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Do people with Intellectual Disabilities experience bias at the hands of the professionals trained to support them?

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General Summary

Literature Review

Lovett (1985) describes how carers and professionals who work with people with intellectual disabilities describe their client's behaviour in seemingly objective but actually meaningless ways (e.g. attention-seeking). Thus the *meaning* of behaviour is often not considered and behaviour which may be a reasonable response is judged negatively and in isolation. This literature review is interested in the presence of and reasons for poor empathic understanding of people with intellectual disabilities by the professionals who support them. The review examines the literature finding evidence for a focus on behaviour as opposed to emotion and distress. Literature in the areas of the response of people with intellectual disabilities to bereavement and diagnostic overshadowing demonstrate how the Intellectual Disability label can influence the judgement of support workers and psychologists alike. Attribution theory is used as a framework for understanding these biases and recommendations for further research are made.

Empirical Paper

In order to test whether professionals working with people with intellectual disabilities show empathy and attribution bias an online vignette-based approach was used. On entering the study via email the participants were randomly assigned to either the intellectual disability or non-intellectual disability vignette condition and asked to predict the response of the people in the vignettes to seven everyday situations. These predictions were categorised into behavioural and emotional predictions. Participants were also asked to rate these responses on 5 attribution dimensions. Each participant then completed a measure of empathy. It was found that the participants did indeed predict a higher number of behavioural responses to emotional responses when they believed the person had an intellectual disability. The participants also showed significant differences in the way they made attributions for these responses but the style in which they did so varied between situations. Conclusions are drawn about the input psychologists could have in supporting services for people with intellectual disabilities.

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Literature Review*

Do people with Intellectual Disabilities experience bias at the hands of the professionals trained to support them? A review of the literature.

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*Applying guidelines for publishers for submission to the Journal of Applied Research in Intellectual Disabilities (Appendix A)

1. **Introduction**

1.1 Abstract

People with intellectual disabilities are one of the most marginalised groups within our society. They have little self-determination in their lives and although the situation is improving our society still stigmatises those with intellectual disabilities (ID). This literature review is interested in the more socially constructed reasons for poor empathic understanding such as the history of ID care, the use of behavioural principles in psychology, and the effect on staff of institutionalisation. All features which might contribute to dehumanise people with intellectual disabilities.

1.2 Literature Review Goals and Literature Search Strategy

The aim of this literature review was firstly to examine what published evidence there might be that suggests professional bias against people with intellectual disabilities and to review any theoretical frameworks that may be instructive in understanding the reasons for this bias. The search strategy consisted firstly of a manual search of 10 high-quality, high-impact journals between 1980 and 2007 (e.g. *British Journal of Clinical Psychology, Journal of Intellectual Research and Journal of Applied Research in Intellectual Disabilities*). Secondly, a computer search of Medline and Psychinfo was conducted using the key words “intellectual disabilities”, “bias”, “stigma” and “overshadowing”. The results of the search were collated and the most pertinent journal articles selected.

1.3 Author’s Experience

Mary has a moderate learning disability, epilepsy, survived an undiagnosed brain tumour, had been resident in a long-stay hospital for 25 years and was then almost *certainly sexually abused in her next home. All this considered she was a friendly good humoured person but was having some problems with a particular member of staff. This caused her to become upset and scream and it was because of this 'screaming behaviour' as they called it, that I came to know her. I arrived at the care home one day to be told she was 'acting out' (she was 55 years old) worse than usual and that this was particularly inconvenient as one of the resident's in a neighbouring room had just died and their family was due to visit at anytime. It was obvious Mary was upset because her friend had died and she described how good the women had been to her over the last few years. What surprised me was the inability of the people supporting her, the people that should know her best, to read any emotional meaning into her behaviour whatsoever.*

1.4 Definition of Empathy

em·pa·thy (ĕm'pə-thē)

n. "Direct identification with, understanding of, and vicarious experience of another person's situation, feelings, and motives". (Random House Unabridged Dictionary, 2006)

