported self-esteem and the higher the reported psychopathology.

The relationship between self-esteem and psychopathology and social comparison with service users and the community was tested using Pearson product-moment correlation coefficient and the results are shown in Table 3.6.

Table 3.6

Correlations of total and subscale scores for self-esteem and psychopathology with total and subscale scores for social comparison with service users and with the community

		<u>Self-esteem</u>			<u>BSI</u>
		Total score	Positive	Negative	Positive symptom total
Social comparison with service users	Total score	0.43**	0.37*	0.31*	-0.41**
	Group belonging	0.34*	0.32*	0.22	-0.20
	Social attractiveness	0.27	0.18	0.27	-0.17
	Achievement and rank	0.40**	0.42**	0.19	-0.51**
Social comparison with the community	Total score	0.41**	0.43**	0.18	-0.29
	Group belonging	0.10	0.15	-0.02	-0.13
	Social attractiveness	0.34*	0.34*	0.17	-0.23
	Achievement and rank	0.50**	0.51**	0.24	-0.32*

** Correlation is significant at the 0.01 level (two-tailed)

* Correlation is significant at the 0.05 level (two-tailed)

Looking at social comparison with service users first, there was a strong positive correlation between social comparison (*total score*) and self-esteem (*total score*). There were also positive correlations between social comparison (*total score*) and the *positive* and the *negative* self-esteem factor. There was a strong negative correlation between social comparison (*total score*) and the *positive symptom total* from the BSI. The results show that if people with a learning disability compare themselves more positively to other service users then they report higher self-esteem, specifically more positive views and fewer negative views of self, and fewer symptoms of psychological distress.

Further analysis of social comparisons with service users found that there were positive correlations between the social comparison factor *group belonging* and self-esteem (*total score*) and the *positive* self-esteem factor. Positive correlations were also found between the social comparison factor *achievement and rank* and self-esteem (*total score*) and the *positive* self-esteem factor. These patterns suggest that people with a learning disability who feel they belong to their peer group and consider themselves more capable compared to their peer group, report more positive views of themselves. There was a negative association between the social comparison factor *achievement and rank* and the *positive symptom total* from the BSI, showing that those who felt more capable compared to other service users reported fewer symptoms of psychological distress.

The correlational analysis between self-esteem and social comparison with the community revealed a strong positive correlation between social comparison (*total score*) and self-esteem (*total score*) and the *positive* self-esteem factor. There were no significant relationships between social comparison (*total score*) and the *positive symptom total* from the BSI or the *negative* self-esteem factor. These results show that how people with a learning disability rate themselves compared to people in the community, influences whether they see themselves positively, but not whether they see themselves negatively or report symptoms of psychological distress.

There were also positive correlations between the social comparison factor *social attractiveness* and self-esteem (*total score*) and the *positive* self-esteem factor. Strong positive correlations were also found between the social comparison factor *achievement*

and rank and self-esteem (*total score*) and the *positive* self-esteem factor. As above, these results show that how socially attractive and capable people with a learning disability rate themselves compared to people in the community, influences whether they have a positive view of self. There was a significant negative relationship between the social comparison factors *achievement and rank* and the *positive symptom total* from the BSI, suggesting that those who feel they are more capable compared to people in the community report fewer symptoms of psychological distress.

Overall, the results suggest that for people with a learning disability, comparing themselves to others influences how positively they see themselves but does not have much effect on whether they have negative views of themselves. For comparisons with service users, how socially attractive people with a learning disability saw themselves did not affect their self-esteem or reports of psychological distress. For comparisons with the community, how capable they saw themselves did not affect their self-esteem or reports of psychological distress.

3.4. Hypothesis four: differences in social comparison

Hypothesis 4. There will be a significant difference in the social comparisons made with service users and with people in the community, i.e. social comparisons made with service users will be more positive than comparisons made with people in the community.

Paired-samples t-tests were conducted on total and subscale scores to determine if there was a difference in the social comparisons made with service users and people in the community; the results are shown in Table 3.7. No statistically significant differences were found in the total scores or between the factor scores. The results failed to show any differences between the social comparisons made with service users versus those made with the community and consequently, hypothesis four is not supported.

Table 3.7

Paired sample t-test between total and subscale scores for social comparison with service users and with the community (two-tailed)

	Comparison target		t-test result	
	<u>Mean (standard deviation)</u>		t (42)	p
	Service users (n=43)	Community (n=43)		
Total score	23.44 (4.64)	22.65 (5.51)	1.12	0.27
Group belonging	3.79 (1.32)	3.63 (1.50)	0.59	0.56
Social attractiveness	12.21 (2.71)	11.51 (3.20)	1.63	0.14
Achievement and rank	7.86 (1.64)	7.84 (1.73)	0.10	0.93

3.5. Hypothesis five: moderating effect of social comparison

Hypothesis 5. Social comparison will have a moderating effect on the relationship between perceived stigma and self-esteem.

The procedure for testing moderating relationships described by Holmbeck (1997) and Baron and Kenny (1986) was used. This procedure tests the existence of a moderating relationship via a multiple regression equation in which the following variables are

regressed onto the target variable; in the present study this was self-esteem. First, the predictor variable (perception of stigma) is entered and then the variable hypothesised to be a moderator is entered (social comparison). Finally, the product of the two variables is entered and is called the interaction term (perception of stigma x social comparison). According to Baron and Kenny, if the final step is significant once the previous two variables have been controlled for, this is support for the role of the variable in moderating between the predictor (perception of stigma) and the target variable (self-esteem).

The analysis was carried out twice, firstly using social comparison with service users (*total score*) as the moderating variable and secondly, using social comparison with the community (*total score*). The results of the regression analysis using social comparison with service users (*total score*) are shown in Table 3.8. Model 1 was found to be significant ($F_{(2, 40)} = 7.528, p < 0.01$) and it accounted for 27% of the variance ($R^2 = 0.273$). Perception of stigma ($\beta = 0.31, t = 2.21, p < 0.05$) and social comparison with service users ($\beta = 0.34, t = 2.42, p < 0.05$) were shown to be making a significantly unique contribution to the equation. The Beta value indicates that social comparison with service users was a slightly better predictor than perception of stigma. The unstandardised coefficient B indicates that as the perception of stigma increases by one unit (representing lower awareness of stigma) and as social comparison increases by one unit (representing more positive comparisons) then self-esteem will increase by 0.24 and 0.30 respectively. The part correlation coefficient for stigma was 0.298 and for social comparison was 0.326; the square of the part coefficient indicates that stigma and social uniquely explain 9% and 11%

respectively of the total variance of self-esteem. However, in model 2, the interaction term was not significant ($\beta = 2.80, t = 1.55, p = 0.13$) and the addition of the interaction term failed significantly to improve the model ($F_{\text{change}}(1, 39) = 2.41, p = 0.13$). The results did not show a moderating effect of social comparison with service users on the relationship between stigma and self-esteem, consequently, this does not support hypothesis five. However, due to a relatively small sample size, the study was unlikely to have sufficient power to detect moderator effects.

Table 3.8.

Moderator analysis for social comparison with service users.

Predictors	B	β	R^2	Adjusted R^2	R^2 change	F change
Model 1						
Stigma	0.24	0.311				
Social comparison	0.30	0.340	0.273	0.237		7.528*
Model 2						
Stigma x social comparison	0.04	2.798	0.316	0.263	0.042	2.413

* $p < .005$

Secondly, the results of the regression analysis using social comparison with the community (*total score*) are shown in Table 3.9. Model 1 was found to be significant ($F(2, 40) = 6.712, p < .005$) and it accounted for 25% ($R^2 = 0.251$) of the variance. Perception of stigma ($\beta = 0.31, t = 2.11, p < 0.05$) and social comparison with service users ($\beta = 0.31, t = 2.12, p < 0.05$) were shown to be making a significantly unique contribution to the equation. The unstandardised coefficient B indicates that as the perception of stigma increases by one unit (representing lower awareness of stigma) and as social comparison increases by one unit (representing more positive comparisons) then self-esteem will increase by 0.24 and

0.23 respectively. The part correlation coefficient for stigma was 0.288 and for social comparison was 0.290; the square of the part coefficient indicates that stigma and social uniquely explain 9% and 8% respectively of the total variance of self-esteem. However, in model 2, the interaction term was again non-significant ($\beta = 1.55, t = 1.14, p = 0.25$) and the addition of the interaction term failed significantly to improve the model ($F_{\text{change}}(1, 39) = 1.38, p = 0.25$). The results did not reveal a moderating effect of social comparison with the community on the relationship between stigma and self-esteem, consequently, this does not support hypothesis five. However, due to a relatively small sample size, the study was unlikely to have sufficient power to detect moderator effects.

Table 3.9.

Moderator analysis for social comparison with the community.

Predictors	B	β	R^2	Adjusted R^2	R^2 change	F change
Model 1						
Stigma	0.24	0.306				
Social comparison	0.23	0.307	0.251	0.214		6.712*
Model 2						
Stigma x social comparison	0.02	1.551	0.277	0.221	0.026	1.379

* $p < .005$

Certain assumptions need to be met when performing regression analysis. Firstly, the predictor variables should show a relationship with the dependent variable, preferably above 0.3 (Pallant, 2005). The variables in this analysis showed relationships between 0.41 and 0.53. However, there should not be strong correlations between the predictor variables, known as multicollinearity as then the variables appear to be measuring the same thing. Tabachnick and Fidell (2001) suggest if two variables have a correlation of $r = 0.7$ or more

in the same analysis then one of them should be omitted. None of the variable relationships for this study exceeded 0.7. To assess for problems with collinearity, SPSS also produces a tolerance value that is a measure of the correlation between the predictor variables. Pallant (2005) suggests excluding any variable that has a tolerance level of less than 0.1. The tolerance values reported for model 1 for both comparisons with service users and the community were greater than 0.1 (see appendix XIV) and therefore there are no concerns about multicollinearity. However, the addition of both of the interaction terms in model 2 resulted in all of the variables violating the tolerance level indicating that model 2 was not a robust model.

It is also important to check for the assumptions of normality and linearity and to check for outliers. Pallant (2005) suggests that these can be checked by using the Normal Probability Plot and the residuals scatterplot presented in the SPSS output (see appendix XV). The Normal Probability Plot shows points lying on a reasonably straight diagonal line from bottom left to top right suggesting no major deviations from normality. The scatterplot shows that the residuals are roughly rectangularly distributed with most scores concentrated along the 0 point; thus, the scatterplot did not show any systemic patterns to the residuals. Finally, the scatterplot also highlights any outliers. Tabachnick and Fidell (2001) define outliers as cases that have a standardised residual of more than 3.3 or less than -3.3. For this sample, the scatterplots show that all the residuals appear to fall within 2.5 to -2.5 indicating that there are no outliers.

Chapter 4. Discussion

The discussion will begin with a brief outline of the main findings before considering each hypothesis in more detail. Section 4.2 will look at clinical and ethical implications of the study and section 4.3 will review the strengths and limitations of the current study. The discussion will conclude with a summary of possible directions for future research before drawing the thesis to a close.

4.1. *Summary of main findings*

This study provides further evidence that perception of stigma and social comparisons are strongly involved in the emotional lives of people with a learning disability and influence their psychological wellbeing. Perception of stigma was shown to be related to psychological distress and social comparison, and social comparison was shown to be related to psychological distress. Perception of stigma and social comparison were also found to be predictive of self-esteem, although social comparison was not found to have a moderating effect on the relationship between perception of stigma and self-esteem. The differences between social comparisons with service users and people in the community were explored in relation to stigma and psychological distress and a varied pattern of significant results was revealed. However, no difference was found when looking directly at social comparisons between service users and people in the community. The hypotheses will now be explored individually and in more detail.