1.5 Background

In his book *Cognitive Counselling for people with Special Needs* Lovett (1985) describes how carers and professionals who work with people with intellectual disabilities describe their client's behaviour in seemingly objective but actually meaningless ways (e.g. attention-seeking) rather than describing an emotion which may be the cause of a particular behaviour (e.g. a friend dying and feeling sad, angry or anxious). Thus the *meaning* of behaviour is often not considered and behaviour which may be a reasonable response is judged negatively and in isolation. Worse still, it is often then the 'behaviour' that is 'treated' either using behavioural technologies or medication. This approach is likely to either fail as it does not engage the underlying problem or if the problem behaviour is 'extinguished' its original function is likely to manifest itself as a different behaviour. Equally, the use of medication can amount to chemical restraint (Stenfert Kroese, Dewhurst & Holmes, 2001) instead of carefully targeted medical intervention. More fundamentally, to fail to recognise and validate people's emotions and neglect their psychological well-being is dehumanising and as research into personality disorder demonstrates, damaging (Linehan, 1993). 'To attend to the emotional well-being of people with profound and multiple learning disabilities is to assert their very humanness and their right to quality of life' (Sheehy & Nind, 2005, p.34).

This paper reviews studies that have focussed how professionals and carers working alongside people with intellectual disabilities are subject to bias towards this group as a consequence of their socially constructed label. It begins by examining the work conducted in the field of intellectual disability and grief as well as the effect the ID label has on the accuracy of mental health diagnosis (diagnostic overshadowing). Attribution theory is considered as a framework for understanding carer and professional reactions to the person with an ID as is theory around the stigmatising effect of labels. Finally, it aims to review the level of need people with intellectual disabilities have in terms of emotional difficulties and how this need is addressed by psychological services. Lastly the implications for clinical practise and further research are discussed.

1.6 Supporting Evidence for Behavioural Bias

Lovett's (1985) observation that professionals working with people with intellectual disabilities lacked emotional understanding and recognition was made shortly after the 1970's during which behaviour therapy was the preferred treatment of many practising psychologists and people with intellectual disabilities were out of sight, incarcerated in large sub-normality hospitals (Arthur, 2003). It could be argued that cognitive-behavioural approaches have become more recognised (Whitehouse, Tudway, Look & Stenfert Kroese, 2006) and the quality of residential living within the community has improved (Young, Ashman, Sigafoos & Grevell, 2001). However, studies in the 1990's have found a continued focus on behaviour rather than underlying emotions in both the description and treatment of psychopatholoy in people with ID (e.g. Harper & Wadsworth, 1993; Hollins & Esterhuyzen, 1997). Harper and Wadsworth (1993) conducted a study in which 43 adults with moderate to severe intellectual disabilities were interviewed about their experience of the loss of a significant other in the previous 3 years. They also asked 100 support staff and professionals how people with intellectual disabilities cope with loss. They found adults with ID reported mainly emotions. Most commonly, sadness, anger and anxiety. The carers and professionals however reported mainly behaviours, most commonly, irritability, disruptiveness, hostility, loss of appetite and sleep difficulties. The authors postulate that these behaviours are likely to be mediated by some type of depressive state. They also found that only a few of the staff cohort were able to identify resources that were available to assist people with intellectual disabilities who had been bereaved. This study indicates that carers and professionals do notice the behavioural symptoms of grief in people with intellectual disabilities but implies that the recognition of these symptoms as depression is often unlikely and even when made there appear to be scarce resources to work effectively with the person in question.

Similarly, Hollins & Esterhuyzen (1997) investigated whether bereavement together with its concomitant life events, had an observable effect on adults with ID. They write that “treatment interventions are often directed at suppressing the rate and severity of the problem behaviour without addressing the underlying causal factors” (p. 500). Similarly, MacHale & Carey (2002) matched 20 adults with ID who had experienced the bereavement of a primary caregiver in the previous two years with 20 adults with ID who had not. They found significantly higher levels of ‘psychiatric disturbance’ and ‘challenging behaviour’ in the group that had experienced the bereavement. They conclude that it is important to include screening for bereavement in any assessment and that is it possible that grief could be misdiagnosed as ‘disturbed challenging behaviour’ in people with intellectual disabilities. They go on to make recommendations for grief counselling appropriate to the cognitive abilities of the person.

Being institutionalised and ‘cared for’ can be associated with one of the inequities that people with intellectual disabilities experience. If someone without an ID has depression and they consistently do not get out of bed in the morning it is taken as a clear indication of their emotional (and cognitive) state. For someone with an ID in any kind of institutional setting (e.g. having support staff with a days’ routine in mind) refusal to get out of bed could be seen as ‘challenging’ or ‘aberrant’ and the underlying, emotional cause be missed. In a study which exemplifies this problem Prasher & Hall (1996) matched 10 people with Down’s Syndrome with 10 people with Down's Syndrome and a diagnosis of depression. Eight of the depressed group were treated with anti-depressants with none receiving ECT, psychotherapy or cognitive therapy in the year before follow-up. Before this treatment the depressed group showed significantly more maladaptive behaviour, as measured by the Adaptive Behaviour Scales (ABS, Nihra, Lelan and Lambert, 1993). After treatment there was an improvement in symptoms of depression (significantly, mood, sleep, interest and energy) and a decrease in maladaptive behaviour. This suggests that the difference in behaviour was attributable to depression and implies, again, that it is crucial that the emotion and motivation that underlie behaviour is detected before treatment commences. Although the intervention here was purely pharmacological the drugs were anti-depressants and were therefore directly aimed at treating the depression. Indirectly, the study also implies that given accurate screening, anti-depressant medication alone has some positive effect on mood, sleep, energy and interest in people with Down's Syndrome.

The treatment of the symptoms as opposed to the cause of distress is likely to achieve sub-optimal results and fails to understand the function of the behaviour of a particular person (Sovner & Lowry, 1991). Unsurprisingly Hollins & Esterhuyzen (1997) found that aberrant behaviours increased in a group of bereaved people with ID compared to controls. What concerned the authors was that the majority of carers did not perceive the person's behaviour to be affected by the bereavement despite objective data showing this to be the case. In the majority of the cases the behaviour was assumed to be part of the person's innate personality or due to their intellectual disability. In contrast to these findings an Irish study (Dodd *et al.* 2005) looked at caregivers' experience of the reaction of people with intellectual disabilities to bereavement. They found that 43% of described responses were emotional descriptions (e.g. sadness, crying, anger etc.) and 25% were behavioural (withdrawn, attention seeking), suggesting a higher level of empathic understanding in this context. They also found a high level of participation in grief rituals reflecting the high general levels of participation in these rituals by the public in Ireland. It is possible that the high levels of emotional recognition by the support staff in Ireland was a result of the participation in grief rituals. Such participation represents a normal social response to bereavement and took place in a context within which these symptoms of grief are normal, hence the underlying cause of these behaviours may have been more appropriately acknowledged.

1.7 The prevalence of emotional problems in people with intellectual disabilities

The prevalence of emotional problems in people with intellectual disabilities is considered to be higher than in the general population (Chaplin, 2004, Jopp & Keys, 2001), highlighting a need for services that deal effectively with psychological distress in people with intellectual disabilities. There is some contention about exactly how much greater psychological problems in people with intellectual disabilities are. A review of epidemiological data from the past 20 years by Whitaker & Read (2005) led them to conclude that the rate of psychiatric problems was indeed higher in children with ID and people with severe ID compared to the general population. However, their finding was that there was little evidence for any differences in the moderate intellectually disabled population. This is a difficult conclusion to draw with certainty since epidemiological data requires accurate detection. To be included a person would have to be accurately identified as having an ID and also have a secondary diagnosis accurately made. Also, children with ID and adults with severe

ID are much more likely than people with moderate ID to be receiving the support of services and therefore have their depression accurately detected. At present this is problematic due to the lack of consensus about how to assess depression in people with intellectual disabilities. The Diagnostic Manual of Mental Disorders (DSM-IV, APA, 2000) relies on self-report, reflection and emotional insight, things that people with impaired communication skills are less capable of (Jahoda, Dagnan & Kerr, 2006).

The literature on depression, the most common mood disorder, in people with intellectual disabilities is in its nascent stages in comparison to those without an ID. It was only as recently as the early 1980's that there was any recognition within the literature that people with intellectual disabilities were *capable* of having depression. The psychological profession, despite advances in describing cognitive function, working with challenging behaviour and service planning, has conducted little research into emotion in people with intellectual disabilities (Arthur, 1999). There is significant research on people with intellectual disabilities' ability to recognise emotions in others but oddly not in the ability of the people who work with them to recognise it in them. Clark, Reed & Sturmey (1991) studied staff perceptions of sadness, finding staff did not report 'sad' behaviour or differentiate it from other internal factors. Neither had staff received any explicit training relating to the expression and understanding of emotion in people with intellectual disabilities.