4.1.1. Results of hypotheses one – five

Hypothesis 1. There will be a significant association between perception of stigma and self-esteem and psychopathology, i.e. the higher the perceived stigma, the lower the reported self-esteem and the higher the reported psychopathology.

The findings supported hypothesis one and showed that greater perception of stigma was strongly related to lower reported self-esteem. These results are in support of previous the findings reported by Abraham *et al.* (2002) and Szivos-Bach (1993). However, in the present study only the *negative* self-esteem factor was found to be related to stigma. This finding suggests that it is not whether the participants felt good about themselves that mattered for the perception of stigma, but that they are more likely to perceive stigma if they felt bad about themselves and this could be explained by psychological models. Cognitive theory proposes that if individuals feel bad about themselves they can be hypersensitive to negative feedback from others and may interpret ambiguous interactions negatively (Beck, 1967). Furthermore, individuals with a negative view of themselves who report feeling worthless may be more likely to recall negative stigmatising experiences (Hertel, 2004). This bias in interpretation and recall would mostly likely exacerbate a negative view of self, causing further implications for psychological wellbeing. Consequently, those who feel negatively about themselves are more susceptible to the effects of stigmatisation and vice versa.

The positive symptom total (PST) dimension on the Brief Symptom Inventory (BSI) was related to stigma, indicating that those with a higher perception of stigma reported a greater number of symptoms of psychopathology. This finding suggests that perceiving stigma could lead to symptoms of paranoia, interpersonal sensitivity or anxiety, all of which are symptom dimensions of the BSI. Alternatively, increased symptoms of paranoia, interpersonal sensitivity or anxiety, for example, could make individuals more likely to report negative interactions with others. Further exploration of the symptom dimensions could provide information on the specific symptoms of psychological distress that may be related to awareness of stigmatisation.

These results have implications for people with a learning disability living in the community because they show that experiences of stigmatisation are strongly linked to levels of self-esteem and symptoms of psychological distress. Considering that this study interviewed a community sample of people with a learning disability without mental health difficulties, it suggests that stigmatisation may make them vulnerable to developing problems. However, a correlational relationship from a cross-sectional study does not allow causal relationships to be established. It is likely that there are other factors affecting the self-esteem of those who report more awareness of stigma, rather than stigmatisation itself causing these effects. Future research could examine the differences between those with higher and lower awareness of stigma. For example, it has been shown that social supports buffer against anxiety and depression (Reiss & Benson, 1985), early social experiences impact on how individuals think and act (Zigler *et al.*, 2002), and that those who have more experiences of failure may be more susceptible to psychological difficulties

(Jahoda *et al.*, 2006). The various factors that are likely to influence the emotional lives of people with a learning disability will be discussed in more detail in section 4.2 below.

Hypothesis 2. There will be a significant association between perception of stigma and social comparison with both service users and people in the community, i.e. the higher the perceived stigma, the more negative the social comparisons with both groups.

For people with a learning disability, perception of stigma was not shown to be related to social comparisons with other service users. However, perception of stigma was related to comparisons with the community and, in particular, how socially attractive and capable people with a learning disability saw themselves in comparison to people in the community. Whether participants saw themselves as belonging to the same group or not as people in the community was not related to their perception of stigma. The findings suggest that people with a learning disability place value on social attractiveness and ability when comparing themselves to people in the community. Those who report more awareness of stigmatisation (most likely by people in the general population), rate themselves less socially attractive and less capable, indicating that those attributes are the most sensitive to the effects of stigmatisation. The extent to which people with a learning disability feel capable compared to people in the community is likely to be sensitive to stigma because there are tangible differences in ability and achievements that people with a learning disability may not be able to ignore. Social attractiveness may be sensitive to the effects of stigma because when individuals feel that others are behaving negatively towards

them, they may conclude that they are not considered likeable by others and therefore rate themselves as less socially attractive. Parallels can be drawn here with the beliefs and appraisals arising in social anxiety, as described in Clark and Wells' (1995) model of social phobia and anxiety. Many people with social anxiety are preoccupied with the expectation that they will be negatively evaluated by others and thus continually monitor their self-representation in social situations. If people with a learning disability are aware of stigmatising treatment then this may serve as confirmatory evidence that they are being negatively evaluated by others and consequently they cannot rate themselves as socially attractive. As the discussion of hypothesis three will show, feeling less socially attractive compared to people in the community adversely impacts on self-esteem.

It is not surprising that the relationship between stigma and social comparison is stronger for comparisons with the community since it is members of society who carry out the stigmatisation (Goffman, 1963). Although the relationships between stigma and social comparisons with service users were not found to be significant for this sample, the pattern of correlations was similar to those for comparisons with the community. The lack of significance may be because the study is underpowered and if sufficiently powered then the relationships between stigma and social comparisons with service users may be significant. If that were the case then it implies that how socially attractive and capable people with a learning disability see themselves compared to others in general is related to how much stigma they perceive. However, it appears that people with a learning disability do not consider being a member of a group as related to the stigma they perceive. The study would need to be replicated to test whether this is a real effect.

The pattern of results reported here is slightly different to that reported by Dagnan and Waring (2004) who used the same measures and a very similar sample. They found that perception of stigma was related to total social comparison and to how socially attractive the participants saw themselves. As found in this thesis, Dagnan and Waring found no relationship between perception of stigma and identifying with the other group but they also found no relationship between perception of stigma and how capable the individuals perceived themselves. There may be a number of reasons for their different findings. For example, they asked individuals to compare themselves to others without specifying the target comparison group, which means they could not control to whom the individuals actually compared themselves. The clarification of the comparison group in the current study may have resulted in the detection of a relationship between perception of stigma and how capable the individuals perceived themselves. Furthermore, Dagnan and Waring report that the internal reliability of this measure on their sample is low, whereas in the present study the measure achieved acceptable internal reliability. Stronger internal reliability may have produced the significant relationship between perception of stigma and how capable the individuals perceived themselves. Nevertheless, it appears that the trait most sensitive to the negative effects of stigmatisation is how socially attractive individuals with a learning disability see themselves.

Hypothesis 3. There will be a significant association between social comparison made with both service users and people in the community and self-esteem and psychopathology, i.e. the more negative social comparisons with both groups, the lower the reported self-esteem and the higher the reported psychopathology.

For both social comparisons with service users and with the community, the results showed that the more negative the social comparisons, the lower the reported self-esteem. This partially supports hypothesis three. However, the rest of the results differ somewhat between comparisons with service users and comparisons with the community.

The results showed that when participants reported feeling part of the same group as other service users, and more able compared to other service users, they reported a more positive view of their self. However, how socially attractive they saw themselves compared to other service users was not related to their level of self-esteem. These findings imply that in order for people with a learning disability to feel good about themselves, they need to see themselves not only as part of the group of people with a learning disability but as located at the more able end of that group. This finding contradicts the evidence presented by some studies in section 1.2 of the introduction (Finlay & Lyons, 2000; Jahoda *et al.*, 1988) which suggested that people with a learning disability attempt to distance themselves from their peers. Rather, the present study suggests that people with a learning disability may attempt to detach themselves from the negative connotations of being less able, which, of course, is the definition of their social category. Rapley (2004) also made this point, arguing that

people with a learning disability do not necessarily reject the label of learning disability but rather deny the moral connotations that are associated with it.

When participants compared themselves to the community, the results showed that if they rated themselves as more socially attractive and more capable compared to people in the community then they reported higher levels of self-esteem and in particular a more positive view of self. However, the extent to which the participants saw themselves belonging to the same group as people in the community was not related to their self-esteem. These results indicate that for people with a learning disability to feel good about themselves, they need to see themselves as more socially attractive and more able than people in the community but they do not need to express an affinity or sense of belonging towards the community. The failure to identify with the community may be because people with a learning disability are aware that they are not in the same social category as people in the community but that it does not trouble them.

Having a more negative view of self was only related to less positive social comparisons with service users overall, and not to any of the social comparisons made with people in the community. This result suggests that generally for people with a learning disability, the comparisons they make with others do not impact on how negatively they feel about themselves. The relationships between social comparisons and psychopathology showed that the less positively participants rated themselves overall compared to other service users the more they reported symptoms of psychological distress. Furthermore, the less

participants rated themselves as capable compared to other service users and people in the community, the more they reported symptoms of psychological distress.

The introduction summarised arguments proposed by Miller and Kaiser (2001) that those higher in self-esteem would be more likely to make upward (less positive) social comparisons in order to increase their motivation to develop and achieve more. If this were the case in people with a learning disability, then it might have been expected that the results would show a negative correlation between self-esteem and social comparisons with people in the community. As participants report higher self-esteem, they make more negative, and therefore upward, comparisons with the community by placing the community in a more favourable position and, theoretically, motivating themselves to do better. However, such patterns were not detected. It could be concluded that people with a learning disability avoid making upward comparisons with people in the community because it could be very detrimental to their self-concept (Swallow & Kuiper, 1988). Alternatively, people with a learning disability may not make upward comparisons because it would not be realistic to expect to improve their level of functioning to the level of people without a learning disability. In some aspects of their lives it simply would not be possible. However, when comparing themselves to their peers, the participants with greater self-esteem made a downward comparison based on ability because they rated themselves as more capable. Downward comparisons made towards others overall appeared to be boosting self-esteem. Indeed, as discussed below in hypothesis four, most people with a learning disability make downward or lateral social comparisons and therefore these types may be the most adaptive for this social group.

Hypothesis 4. There will be a significant difference in the social comparisons made with service users and with people in the community, i.e. social comparisons made with service users will be more positive than comparisons made with people in the community.

Hypothesis four was not supported because no significant differences were found between the social comparisons made between service users and the community. Several studies had shown that people with a learning disability tended to make downward comparisons towards their peers (Cooney *et al.*, 2006; Craig *et al.*, 2002; Finlay & Lyons, 2000; Gibbons, 1985) and lateral comparisons with the general population (Craig *et al.*, 2002; Gibbons, 1985); however, a difference was not identified in this sample.

In the current study, the mean scores for the social comparison total scores and factors were at the more positive end of the scale for both service users and the community, and were very similar. First, this could be due to a ceiling effect on the social comparison measure meaning it was not sensitive enough to detect any differences. Alternatively, it could indicate that these participants were more positive about themselves overall, regardless of to whom they were comparing themselves. This latter assumption could indicate that, in this study, people with a learning disability made downward comparisons towards both their peers and people in the community. A final possible explanation for the lack of a difference is that, on the whole, participants did not put emphasis on to whom they compared themselves and merely compared themselves to 'others', thus repeating the same ratings. However, differences in the relationships between social comparisons made with

other service users and with people in the community, and stigma and self-esteem, mean that the latter explanation does not appear correct. Other issues relating to problems with the social comparison measure are discussed in more detail in section 4.3 below.

Hypothesis 5. Social comparison will have a moderating effect on the relationship between perceived stigma and self-esteem.

The results did not show a moderating effect of social comparison with either service users or the community on the relationship between perceived stigma and self-esteem. Consequently, hypothesis five was not supported. It is surprising that social comparison does not appear to have a moderating effect given that, theoretically, it seemed to be a plausible model. Nevertheless, the result could indicate that social comparison and stigma work in very different ways when they influence self-esteem. Both variables were shown to be predictive of self-esteem, and the part correlation coefficient indicates that stigma uniquely explains 9% of the total variance of self-esteem, and social comparison with service users and with people in the community explains 11% and 8% respectively. It is possible that stigma and social comparison are predicting different parts of the variance in self-esteem, which is why social comparison was not shown to moderate the influence of stigma.

On the other hand, it is possible that social comparison does have a moderating effect that was not detected in this sample. There could be a number of reasons why this may be. Firstly, it could have been because the social comparison measure was not sensitive enough

to reveal differences in social comparison as related to perceived stigma and self-esteem. The lack of sensitivity could be because of the high number of positive ratings as noted in hypothesis four. Secondly, the sample size in this study was too small for the analysis required, meaning there was not enough power in the model. In addition, Holmbeck (1997) remarks that significant moderator effects may be difficult to detect statistically, particularly in samples that are relatively homogeneous, because all the high and low values of the variables may not be represented. Indeed, theorised moderator effects are notoriously difficult to find (McClelland & Judd, 1993), despite often compelling grounds for expecting such effects and the knowledge of how to detect the effects statistically. A further issue is raised by Jaccard and Wan (1995); when the product term is added to the multiple regression equation the reliability decreases, which can lead to biases in the regression coefficient. These are issues with the statistical analysis that cannot be overcome in the present study. However, they suggest that failure to find moderator effects does not necessarily mean that social comparison does not play a moderating role and that further research is therefore warranted. Nevertheless, the regression model in the current study appeared to become quite unstable once the moderator equation was added, which also suggests that it does not act as a moderating variable.

Although the evidence was not found to support a moderating effect of social comparison, the regression analysis did reveal that both social comparison and perception of stigma are predictive of self-esteem. In this sample, 27% of the variance in self-esteem was predicted by perception of stigma and social comparison with service users, and 25% of the variance in self-esteem was predicted by perception of stigma and social comparison with the

community. Despite these being significant models, they only predict a one quarter of the proportion of the variance. It is likely therefore that there are many other factors that would predict an individual's level of self-esteem and it is therefore not surprising that the amount of variance predicted is relatively low. Other potential factors that may influence the self-esteem of people with a learning disability are discussed below. Nonetheless, because social comparison and perception of stigma do predict around a quarter of the variance and because independently they both contribute significantly to the model, this provides further evidence of the importance of these variables in the lives of people with a learning disability.

4.1.2. Other findings

Preliminary analysis revealed that the British Picture Vocabulary Scale (BPVS) score correlated significantly and negatively with the social comparison factor *rank and achievement* for both comparisons with other services users and with the community. This finding indicates that as BPVS score increased, individuals rated themselves as less capable compared to others. The BPVS is a measure of receptive language and it has been shown to be related to IQ (Dunn *et al.*, 1997). One interpretation of this result is that the participants who were more able were more realistic about their abilities and did not feel that they could say they were *more* capable than others. If that were the case, it might be expected that they would rate themselves differently for service users versus people in the community; however, this was not shown by the results. The relationship between

receptive language or IQ and how able participants see themselves deserves further investigation.

4.2. Clinical and ethical implications

This study provides more evidence that perception of stigma and social comparison play an important role in the psychological wellbeing of people with a learning disability. The quality of social interactions that people with a learning disability experience and the way they understand and react to these interactions clearly influences their self-esteem. Nonetheless, the majority of the sample reported relatively high self-esteem, which confirms the possibility that people with a learning disability can maintain high self-esteem whilst living in the community and whilst facing frequent experiences of stigma (Jahoda *et al.*, 1988). However, for those lower in self-esteem, there are concerns both about the impact this may have on their quality of life and because low self-esteem can render individuals vulnerable to depression (Brown *et al.*, 1986). Understanding how perceiving stigma or making negative social comparisons may make individuals vulnerable to lower self-esteem can point towards possible interventions. It is important to consider what strategies could be implemented in the community, since this study shows that individuals do not need to be experiencing significant psychological difficulties or any at all, to be aware of stigma. The findings from this study have highlighted that perception of stigma and social comparison are significantly predictive of self-esteem, which adds weight to the importance that these factors play in the lives of people with a learning disability. In support of other research in this area, this study has shown that social processes have a

considerable impact on the psychological experience and development of self-concept in people with a learning disability; any interventions, therefore, need to be at both a social and individual level.

4.2.1. Social comparison and schema

It was proposed earlier that people with a learning disability may interpret stigmatising behaviour and attitudes as negative social evaluations of themselves, and as a result rate themselves less socially attractive compared to others, which in turn lowers their self-esteem. An alternative understanding of how social interactions may influence cognitive processes comes from the work of Beck *et al.* (1983), which looked at concepts of sociotropy and autonomy. Individuals with a sociotropic schema define themselves negatively if they perceive themselves to be failing in interpersonal relationships. On the other hand, those with an autonomous schema define themselves negatively if they perceive themselves to fail on achievement-related goals. Giordano *et al.* (2000) investigated these schemata in relation to social comparison and concluded that individuals high in sociotropy are more likely to make social comparisons related to the interpersonal domain and will experience negative affect if such comparisons in this area are negative. In addition, individuals high in autonomy are more likely to make social comparisons on achievement-related domains and will experience negative affect as a result of negative social comparison on those domains. Dagnan and Waring (2004) considered the role that these schemata might play in the social and emotional lives of people with a learning disability. They argued that the experience of being identified as an individual with a learning

disability leads to exposure to negative evaluations and stigmatisation. This exposure may heighten their sensitivity to social processes and result in the development of a sociotropic rather than autonomous schema. It seems plausible that people with a learning disability would develop a sociotropic schema because they are unlikely to have had many experiences in which they felt high in autonomy. A schema model for understanding the psychological processes of people with a learning disability has not been discussed in the literature on learning disability (Dagnan & Waring, 2004). However, such a model could be a useful framework for understanding their difficulties and provide clear direction for possible interventions. Social comparison is an influential process in people with a learning disability and further exploration of its development in relation to personality styles in people with a learning disability would be highly informative.

4.2.2. Other significant factors

Self-concept is, of course, multifaceted, and there are a number of significant factors that could influence and determine the self-concept of people with a learning disability. The regression model revealed that perception of stigma and social comparison can predict about a quarter of the variance in self-esteem, meaning that there are many other aspects of an individual's character that will impact on their psychological wellbeing. More studies investigating other protective factors that are involved in the perception of stigma and the process of social comparison would add depth to our understanding of the emotional lives of people with a learning disability. One factor often cited is that of 'psychological complexity' (Linville, 1987). This model proposes that when individuals hold a wide range

of roles and self-aspects that they value, then this ‘complexity of self’ will buffer against the effects of negative social comparison. Some of the arguments presented in the introduction to this study stated that people with a learning disability have a limited range of roles that are available to them and that it may therefore be difficult for individuals to develop psychological complexity. It may also explain why some people with a learning disability may appear to be more susceptible to the effects of stigmatisation or negative comparisons. This theory points towards interventions that increase the roles and activities of people with a learning disability, thereby adding to their resilience and improving their ability to withstand negative experiences.

4.2.3. The role of service providers and carers

For people with a learning disability who live in the community, adult resource centres and supported employment services may provide the ideal opportunity of finding ways to develop different roles and a range of social experiences. Studies have investigated the role service providers could have in helping people with a learning disability overcome the negative aspects of their lives, and how participation in the community may also effect this (e.g. Abraham *et al.*, 2002; Craig *et al.*, 2002; Todd, 2000). While the theory of psychological complexity suggests that varied roles are highly beneficial, additional contact with the general population could be potentially damaging, especially to those already vulnerable or aware of stigmatisation. Although some participants in the present study did have different roles, such as attending college or having a part-time job, the numbers were neither equal nor sufficient to allow further investigation of the possible differences. Some

researchers have explored the experiences of children and young people with a learning disability and the differences between attending segregated versus mainstream schools (Cooney *et al.*, 2006; Szivos-Bach, 1993; Todd, 2000). Szivos-Bach (1993) reported that mainstreaming did not make the students feel more stigmatised or have lower self-esteem. However, Cooney *et al.* (2006) found that compared to segregated pupils, the mainstream pupils reported significant additional stigma at school. Further research looking at the relationship between community participation and stigma, social comparison and psychological wellbeing in adults with a learning disability would be very valuable.

A further role for service providers and carers of people with a learning disability could be to discuss issues of stigma or identity conflict with people with a learning disability. Todd (2000) argued that staff play a key role in buffering the experience of stigma from people with a learning disability. While it is recognised as important for service providers and carers to engage people with a learning disability in discussions about the underlying issues of stigma, it has been shown to be both difficult and uncomfortable (Craig *et al.*, 2002). Jahoda *et al.* (1988) recommend that service providers and carers should be aware that people with a learning disability can be sensitive to negative attitudes and that they should attempt to enhance the individual's sense of personal worth. It appears, therefore, that it may be beneficial for service providers to include a programme that would examine these issues and provide a safe forum for people with a learning disability to discuss their views on their identity and experiences in the community. The role of social supports and significant others evidently has a powerful influence on the lives of people with a learning disability, so future research that examined this influence in relation to stigma would be

highly informative. In addition, it would be interesting to investigate the views of parents and carers with regard to the stigma experienced by their family member or carer.

4.2.4. Ethical issues

There are, however, ethical issues about discussing a stigmatised identity with an individual, especially with someone with a learning disability. Papers discussed in the introduction suggested that people with a learning disability attempt to distance themselves from the label of learning disability (Finlay & Lyons, 2000; Jahoda *et al.*, 1988) because they are aware of the associated stigma (Craig *et al.*, 2002; Rapley *et al.*, 1998; Szivos-Bach, 1993). Craig *et al.* (2002) concluded that discussion of the label of learning disability was associated with discomfort and other studies have suggested that people with a learning disability would not use that label to describe themselves at all (Davies & Jenkins, 1997; Finlay & Lyons, 2000; Jahoda *et al.*, 1988). If people with a learning disability are expressing negative attitudes towards the label and are distancing themselves from the category of learning disability then it may be difficult to open a discussion on a topic that they either dislike or are actively avoiding. Even if they are willing to engage in a conversation about feeling different from people in the community and their experiences of stigma, it is nonetheless a sensitive topic and could raise some upsetting issues. People with a learning disability have been shown to lack coping skills and have poor psychological resources (Jahoda *et al.*, 2006), and therefore they may find it difficult to participate in such potentially emotive discussions and may find it hard to cope with the feelings and concerns raised. Thomson and McKenzie (2005) state that because of a lack

of understanding about what it means to have a learning disability on the part of the individuals then the provision of balanced and sensitive information would be beneficial. However, they go on to point out that their study indicates that individuals believing themselves not to have a learning disability could be a possible protective factor for self-esteem and that therefore to alter their beliefs may have repercussions for their emotional wellbeing. The authors propose that the priority should lie in changing the negative attitudes towards people with a learning disability that abound in society. While direct discussions about stigma and identity may be deemed risky for people with a learning disability, service providers and carers should ensure that they do not ignore or avoid references to stigma altogether but if comments are raised by individuals then they should be responded to appropriately and with consideration.