Clearly, the greater the level of disability and the higher the associated levels of communication problems, the less overt (or more idiosyncratic) the signs of emotional distress become. Chaney (1986) used physiological measures of distress to provide objective evidence that people with profound ID experience an adaptive reaction to stressful situations. In a non-disabled population the diagnosis of affective disorders relies heavily on self-reporting. This makes diagnosis in people with intellectual disabilities with associated communication difficulties problematic and often, reliant on the correct interpretation of behaviour, particularly in people who are non-verbal. In a review of the available literature on the assessment of depression in people with intellectual disabilities, McBrien, (2003) cites the conclusion of previous reviews that diagnostic criteria for depression is inadequate in people with intellectual disabilities and that depression will manifest itself differently according to the severity of the ID. Accurate diagnosis in more severe ID would need to involve people that know the person best. A regular support worker or close family member would be better able to describe change in affect and behaviour over time. This approach is used in the Autistic Diagnostic Interview (ADI, Lord, Rutter, & Le Couteur, 1994) which involves the parents of the child suspected of being on the autistic spectrum. Finding a definitive way of assessing depression is an elusive goal. What is clear though is that people with ID often have to cope with social deprivation, frequent failure, small or nonexistent social networks and fewer employment opportunities, all features which increase vulnerability to mental health difficulties (Dykens, 1999). The research therefore shows that the accurate diagnosis of psychological distress in people with intellectual disabilities is difficult. However, the psychological profession may have to consider aiming their resources towards overcoming this challenge and adapt to the needs of people with intellectual disabilities in line with the core tenet of the therapeutic model, the attempt to alleviate distress, rather than to simply apply existing support networks unfit to accommodate people with intellectual disabilities (O’Brien, 2003).

2. History of the concept of the therapeutic alliance and people with intellectual disabilities

During the early half of last century psychological approaches to clinical problems were dominated by psychodynamic and psychoanalytic approaches. The 50's and 60's saw the development of two further psychological approaches with starkly different values at their core, those of Skinner (1904-1990) and Rogers (1902-1987).

2.1 Behaviourism and the therapeutic relationship

Skinner was developing his learning theory based on the experimental work of Pavlov (1849-1936). Learning theory holds that all behaviour is the result of learning and is influenced by environmental factors. Undesirable behaviours are seen as habits resulting from maladaptive learning. From this premise Skinner developed 'behaviour modification' which seeks to change behaviour by manipulating the consequence of behaviour using reward and punishment. This approach served as the basis for psychological intervention in people with intellectual disabilities. It is used directly to extinguish unwanted behaviours and incorporated into institutions in the form of 'token economies' where patients were rewarded for desired behaviour. The fundamental advantage of this approach in working with people with intellectual disabilities was that it did not require the extensive dialogue of the existing talking therapies but rather relied on 'objective' observations. It was adopted as a useful technology in the large sub-normality hospitals, sometimes abusively in its most simple forms (O'Brien, 1991). A psychiatric nurse, recently described how in the 1960's the psychologist he worked with advised squirting lemon juice in the eyes of residents as aversion therapy for unwanted behaviours (2004, Personal