Another ethical concern is related to carrying out research into how people with a learning disability see themselves compared to the general population. By making this distinction, the researcher is creating a boundary between the two groups and although the participants may be allowed to rate themselves as the 'same' as people in the community, there is an underlying assumption that they are different. With moves towards increased integration in society, exploration of the differences between people with a learning disability and the general population seems counterintuitive and may exacerbate a 'them and us' mentality. Although there are clear differences between some subgroups of people with a learning disability and subgroups in the general population, the boundaries are becoming less clear, and therefore caution must be taken when investigating the relationships between these groups.

4.3. *Strengths and limitations of current study*

4.3.1. Recruitment/sample

The inclusion criteria in this study were kept as broad as possible because to control for the many variables that may affect people with a learning disability would be very restrictive. The open inclusion criteria maximised the potential number of participants and also attempted to gain a sample representative of people with a learning disability attending adult resource centres. It was encouraging that there was acceptable response rate (74% of those able to consent), which suggests that it was a representative sample. A number of further points regarding the sample are addressed below.

A potential influence is that of the visibility of the stigma that an individual carries (Goffman, 1963). This study recorded whether participants had a physical disability, verbal disorder or any physical characteristics synonymous with a genetic disorder (e.g. Down's Syndrome). However, the impact of this 'visible' stigma was not investigated further for several reasons. Firstly, only 10 individuals with a 'visible' stigma were interviewed, which was insufficient to allow for further analysis. Secondly, it was felt that individuals with additional disabilities should be included in a representative sample of people attending adult resource centres. Finally, it was not the purpose of this thesis to examine the difference between visible and non-visible stigma and the information was collected for demographic purposes only. More research in this area would be highly relevant; however, it is likely that the ethical issues surrounding research with individuals with multiple disabilities would be very complex.

Having an inclusion criteria designed for people attending adult resource centres raises the question of how confidently the results can be generalised to people with a learning disability that do not attend adult resource centres, for example those solely working in supported employment placements or those attending college. It is possible that there would be a difference in perception of stigma and social comparisons based on differences in contact with the general population. Yet whether people with a learning disability working or studying in the community would report more or less experiences of stigma and make more negative social comparisons is uncertain. They do not have the observable link with the adult resource centre, which has been shown to be identified with stigma (Jahoda *et al.*, 1988), but they may have more experiences of performing negatively compared to people in the general population, or have more experiences of abuse. Studies looking at the differences in experience between the subgroups of people with a learning disability do not appear to have been published thus far. Some studies have compared children in segregated versus mainstream schools (e.g. Cooney *et al.*, 2006; Szivos-Bach, 1993), but the results are inconclusive. Consequently, it would be useful for further research to investigate the differences in perception of stigma and social comparison in adults with a learning disability working in the community or attending colleges. Furthermore, investigating these concepts in other subgroups, such as offenders with a learning disability, would be very valuable and may inform programmes of rehabilitation.

Another question over the ability to generalise from this study concerns the lack of a control group. It would be difficult to find a representative sample from the general population that could be adequately matched to people with a learning disability attending

resource centres. Nevertheless, exploration of the relationships between feeling different, social comparisons and self-esteem in the general population would provide evidence as to whether the results of this study are unique to people with a learning disability, or other stigmatised populations, or whether they are global processes. Examples of feasible and accessible comparison groups would be adults with a learning disability at the special needs section at college compared to the mainstream college students, or offenders with a learning disability compared to offenders without a learning disability.

4.3.2. Procedure

A positive aspect of the procedure in this study was that it was designed to be as user-friendly as possible for the participants. Individuals were approached by someone they knew well, the information was discussed with them directly, and they were encouraged to discuss the study with others. The interview began with a conversation about the individuals' interests and activities at the centre and where they lived. This discussion served to provide information to the researcher and also to build rapport with the participant and set them at ease. The participant was told that there were no right or wrong answers and saying that they, not the researcher, were the 'expert' in this situation, which attempted to create a collaborative atmosphere and avoid acquiescent responses. It was important for the study to be set up in this way because it has been argued that people with a learning disability can be unreliable in their responses when being asked about their opinions, in particular on measures of self-concept (Zetlin *et al.*, 1985).

Early papers looking at interviewing techniques and research with people with a learning disability identified concerns about the reliability and validity of their responses (Sigelman *et al.*, 1981; Zetlin *et al.*, 1985). Sigelman *et al.* (1981) investigated the responses of people with a learning disability to yes-no and either-or questions. They reported that yes-no questions yielded invalid answers and the participants tended to say 'yes' regardless of the content of the question. They found that while either-or questions were more difficult to answer they generally yielded more responses that were valid and including picture-choice questions made it even easier for the individuals with a learning disability to give an accurate answer. Nevertheless, they concluded that obtaining reliable and valid responses was problematic in this population.

Zetlin *et al.* (1985) used content analysis to examine response styles of people with a learning disability on self-concept questionnaires. They found that over half of the initial responses were ambiguous and difficult to score and participants frequently gave contradictory or seemingly irrelevant answers. The authors felt that the cognitive demand of the self-concept measures exceeded the ability of the participants to generalise and make abstract responses. However, they proposed that including standardised prompts for each item or providing a scaled selection of choices might improve the reliability of responses. Finally, a more recent study (Hartley & MacLean, 2006) evaluated the reliability and validity of using Likert-type scales with people with a learning disability. The authors queried whether such scales would be more vulnerable to low response rates due to the increased complexity of the task compared to yes-no or either-or questions. However, they found that response rates for Likert-type scales were comparable to other formats and

indeed were efficient at capturing a wide range of self-reported attitudes and behaviours. The authors proposed that response rates could be improved by the inclusion of pictorial representations of the response alternatives and that scripted paraphrasing or expansion of the question items or responses alternatives would increase the number of participants able to respond.

In this thesis, attempts were made to overcome some of these difficulties with interviewing people with a learning disability, for example creating a comfortable and collaborative atmosphere as described above. Furthermore, participants were provided with visual analogue scale as well as spoken response options and, as was recommended by Szivos-Bach (1993), the participants were encouraged to talk around each item before deciding on a score. Response ambiguity introduces a substantial subjective element into the scoring of individuals' responses but an advantage of this study is that all of the interviews were carried out by the same researcher, thereby improving the consistency of the scoring. However, Cooney *et al.* (2006) suggest that if participants were only interviewed on a single occasion then the results could be influenced by researcher power, which highlights the need for additional reliability checks. Nevertheless, these difficulties can also be found in research with the general population and, while they are exacerbated in research with people with a learning disability, many of them are difficult to overcome in field research. These issues are raised repeatedly when doing research with people with a learning disability, but nevertheless, the use of self-report measures with this population is extremely important as it allows them to have an active role in research and for their own views and opinions to be studied.

Another debate is around whether the social experiences of people with a learning disability are better explored through qualitative methods or through quantitative analysis. Some researchers argue that quantitative methods can neither adequately define nor accurately measure enough of a variable to understand complex natural interactions and that they are confined to rigidly controlled variables. Finlay and Lyons (2000) argue that using a qualitative method allows individuals to express comparisons that are made when they talk about themselves and their social worlds without being forced into dimensions of comparison that the researcher might think is relevant. Qualitative methods are useful to explore new areas of research, especially when the theories are broad and complex and there is no prior direction. However, these methods cannot examine in detail the structures underlying the interactions and processes and replicability is often difficult. Furthermore, the subjective nature of the method leads to unavoidable researcher bias and the analysis is very time consuming. Alternatively, quantitative methods enable the analysis of defined and measured variables and test clearly defined hypotheses. They aim to establish relationships that can be generalized across different populations and consequently lead to greater prediction, explanation, and understanding. Quantitative data may miss the contextual detail and rich narrative of individual lives but nonetheless can provide valuable information regarding the social worlds of people with a learning disability. A quantitative approach was chosen for this thesis because previous qualitative literature in the field had explored experiences of stigma, social comparison processes and emotional wellbeing in people with a learning disability and had identified some important and meaningful themes (Craig *et al.*, 2002; Finlay & Lyons, 2000; Jahoda *et al.*, 1988; Jahoda & Markova, 2004). Such papers have led to a growing number of quantitative studies that have begun to test

these themes and establish relationships between variables. Many important questions remain and for that reason, this thesis has attempted to support to the recent findings in the area and develop a greater understanding of the lives of people with a learning disability.

4.3.3. Measures

The present study used the social comparison measure in a different way than did previous research (Allan & Gilbert, 1995; Dagnan & Sandhu, 1999; Dagnan & Waring, 2004). The adaptation allowed an evaluation of the differences in social comparisons made by people with a learning disability towards their peers and towards the general population. Although no differences were found in the social comparisons made with service users and those made with the community, there was a difference in the relationship social comparison had with perception of stigma and self-esteem. It is possible that the scale was not sensitive enough to pick up on the differences between service users and the community, especially since the responses were slightly weighted towards the more positive end of the scale. Preliminary analysis identified that the distributions of some of the subscales on the social comparison measure were slightly skewed and while the decision was taken to continue with parametric analyses, it is possible that the skewness affected the results. However, it is also not surprising to find in a non-clinical sample that the majority of the scores were positive because it would not be expected for a non-clinical sample to report significant levels of difficulties. Finally, it is also possible that the scale itself was not robust because it has not been subjected to rigorous analysis for use with this population.

Previous research has suggested that low levels of reliability can be a problem in research with people with a learning disability (Abraham *et al.*, 2002; Cooney *et al.*, 2006; Crabtree & Rutland, 2001; Dagnan & Waring, 2004). This is often because of the problems with self-report measures as described in the previous section. Both Cooney *et al.* (2006) and Dagnan and Waring (2004) reported that the internal reliability of the social comparison scale was low, which leads to greater variance within the data and may result in unreliable correlations. However, in this study, reliability analysis of the social comparison scale with service users and with the community showed acceptable internal reliability of above 0.7. The measure may have been shown to be more reliable than in Dagnan and Waring's (2004) study because the present study specified whom the target comparison should be. However, it is interesting that Cooney *et al.* (2006) found low reliability in the social comparison scale in their study when it was used by the participants to compare themselves with peers without a learning disability. The authors suggest that their finding was due to an inability to compare to a non-disabled peer due to lack of familiarity or because of an avoidance of upward comparisons. This was not the case for the present study, however, and therefore further investigation of this scale is needed.

Although attempts were made to ensure that the participants compared themselves to the group of other service users in general or to people in the community in general, it is impossible to control for whether participants actually had someone specific in mind when making the comparisons. Cooney *et al.* (2006) question whether some of their participants acted 'defensively' when asked to compare themselves to a peer without a learning disability and chose an individual with whom they could compare themselves positively.

Finlay and Lyons (2000) found that when individuals made downward comparisons they chose groups comprised of people with more severe learning disabilities and it is possible that the participants in the present study selected those to whom they would like to compare themselves.

It is hard to determine if the strong positive bias on the social comparison measure was due to genuinely positive comparisons with others by people with a learning disability or whether the scale was measuring a different concept. The questionnaire asks individuals how they see themselves compared to others but it is possible that the participants were describing how they saw themselves in general and were not actually making a comparison with others. This may be due to difficulties understanding the design of the measure. Although Dagnan and Sandhu (1999) and Dagnan and Waring (2004) both reported using this measure successfully with people with a learning disability, the performance of the participants in this study raised doubts about the validity of the measure with this population. Dagnan and Sandhu (1999) reported acceptable test-retest data for the social comparison measure total score and factors but since the measure was altered for use in the present study additional reliability checks would have been beneficial.

The importance of test-retest reliability checks was emphasised by Abraham *et al.* (2002) when they explored the reliability of the stigma scale. They could not replicate the factor structure that had originally been identified by Szivos-Bach (1993) and they found poor test-retest reliability, which they argued is important for being able to generalise the results from a study. They concluded that the original questionnaire was not reliable. However, it

was decided that the present study would continue to use the total score from the original questionnaire in the analyses because it was the only scale found in the literature search that had been developed to look at the experience of stigma in people with a learning disability, and because it has been used in another recent study (Dagnan & Waring, 2004). It was not the intention of this research to carry out further analysis on the questionnaire and the small sample size would not have permitted it. Therefore, it must be acknowledged that questions about the reliability of this questionnaire have been raised and that further investigation of the measure and replication of the results from this study is needed.

The points raised here mostly relate to the difficulties that arise when using non-standardised questionnaires in research and in particular in research with people with a learning disability. Much of the research carried out with people with a learning disability uses adapted scales from the general adult population and they have rarely been subjected to detailed analysis. When checks of reliability have been reported, they have often been carried out on small samples and are seldom the primary purpose of the paper. Future research needs to identify robust measures that can be used in the study of people with a learning disability and papers should report the results of any checks carried out.

4.3.4. Statistics

The power calculation reported in the method section stated that a sample size of 25 would detect large population effect sizes and a sample size of 70 would detect medium population effect sizes. The number of people with a learning disability interviewed in this

study came to 43 and it was not possible within the time frame of the thesis to increase this number. Nevertheless, several strong relationships were found suggesting that the study was able to detect medium to large population effect sizes and post-hoc power calculations using the computer programme G*Power indicated that an acceptable level of power was reached (~0.80).

When multiple comparisons are carried out there is an increased risk of Type I errors, i.e. concluding that there is a significant result when the correlation could have occurred by chance. Some authors suggest carrying out a Bonferroni adjustment to the alpha level that is used to judge statistical significance (e.g. Curtin & Schulz, 1998). However, other papers have argued against the use of a Bonferroni correction (Nakagawa, 2004; Perneger, 1998) stating that it creates more problems than it solves; because of that, and the following reasons, this correction was not performed on the data. Firstly, since the Bonferroni method is concerned with the general null hypothesis, the likelihood of Type II errors is increased, i.e. concluding that there is no significant correlation when in fact there is. Secondly, this study was supported by previous research; therefore, it was possible to make planned comparisons before analysing the data. Nakagawa (2004) suggests that instead of using the Bonferroni method, studies should report effect sizes, which enables readers to evaluate the importance of the results.

4.4. Further directions for future research

Ideas and areas for future research have been highlighted throughout this discussion but they will be drawn together in this section. To begin with, the results indicated that how socially attractive and how capable people with a learning disability saw themselves compared to others was sensitive to the negative effects of stigmatisation. Further investigation of these concepts in people with a learning disability may inform clinical practice, both in terms of developing preventative guidelines and also therapeutic approaches for those with mental health problems. A surprising outcome in the present study was that social comparison was not shown to have a moderating effect on the impact of perception of stigma on self-esteem. The study raised questions about the accuracy of this finding due to doubts about the reliability of the social comparison measure used and recurring difficulties in identifying moderator effects in field research. However, it is more likely that the present study was underpowered for moderator analyses due to the small sample size. Consequently, this hypothesis warrants further investigation.

The study used a sample of people with a learning disability living in the community who did not report high levels of psychological difficulties. Nonetheless, perception of stigma and negative social comparisons were shown to impact on their self-esteem and symptoms of psychopathology. It would be interesting, therefore, to see if the relationships detected emerged as stronger in a clinical sample of people with a learning disability with mental health difficulties. However, while people with a learning disability experience stigma throughout their lives, if they also had mental health difficulties that may mean that they

carry an additional stigma. It would be hard, therefore, to distinguish between stigmatisation associated with a learning disability or with mental illness. Nevertheless, exploration of the experience of stigma and social comparison in different groups of people with a learning disability would be very informative. For example, it was proposed earlier that an investigation of the differences between people with a learning disability who attend adult resource centres and those who have more contact with the general population through supported employment opportunities would be beneficial. If such a study were repeated at intervals over a period of time then the impact of changes in attitudes of people with a learning disability by society could be examined and the process of integration could be evaluated.

The discussion has also summarised other factors that may affect the self-esteem of people with a learning disability and in particular, factors that may protect or buffer people with a learning disability from the negative effects of stigmatisation. In order to improve the evidence base for practice with people with a learning disability, a thorough understanding of what factors are truly protective and why is very important. Some examples such as the impact of increased community participation and the role service providers and carers play in the lives of people with a learning disability were discussed above.

Finally, the present study did not include a control group and it was suggested, therefore, that future research could incorporate a matched control group from the general population. The inclusion of a control group could ascertain whether the patterns identified in this study are unique to people with a learning disability, by virtue of being members of a stigmatised

category, or whether the same tendencies arise in anyone who feels they receive negative feedback from others. Dagnan and Jahoda (2006) argued that people with a learning disability are more at risk of being damaged by stigma and negative social comparisons than the general population for several reasons. Dagnan and Jahoda argue that people with a learning disability have had lifelong experiences of negative evaluations and they have limited ability to change their position due to lack of social influence and lower intellectual ability. However, it would be highly valuable to investigate this hypothesis further and validate the real impact of stigma on the lives of people with a learning disability. Some possible comparable groups were suggested and these included people with a learning disability attending the special needs sections at college and individuals without a learning disability attending the mainstream courses, or offenders with and without a learning disability.

4.5. *Summary and conclusions*

This study has added to our understanding of the personal and social lives of people with a learning disability. It has underlined the importance of the perception of stigma and social comparisons made towards others for the emotional wellbeing of people with a learning disability living in the community. The relationships presented do not suggest causality nor exclude other models that could represent the data, but they nonetheless provide persuasive support for the influence of perception of stigma and social comparison on the self-concept of these individuals.

The results found that those who reported higher perception of stigma also reported feeling more negative about themselves and reported a greater number of symptoms of psychological distress. Perception of stigma was not found to be related to social comparison with other service users but it was related to how socially attractive and how capable participants saw themselves compared to the general population. It was proposed that greater awareness of stigma makes individuals feel awkward in social situations and therefore evaluate themselves more negatively. Furthermore, greater awareness of feeling different from people in the general population may mean that they cannot ignore the reality of being less able.

It was shown that people with a learning disability who identified more with their peers yet rated themselves as more able than their peers, saw themselves more positively. In contrast to previous studies, which have suggested that people with a learning disability attempt to distance themselves from their peers, this study proposes that people with a learning disability were distancing themselves from the negative connotations of their group. When participants compared themselves to people in the community, those who saw themselves as more socially attractive and more able reported greater self-esteem. On the whole, the results showed that people with a learning disability made downward social comparisons towards others, which in turn appeared to boost their self-esteem. No differences were found between social comparisons made with service users and with people in the community, which could have been due to a general positive view of self and a tendency towards downward comparison. Alternatively, this might be because of the limitations of the reliability of the social comparison measure. Finally, social comparison was not found

to have a moderating effect on the relationship between stigma and self-esteem. It was suggested that as stigma and social comparison were both shown, nonetheless, to be predictive of self-esteem they might, therefore, predict different aspects of the variable.

Some issues were raised in relation to limitations of the study, for example the generalisability of the results and the reliability of the measures, and difficulties about carrying out research in general with people with a learning disability were acknowledged. The thesis has identified different relationships between the variables of stigma, social comparison and self-esteem but, regardless of the relative strengths, the findings showed that they play significant roles. However, in any population, the relationships between social and personal aspects of an individual's world are undoubtedly complex and in the case of people with a learning disability, there are many other factors that influence their lives. The roles and responsibilities of people with a learning disability, the extent to which they interact with people in the community, and the influence of significant others in their lives can all affect their emotional wellbeing and self-concept. Adding to these roles may risk increased exposure to negative experiences, but on the other hand would be likely to aid social integration. Future research in this field could explore the variables of perception of stigma and social comparison in relation to those with different levels of contact with the community and with those who carry additional stigma, such as those with physical disabilities or groups of offenders.

This study raised a number of highly pertinent issues for the lives of people with a learning disability. A greater understanding of the experiences and processes that occur in people

with a learning disability leads to informed ways of providing services and appropriate psychological supports if necessary. Additionally, more information about how individuals currently feel towards society as a whole will inform more effective and efficient ways of improving their integration into society. Both stigma and social comparison are dynamic concepts and continually evolve in response to changes in society and social groups. Consequently, research in this area must also be responsive and identify changes as they develop. Society has come a long way since Erving Goffman (1963) published his seminal text looking at the impact of stigma on people's lives and yet some of his writings are still highly relevant and applicable in Western cultures. As a result, investigation of these experiences continues to be extremely important in order to enhance the lives of people with a learning disability.

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List of Appendices

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APPENDIX II	Ethical approval from the NHS
APPENDIX III	Permission to carry out research from the local council
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APPENDIX IX.....	Adapted Social Comparison Scale
APPENDIX X	Adapted Rosenberg Self-Esteem Scale
APPENDIX XI.....	The Brief Symptom Inventory
APPENDIX XII	Non-parametric data
APPENDIX XIII	Skewness and kurtosis summaries
APPENDIX XIV	Tolerance values of regression models
APPENDIX XV	Normal Probability Plot and residuals scatterplots

APPENDIX I

Ethical approval from the University of Edinburgh

APPENDIX II

Ethical approval from the NHS

APPENDIX III

Permission to carry out research from the local council



1st September 2006

Mrs L. Paterson
Clinical Psychology Department



Dear Mrs Paterson,

Re: Research Project - The Perception of Stigma in People with a Learning Disability

Many thanks for your completed application form to carry out your research project. I am writing to confirm that the Department is willing to help out and to allow access to the Department's premises and to approach service users to ask them to take part.

This access is dependent upon sufficient steps being taken to gain participants consent and to protect personal information, as you have set out on the application form.

The Department would be very interested to receive a summary of the finding and it would also be helpful if you could, in due course, perhaps give a presentation of the findings at the Learning Disabilities Strategic Planning Group.

Please can you contact 
in order to make the necessary arrangements to start your project.

Best wishes.

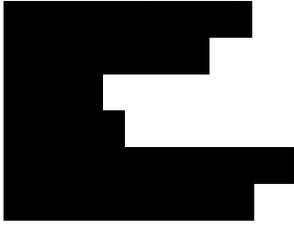
Yours sincerely



Senior Officer (Information)

APPENDIX IV

Information for the managers of the Adult Resource Centres



INFORMATION SHEET

The Perception of Stigma in People with a Learning Disability

Who is doing the research?

The research is being carried out by Mrs Lucy Paterson, Trainee Clinical Psychologist in the [REDACTED], as part of her qualification of Doctorate in Clinical Psychology at the University of Edinburgh. Professor [REDACTED], chartered Clinical and Forensic Psychologist at the Clinical Psychology Department, and Dr [REDACTED], Clinical Psychologist and Academic Supervisor at the University of Edinburgh, will oversee the research.