Communication, Anonymous). Such aversive 'therapies' are well documented, for example, Guess, Helmsetter, Turnbull & Knowlton (1987) reviewed 38 studies published between 1965 and 1984, all of which described the use of punishment to influence a variety of 'negative' behaviours. The techniques used included pinching, slapping, exposure to white noise, inhalation of ammonia, being bathed in cold water, the application of electric shocks, and forcing vinegar into the mouth. These approaches were used disproportionately with people with severe intellectual disabilities (79%). In the US the debate over such techniques was brought to the fore by the death of a man during an individually prescribed treatment (O'Brien, 1991). The treatment involved shackling the man to a chain by his hands and feet, placing a hood over his head and subjecting him to loud white noise. Such approaches continue today. A recently published single-case report (Slavy, Mulick, Butter, Bartlett & Lincheid, 2004) describes the use of 'electrical stimulation', equivalent to 'having a rubber band snapped on the arm' (p.62), to treat head-banging in a 3 year old girl. The girl wore a device strapped to her leg with the experimenters and subsequently her mother using a remote control device to activate the electric shock. They describe the treatment as being used in conjunction with positive reinforcement for desirable behaviours. The treatment was effective in stopping the girl banging her head within 6 days although she wore the device for 60 days. Results were maintained at 7-month follow-up. Self-injurious behaviour is distressing for all involved and potentially detrimental to the health of the person engaging in it. It is therefore easy to see how this approach could have had a profoundly positive effect on the family and on the girl herself. It was administered for a relatively short duration; indeed the authors' rationale for using the approach was that the caregivers had rejected systematic positive reinforcement due to stress and that any further positive-only programmes would be resource intensive with no guarantee of success. One of the chief concerns here is the ease with which one could be seduced by the speed and convenience of such approaches. The authors put forward a compelling justification for their treatment but as O'Brien (1991) points out, what if the purposeful infliction of pain rapidly becomes a bureaucratic debate about 'least intrusive procedures' or the use of 'self-injurious behaviour inhibiting devices'. Put simply, the approach described above involved inflicting pain on a 3 year old child until she behaved in a way that *others* deemed to be acceptable. The theme arising is the extent to which society needs to apply its rules and norms on people with intellectual disabilities and the extent to which people with intellectual disabilities have a right to be different.

2.2 The influence of Client Centred Therapy

During the formation of the Behaviourist paradigm, Rogers published *Client Centred Therapy (1951)*, which purported that a relationship which encompassed the basic tenets of empathy, consistency and unconditional positive regard was, in itself, enough to promote the healing process. Rogers firmly put the onus on the therapist for providing the right 'ambience' for therapy, something that was contrary to the 'seeing what develops' approach taken by the psycho-analysts. Since then literally thousands of research studies have examined these factors and on the whole support the notion that a good therapeutic alliance is highly correlated with good outcome (Hovarth, 2000). In the early years of using behavioural techniques with people with mental health problems the therapist was seen as a behavioural technician but it rapidly became clear that a good working alliance was necessary if the therapy was to be successful. Similarly, in cognitive behavioural therapy (CBT) the alliance was initially not considered to be of great importance, rather that change was due to the techniques being used. As time has gone by, the concept of the alliance and the presence of a collaborative relationship has become central to the philosophy of CBT. There seems to have been a delay in mapping this progression onto work with people with intellectual disabilities and it took the (later) advent of values-based, person-centred planning to begin to achieve it (O'Brien, 2003). However, difficulty remains in that building an alliance with someone with an intellectual disability can often take longer and that any individual work is often accompanied by training the care staff supporting the person. Evidence for the paucity of attention to the therapeutic alliance comes from Harchik, Sherman and Sheldon (1992). They analysed over 50 studies of self-management techniques finding that the people with intellectual disabilities rarely had any involvement in setting treatment goals. Furthermore they found that treatment goals nearly always involved social control or an increase in performance at work. Accordingly, outcome was measured by changes in productivity or the amelioration of unwanted behaviours. It was rare that the psychological well-being of the client was included in outcome measures. Improvement is therefore measured in societal benefits rather than personal gain.

The person-centred approaches developed by Lovett (1985) and O'Brien (2003) are notable for the way they seek to understand the person's needs, desires and dreams and shape the person's care accordingly. These lifestyle approaches are designed to ensure the person is not only being managed but leads a lifestyle that is enriching and promotes mental well-being. This represents a paradigm shift from people with intellectual disabilities being passive recipients of behaviour modification to holding collaborative, therapeutic relationship at the core of any work with people with intellectual disabilities. These approaches were heavily advocated in the government's

'Valuing People' white paper (Department of Health, 2001) along with an emphasis on the importance of people with intellectual disabilities being able to access health services in the community. The findings of the Healthcare Commission's (2007) investigation in the Sutton and Merton Primary Care Trust however paint a different picture. They found that person-centred plans existed only for a minority of people and concluded that institutional abuse was prevalent in most parts of the learning disability service. They concluded that poor staff training and high levels of staff turnover were to blame and that the psychology department was under-resourced. This is evidence of systemic bias towards people with intellectual disabilities, although it is difficult to ascertain whether, in this case, it was occurring at an organisational (the care provider) or governmental (policy and funding) level. Either way the report's findings are serious enough to initiate a nationwide review of all UK intellectual disability services.