The perception of stigma

It is well understood that people with learning disabilities (PwLD) are members of a stigmatised social group (Edgerton, 1993; Hastings and Remington, 1993) and that they are less likely than the general population to achieve socially valued goals such as getting a job, having children or even living independently. Furthermore, Jahoda et al (1989) report that stigma is something PwLD have to cope with in their everyday lives. For PwLD, the perception of stigma has been linked to low self-esteem (Szivos, 1991; Szivos-Bach, 1993) and negative ways of comparing themselves to others (Dagnan & Sandhu, 1999). Dagnan & Waring (2004) looked at perceptions of stigma and negative evaluations of self in PwLD. They found that negative beliefs about self were positively associated with the experience of feeling stigmatised. Two recent papers by Jahoda and Dagnan (Jahoda et al., 2006; Dagnan & Jahoda, 2006) present their theoretical perspective that directly links the experience of stigma to anxiety and depression in PwLD. They suggest that the social context and social comparison processes play a large role in how PwLD manage the negative consequences of stigmatisation.

However, it is interesting that despite such negative predictions, not all PwLD experience significant levels, if any, of depression or other psychological distress and self-esteem is not consistently lower across all PwLD. There may be several reasons as to why individuals are protected from the negative effects of stigma but one proposal is that the way in which PwLD compare themselves to other PwLD and how they compare themselves to the general population is important. As mentioned above, the perception of stigma can lead to negative social comparisons and in turn, this has been associated with higher depression scores and low self esteem in PwLD (Dagnan & Sandhu, 1999). Therefore, this study proposes to build upon and extend the previous research and

investigate whether different social comparisons used by PwLD can protect against the negative effects of stigmatisation.

Why is this study important?

It is important to study the experience of stigma for PwLD because it clearly has implications for their vulnerability to emotional disorders and a greater understanding would inform clinical practice. Furthermore, if the way PwLD compare themselves to others can protect them from psychological difficulties then this could suggest an effective treatment approach for those with psychological problems or as a preventative measure as part of a social skills training package. This study would expand upon previous research in this field and would also contribute quantitative information. In addition, this thesis is being carried out as part of the Doctorate of Clinical Psychology and as such has educational and training value.

What will happen in the study?

Participants will be recruited from Adult Resource Centres across [REDACTED]. If you give permission for the research to be carried out in the college then I would like to approach the keyworkers and ask them to identify which service users they feel would be able to understand and consent. This approach is used frequently when carrying out research with people with a Learning Disability.

Once potential participants have been identified, I will approach them and will explain to them about the study and talk through the patient information sheet and the issues of consent. People with a mild learning disability or borderline intelligence have been shown to be able to choose whether to consent to studies. The explanation will be aided by the use of visual symbols and I am experienced at communicating with people with a Learning Disability. The participant will be allowed to take the information away to consider and will be approached again after at least 24 hours to see if they are willing to come to the consent interview.

At the consent interview, the participant will again be told about the study and their right to choose to participate and withdraw at anytime will be explained. If they consent to proceed then I will ask them to sign a consent form and then I will proceed with the other experimental measures. I will help the participants to complete 4 questionnaires looking at the perception of stigma, how they see themselves compared to others in general and their level of psychological distress and self-esteem. The participants' responses will be anonymous and the interview should last no longer than one and a half hours.

Do they have to take part?

Participation from the service users is entirely voluntary and there will not be any adverse consequences should either the service user or the centre choose not to participate. In addition, the participant can withdraw at anytime without any adverse consequences and they do not have to give a reason.

Could the questionnaires cause any distress?

It is not envisaged that completing the questionnaires will cause participants distress, however, as the topics discussed in the questionnaires include some potentially sensitive issues, it is possible that some individuals may experience discomfort completing the questionnaires. It is worth noting, however, that research suggests that questionnaire completion is unlikely to cause increased distress. I will be present when participants complete the questionnaires and available after the appointment if required. Participants will be asked to stop completing the questionnaires if they became distressed. Furthermore, participants will have my contact details and it will be made clear that they can contact me for advice and support in relation to issues arising from participating in the study. Participants will be directed towards appropriate sources of help if issues arise following completion of questionnaires. This will be made clear in participant information sheets. Additionally, I have training and skills in working with people with a learning disability, and discussing difficult topics.

It will be made clear to participants, both verbally and in writing that completing questionnaires and involvement in the study may be stopped at any point that they wish, and that this will have no adverse effects on them. If participants become unduly distressed during the research, questionnaires will be withdrawn. If at the end of completing questionnaires, participants state that they do not want their questionnaire to be included in analysis, the questionnaire(s) will be destroyed immediately.

Who has reviewed the project?

Before any research goes ahead, it has to be checked by an Ethics Committee; they make sure that the project is safe to do and meets ethical guidelines for research. This study has been checked by the University of Edinburgh Research Ethics Committee.

What will happen to the results of the project?

The project will be written up as part of Lucy Paterson's degree in Clinical Psychology at the University of Edinburgh, and may also be written up in a Psychology journal. You can be sent a summary of the results if you wish.

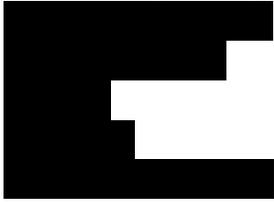
How can I find out more?

Please feel free to ask me anything about this project and I will be happy to answer any questions you may have. You may contact me at anytime at the contacts at the top of this letter if you have any further questions about the project.

Thank you for taking the time to consider this study.

APPENDIX V

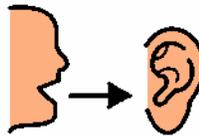
Patient Information Sheet



PARTICIPANT INFORMATION SHEET

The perception of stigma

We would like to ask you to take part in a project. Before you decide if you want to be part of the project, it is important for you to understand why we are doing it and what it will involve. I am going to take you through this information and I would like you listen carefully. Please ask me if there is anything that is not clear or if you would like more information. Talk about it to other people if you want. You can ask your Keyworker about it or anyone else. Take time to decide if you want to take part or not.



What is the aim of the project?

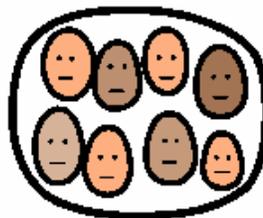
We are interested in what you think about other people at the resource centre and what you think about other people in [REDACTED]. I am not going to ask you about anyone in particular, but about other people in general. We are also interested in what you think about yourself.



This study is a student research project for my course at university.

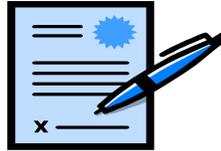
Why are you asking me to take part?

We are asking everybody at the resource centre if they would like to take part in the study.



What will happen to me if I take part?

If you decide to take part in the study you need to sign the consent form. This form says that you understand what the study is about and you want to be part of the research.



After you have signed the consent form, the main researcher will meet with you in a private place here at the resource centre. She will have a chat with you for about one hour and she will ask you some questions about yourself and what you think of other people in general. This conversation is completely private and the researcher will only talk to the other members of the research team about your answers.



Your answers will be written down on a sheet but the sheet will not have your name on it therefore no one will know what you said to the researcher. This means that your answers will be ‘anonymous’.

After the researcher has asked you all the questions the study will be finished. Your time in the study will last no longer than one and a half hours.



1 hour and a half

Do I have to take part?

No. It is up to you whether you want to take part or not. If you decide you want to take part but you change your mind later, that is okay. You can stop at anytime and you do not have to give a reason. Whether or not you decide to be part of this study, there will be no effect on your placement here.

Who has reviewed the project?

Before any research goes ahead, it has to be checked by an Ethics Committee. They make sure that the project is ok to do. This study has been checked by the University of Edinburgh Ethics Committee.

What will happen to the results of the project?

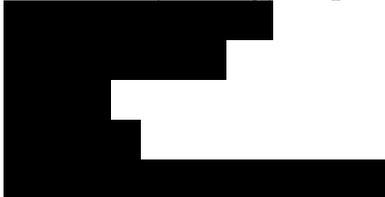
The project will be written up as part of Lucy Paterson's degree in Clinical Psychology at the University of Edinburgh, and may also be written up in a Psychology journal. You can be sent a summary of the results if you wish.

I want to know more? Contact details.

Please feel free to ask the researcher anything about this project and she will be happy to answer any questions you may have. After today, you may contact the researcher at anytime at the contacts below if you have any further questions about the project.

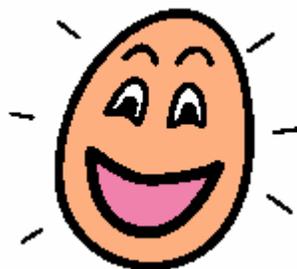


Mrs Lucy Paterson (Principal Researcher)
Clinical Psychology Department



This information sheet is yours to keep. If you agree to take part you will be asked to sign a consent form, which you will also be given a copy of.

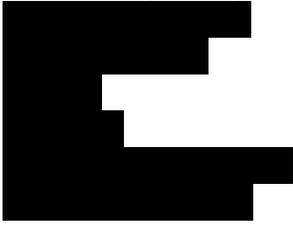
Thank you for taking the time to read this and thinking about taking part.



Thank
you!

APPENDIX VI

Letter to carer of participant



Dear

I have approached your son to ask him if he would be willing to consider taking part in a research project that I am carrying out with the service users at [REDACTED]. I have provided him with an information sheet about the project and I would be grateful if you could read through the information with him and discuss it. If you or your son have any questions then please do not hesitate to contact me at the details found on the information sheet and on this letter. I will speak to your son at the centre again to see if he would be happy to take part.

I am carrying out this research as part of my degree in Clinical Psychology at the University of Edinburgh. The purpose of the project is to develop a greater understanding of the effects of stigmatisation in people with a learning disability. If your son consents to proceed then I will ask him to sign a consent form and then I will help him complete 4 questionnaires looking at the perception of stigma, how he sees himself compared to others in general and his level of psychological symptoms and self-esteem. His responses will be anonymous and the interview should last no longer than one and a half hours.

Participation is entirely voluntary and there will not be any adverse consequences should he choose not to participate. In addition, he can withdraw at anytime without any adverse consequences and he does not have to give a reason.

I would be very grateful if you would support your son's participation in this project. The results would be extremely valuable and a greater understanding of the experience of stigma for people with a learning disability would inform clinical practice in the community.

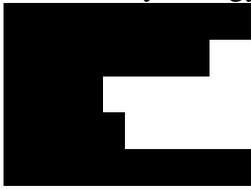
If you have any queries please contact me and thank you for taking time to read this letter.

Yours sincerely

Lucy Paterson
Trainee Clinical Psychologist

APPENDIX VII

Consent form



CONSENT FORM

Project: The Perception of Stigma
Name of Researcher: Mrs Lucy Paterson (Trainee Clinical Psychologist)

Please circle your answer

- Have you read (or been read) the information sheet? YES / NO
- Has somebody explained the project to you? YES / NO
- Do you understand what this project is about? YES / NO
- Have you asked all the questions you want? YES / NO
- Have your questions been answered in a way you understand? YES / NO
- Do you understand it's OK to stop taking part at any time? YES / NO
- Are you happy to take part? YES / NO

If any of the answers are 'No' or you don't want to take part, don't sign your name!

If you do want to take part, please write your name on the first line and sign your underneath that:

Your Name: _____

Your Signature: _____

Date: _____

The researcher who explained the project to you needs to sign too:

Name: _____

Signature: _____

Date: _____

Please return one copy of this form and keep one for yourself.