2.3 Recent developments in psychological treatment for people with intellectual disabilities

Recognising and dealing effectively with people's emotions is a far more humane process than endeavouring to extinguish the behaviours that are symptomatic of the emotions. However, clinical psychology is an evidence-based profession and treatment needs to have some empirical basis (Roth & Fongay, 1996). Since Bender's (1993) description of the therapeutic disdain shown towards people with intellectual disabilities there has been a burgeoning interest in the use of cognitive-behavioural and psychodynamic interventions and significant efforts to quantify these methods. A recent review paper in this area concluded that psychotherapies for people with intellectual disabilities (including those studies using control groups) showed a moderate benefit across levels of intellectual disability and age (Prout & Nowak-Drabik, 2003). The review was heavily criticised by Sturmey (2005, 2006) on the basis that there is still limited evidence for the effectiveness of individual types of therapy i.e. psychodynamic vs. cognitive behavioural. Sturmey (2005/6) stated that behavioural intervention must remain the treatment of choice for people with intellectual disabilities since there are a large number of documented empirical studies using a behavioural approach. Sturmey (2006) also makes the argument that very often treatment successes are attributable to the behavioural element of the treatment as opposed to the cognitive i.e. that the treatment involved respondent extinction to a conditioned stimulus (e.g. a nightmare) or that any change in verbal self-reporting is due to differential reinforcement by the therapist. This view of the efficacy of psychotherapeutic input has been countered (Beail, 2005) by the observation that the meta-analytic reviews upon which Sturmey (2005) based his assertion - that behavioural intervention is the only validated treatment - relied upon data mostly from children (76%) and people with severe and profound ID (74%). Beail (2005) also points out that there is actually very little evidence that behavioural approaches are efficacious in psychological disorders.

In fact there can surely never be a winner of this behavioural versus talking therapy battle. Different approaches have their own unique advantages and disadvantages. It can also be difficult to identify agents of change with strong levels of certainty. Behavioural approaches have the advantage of being highly quantifiable by virtue of identifying target behaviours, counting them and determining if they have changed as a result of the intervention. Behavioural approaches also have the luxury of side-stepping the problematic process of quantifying emotion in people with intellectual disabilities, something that is important in CBT. However, the fact that CBT is concerned with emotion means it could be argued that it is better placed to treat mood disorders. There is also the question of level of intellectual functioning and insight. CBT is also concerned with cognitions, something that becomes increasingly difficult to access as the level of ID increases. This is neither an advantage nor a disadvantage since a cognitive approach might be successful in someone with a mild ID but problematic in someone with a severe ID. The question of alliance and consent further confounds the debate. Behaviourism lends itself to the treatment of problems which pose a challenge to the system without the need to build an alliance with an individual to whom twiddling bottle tops, for example, might be a sorely needed way of coping. CBT requires a person to consent too, and be motivated in treatment. A good working alliance is positively correlated with good therapeutic outcome (Hovarth, 2000) and there will be a variance in the quality of the alliance in any therapy. This affects the strength with which conclusions can be drawn from studies which argue that the technique used was solely responsible for any change. Clearly, it is important that clinicians base their work on evidence and good formulation and in reality a clinician will probably use the skills available to them in the context of the problem. This could include applied behavioural analysis with added talking therapy to help a child with autism with self-injurious behaviour and could include a cognitive-behavioural treatment for obsessive compulsive disorder in someone with a mild or moderate ID. It is therefore important to employ well-trained, competent clinicians using established methodologies. With the most important features of treatment being that the clinician respects and seeks to understand the experiences of their client and does not abuse the inherent imbalance of power in the relationship. In reality psychological resources are scarce and there are wide variations in the number of psychologists being employed in different areas within the UK (Bush, 2006). Often psychologists within the intellectual disability services do not have the time for intervention because of their commitments to the Assessment and Care Management process.