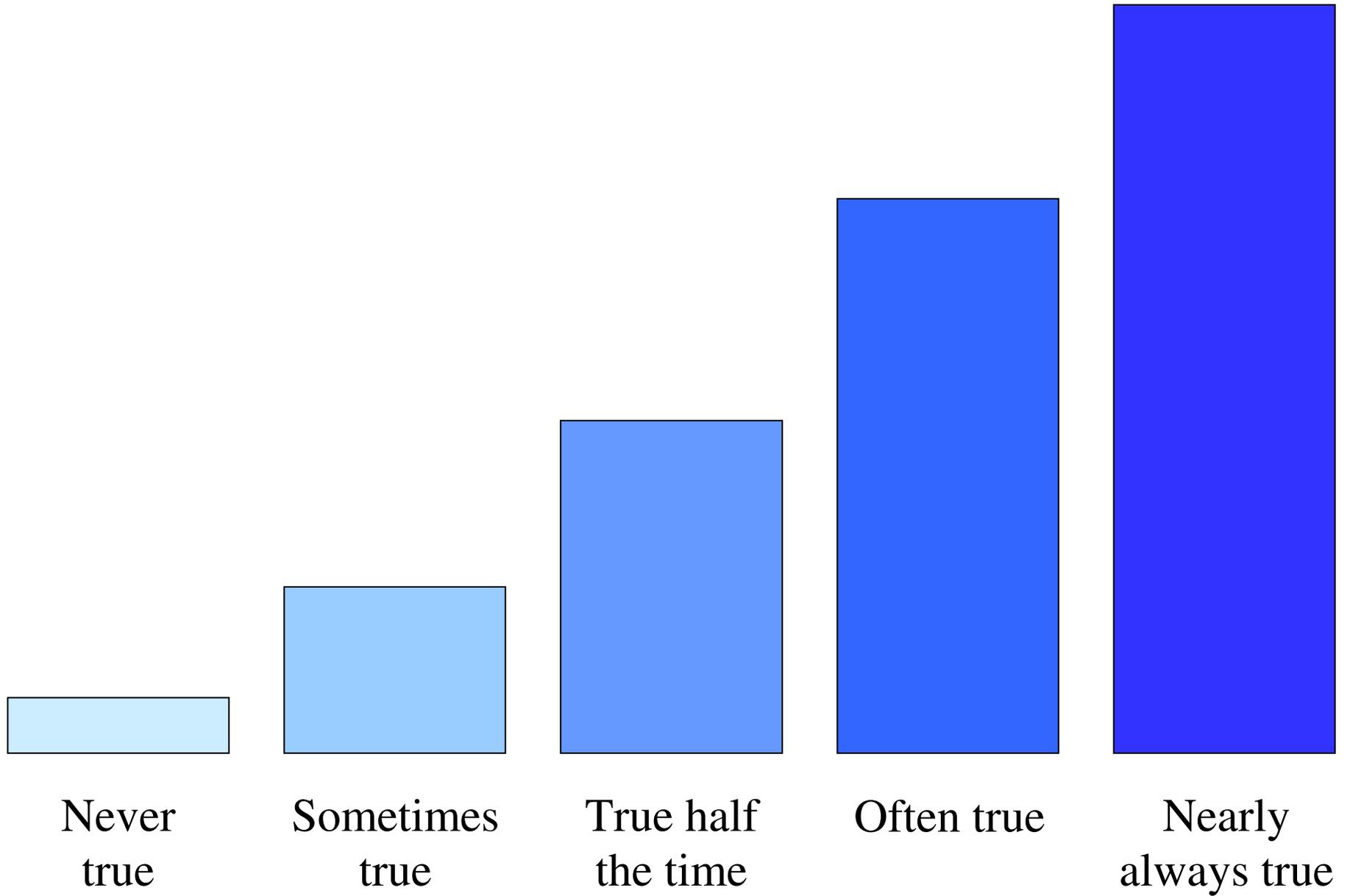
APPENDIX VIII

The Stigma Perception Questionnaire

The Stigma Perception Questionnaire (Szivos, 1991; Szivos-Bach, 1993)

	Never	Sometimes	Half the time	Often	Nearly always
My family is disappointed in me	5	4	3	2	1
People treat me like a child	5	4	3	2	1
I wish I were someone different	5	4	3	2	1
I get teased or made fun of	5	4	3	2	1
I am uncomfortable in the company of strangers	5	4	3	2	1
In groups I feel the odd one out	5	4	3	2	1
I worry about what other people think of me	5	4	3	2	1
Other people treat me oddly	5	4	3	2	1
I hate telling people I come from/go to this place	5	4	3	2	1
I hate going out in a group with people from here	5	4	3	2	1

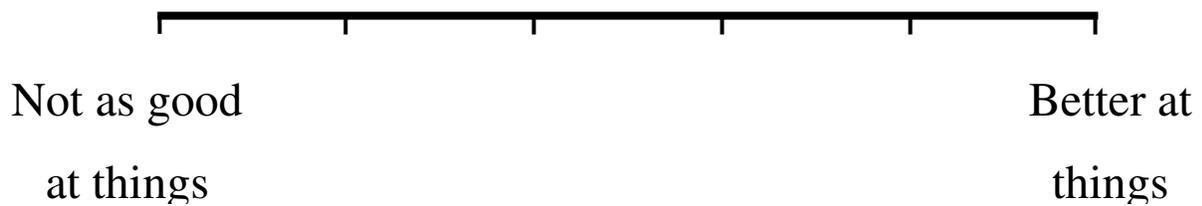
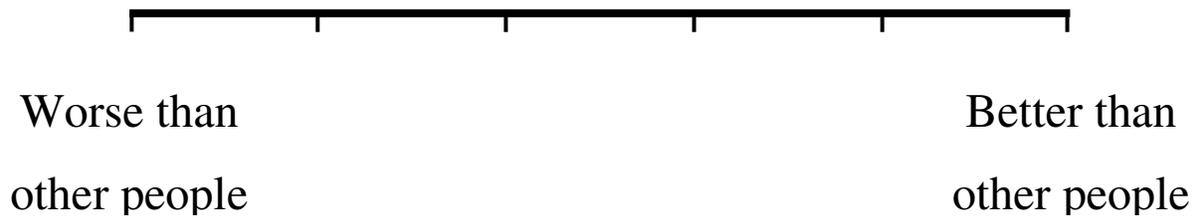
Stigma Perception Questionnaire: Response choices



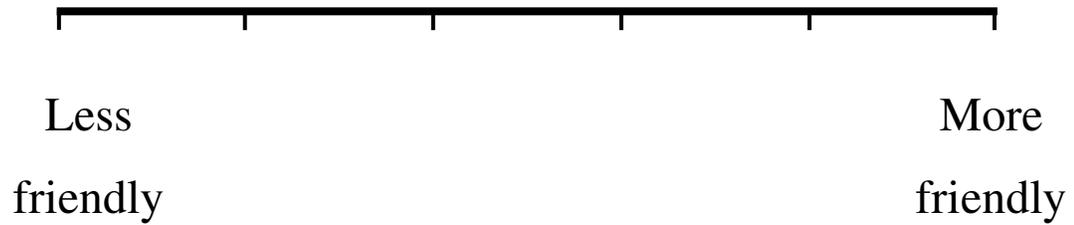
APPENDIX IX

Adapted Social Comparison Scale

When I am with other service users,
I generally feel:



When I am with other service users,
I generally feel:



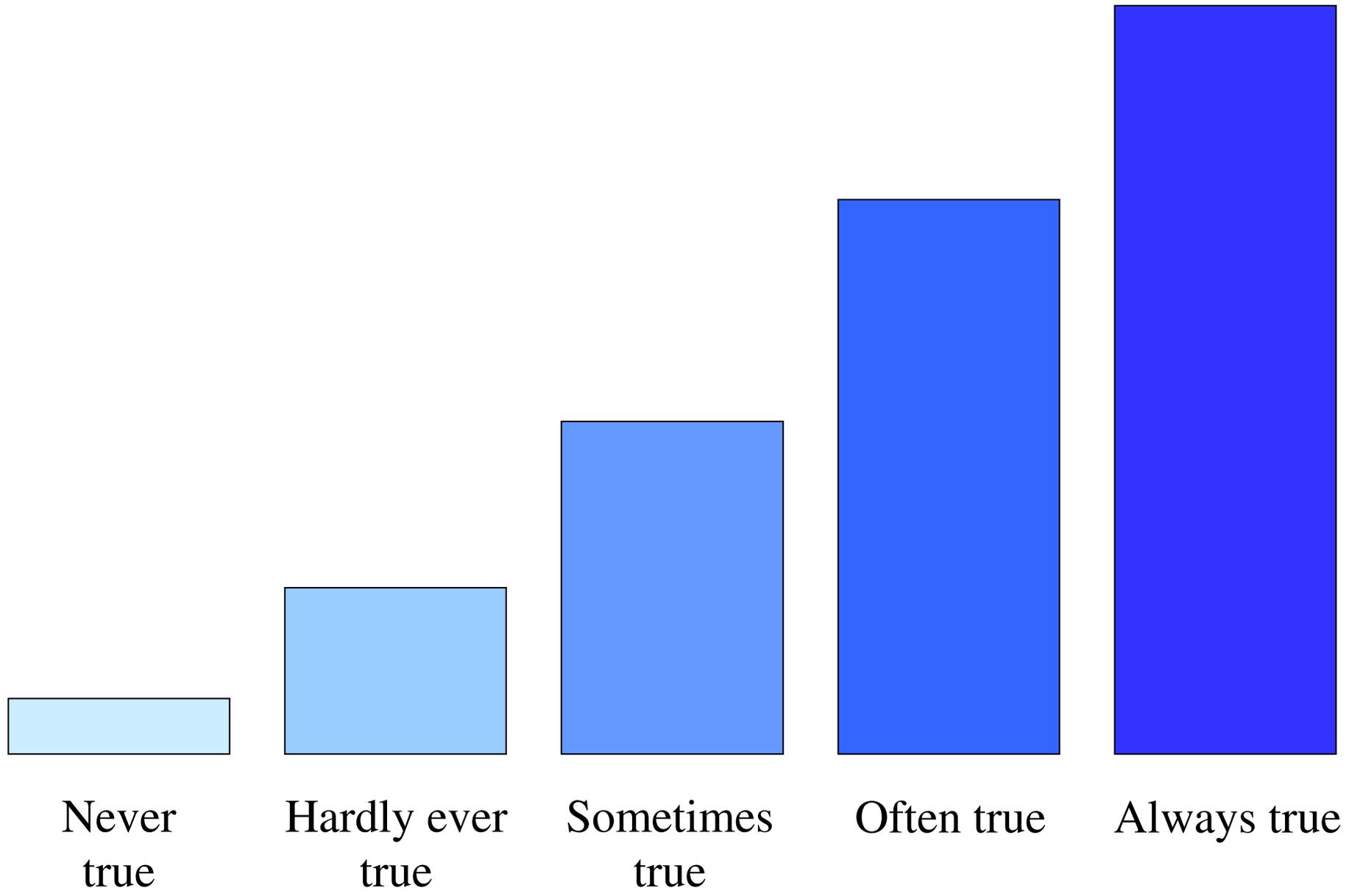
APPENDIX X

Adapted Rosenberg Self-Esteem Scale

Adapted Rosenberg Self-Esteem Scale (Dagnan & Sandhu, 1999)

	Never true	Hardly ever true	Sometimes true	Often true	Always true
I feel that I am a good person, as good as others	1	2	3	4	5
I feel that I have lots of good qualities	1	2	3	4	5
I am able to do things as well as most other people	1	2	3	4	5
I feel I haven't done anything worthwhile	5	4	3	2	1
I like myself	1	2	3	4	5
At times, I think I am no good at all	5	4	3	2	1

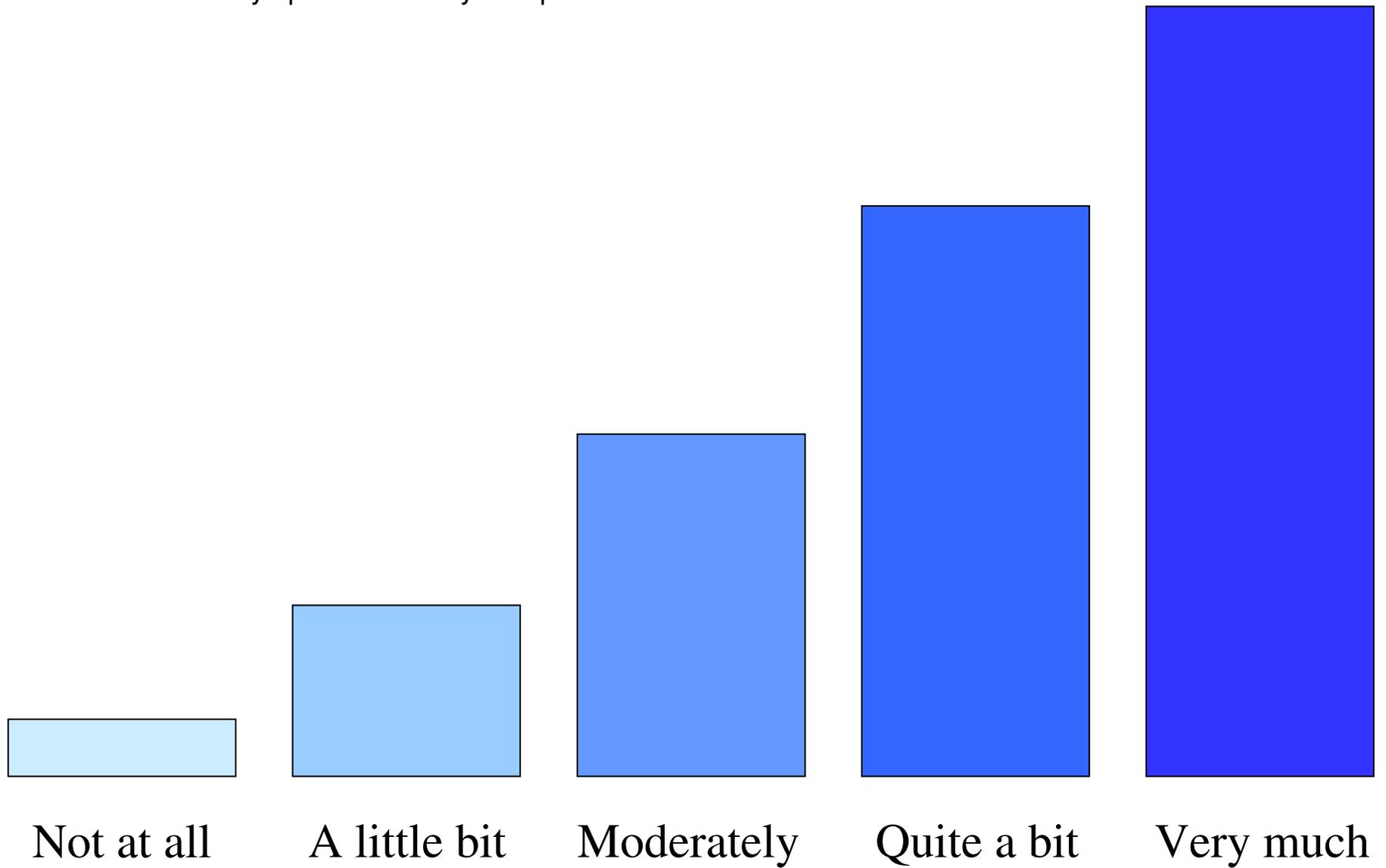
Rosenberg Self-Esteem Scale: Response choices



APPENDIX XI

The Brief Symptom Inventory

The Brief Symptom Inventory: Response choices



APPENDIX XII

Non-parametric data

Spearman's correlations of perception of stigma with total and subscale scores for self-esteem and psychopathology (n=43)

	Self-esteem: total score	Self-esteem: positive	Self-esteem: negative	BSI: positive symptom total
Perception of stigma	0.433**	0.226	0.500**	-0.616**

* Correlation is significant at the 0.05 level (2 tailed)

** Correlation is significant at the 0.01 level (2 tailed)

Spearman's correlations of total and subscale scores for self-esteem, stigma and psychopathology with total and subscale scores for social comparison with service users and with the community (n=43)

		<u>Self-esteem</u>			Perception of stigma	BSI Positive symptom total
		Total score	Positive	Negative		
Social comparison with service users	Total score	0.470**	0.444**	0.385*	0.340*	-0.339*
	Group belonging	0.361*	0.329*	0.317*	0.202	-0.216
	Social attractiveness	0.309*	0.249	0.325*	0.309*	-0.448
	Achievement and rank	0.414**	0.419**	0.266	0.286	-0.103
Social comparison with the community	Total score	0.438**	0.467**	0.259	0.338*	-0.271
	Group belonging	0.151	0.214	0.023	0.087	-0.130
	Social attractiveness	0.389**	0.424**	0.209	0.371*	-0.193
	Achievement and rank	0.501**	0.532**	0.308*	0.313*	-0.267

* Correlation is significant at the 0.05 level (2 tailed)

** Correlation is significant at the 0.01 level (2 tailed)

Wilcoxon Signed Ranks Test between total and subscale scores for social comparison with service users and with the community (n=43; two-tailed)

	Comparison target		z	p
	Mean (standard deviation)			
	Service users (n=43)	Community (n=43)		
Total score	23.44 (4.64)	22.65 (5.51)	-0.789	0.430
Group belonging	3.79 (1.32)	3.63 (1.50)	-0.758	0.449
Social attractiveness	12.21 (2.71)	11.51 (3.20)	-1.538	0.124
Achievement and rank	7.86 (1.64)	7.84 (1.73)	-0.151	0.880

APPENDIX XIII

Skewness and kurtosis summaries

Skewness and kurtosis statistics for each of the measures

		<u>Skewness</u>		<u>Kurtosis</u>	
		Statistic	Std. Error	Statistic	Std. Error
Stigma	Total score	-.608	.361	-.158	.709
	Total score	-.128	.361	-.574	.709
Self-esteem	Positive	-.507	.361	-.121	.709
	Negative	-.612	.361	.139	.709
BSI	Positive symptom total	-.380	.361	.435	.709
	Total score	-.756	.361	.280	.709
Social comparison with service users	Group belonging	-.703	.361	-.711	.709
	Social attractiveness	-1.072	.361	.540	.709
	Rank and achievement	-.037	.361	-1.225	.709
Social comparison with the community	Total score	-.315	.361	-.711	.709
	Group belonging	-.528	.361	-1.256	.709
	Social attractiveness	-1.010	.361	.599	.709
	Rank and achievement	-.026	.361	-1.442	.709

APPENDIX XIV

Tolerance values of regression models

Tolerance values of regression models

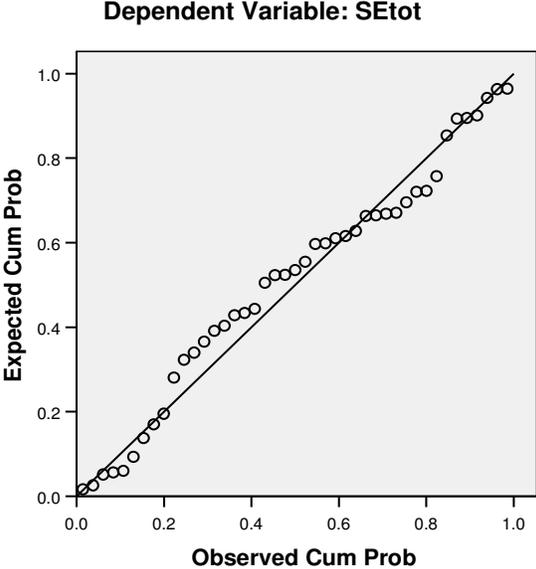
	<u>Tolerance value</u>	
	Social comparison with service users	Social comparison with the community
<hr/>		
Model 1		
Stigma	0.917	0.887
Social comparison	0.917	0.887
<hr/>		
Model 2		
Stigma	0.022	0.063
Social comparison	0.010	0.017
Stigma x social comparison	0.005	0.005
<hr/>		

APPENDIX XV

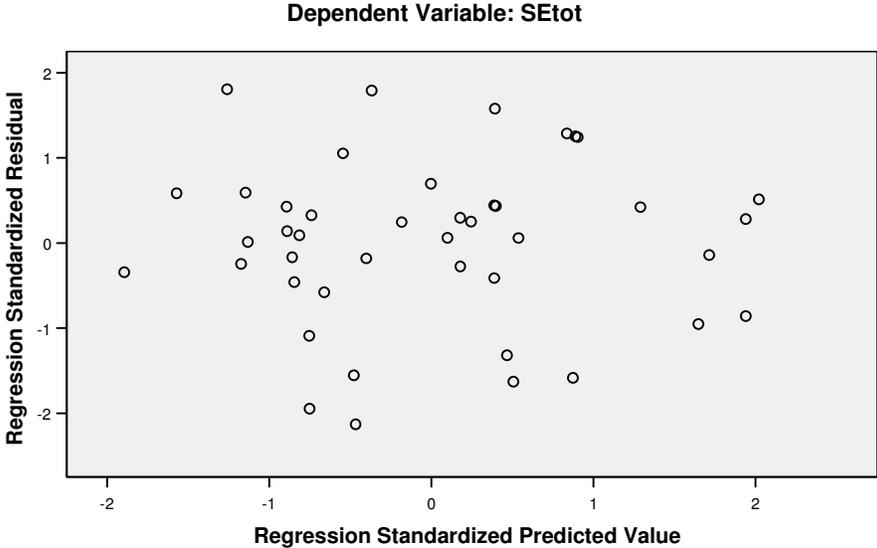
Normal Probability Plot and residuals scatterplots

Normal Probability Plot and residuals scatterplots for regression model of stigma, self-esteem, and social comparison with service users.

Normal P-P Plot of Regression Standardized Residual

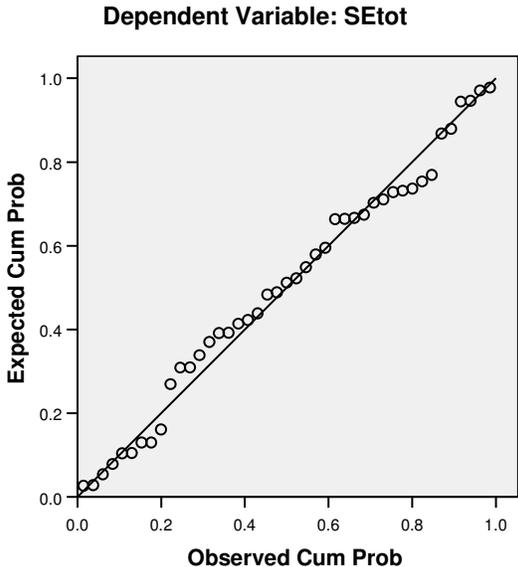


Scatterplot



Normal Probability Plot and residuals scatterplots for regression model of stigma, self-esteem, and social comparison with the community.

Normal P-P Plot of Regression Standardized Residual



Scatterplot