3.0 Diagnostic Overshadowing

3.1 Introduction to diagnostic overshadowing

In the previous section the propensity of professionals to focus on behaviour rather than underlying emotional causation has been considered. Evidence that the ID label effects the judgements of diagnosing clinicians can be found in the diagnostic overshadowing literature. This phenomenon was explored by Reiss, Levitan and Szyszko (1982) and describes the tendency of clinicians to assess the degree of concomitant psychopathology less accurately in people with intellectual disabilities compared to other groups such as people with addictions or with psychosis. The experimental design shows the failure is due to clinicians perceptions of the client's intellectual disability rather than the complexity of sorting out multiple diagnoses in a single person (Jopp & Keys, 2001). The basic paradigm involves asking clinicians to read case studies which describe a person with symptoms of a particular disorder e.g. phobia. In each condition the person has a different primary diagnosis i.e. learning disability, schizophrenia or alcoholism. The robust finding is that the diagnosis, of phobia in this example, is less commonly made for the ID group and when it is made it is less likely to be treated using psychotherapy or psychopharmacology (Spengler, Strohmer & Prout, 1990).

3.2 Evidence of diagnostic overshadowing in the UK

There are only two published diagnostic overshadowing studies with participants from the United Kingdom. The first (Sayal & Bernard, 1998) failed to establish the presence of the bias but was concerned only with the diagnosis of psychosis not emotional problems. The second (Mason & Scior, 2004) used the experimental paradigm described above to investigate the bias in UK psychologists and psychiatrists (n=223). They found the bias to be present for both diagnosis and for the type of treatment recommended. People with intellectual disabilities were less likely to be considered for admission to hospital, for a mental health assessment or for medication. Interestingly, they were more likely to be recommended for psychological therapy. The authors also claim to be the first to compare distinct professional groups. Unsurprisingly, they found that psychiatrists were more likely to recommend hospital admission and drugs and psychologists more likely to recommend psychological therapy. However, they found that psychiatrists appear significantly more affected by the bias than psychologists. They speculate that the reason for this is may be that psychologists do not normally diagnose and since the process of diagnosis is unfamiliar they may have attended to the task more carefully. This study provides a further indication of how professionals trained to diagnose and treatment mental health problems have a propensity to miss mental health diagnoses in people with intellectual disabilities. Since diagnostic overshadowing studies control for differences in symptom presentation between ID and non-ID groups by describing the same symptoms, it cannot be argued that the bias is simply due to complex presentation in people with intellectual disabilities. It also implies that within services diagnoses of mental health problems in people with intellectual disabilities are being missed and appropriate treatment not offered.

3.3 Criticism of Diagnostic Overshadowing research

Despite the fact that the diagnostic overshadowing bias is a relatively robust finding across countries and professions it is subject to criticism for its level of ecological validity as the bias has yet to be shown outside this vignette-based approach (Mason & Scior, 2004). It could therefore be argued that the finding is clinically insignificant and an artefact of the methodological approach used. There is certainly good reason to try and implement a more real-life, observational approach, to demonstrate the finding in a clinical setting. It does appear slightly trite however, to make this recommendation (e.g. Jopp & Keys, 2001; Mason & Scior, 2004) without considering how difficult it would be to implement such an approach. The diagnostic overshadowing paradigm is based on the vignettes being the same apart from the presence of the ID in the subject of the vignette. In a real-life setting it is impossible to control for the wealth of interpersonal processes involved in a diagnostic assessment or indeed in attempting to match people with and without ID for symptom type. An observational approach would almost certainly be subject to the counter-criticism of not being sufficiently rigorous and therefore invalid.

It is also extremely difficult to recreate a ‘typical’ diagnostic interview. In the ideal world a clinician would have a wealth of client information, sufficient time to conduct the assessment and immediately available treatment options. In the real world these treatment options are not always freely available and clinicians are required to make decisions about who might make best use of treatment, leaving people with intellectual disabilities open to the clinician’s belief that certain treatments might be less (or more) suitable for that group. Treatment tends to be what is available 'in-house' rather than what is ideal for a particular person.

Another compelling reason why it is pertinent to continue research in this area is why the bias occurs at all. Is it that the causal mechanisms are a by-product of negative attitudes towards people with intellectual disabilities, the effect of labelling or a hangover from the behavioural technologies of the 1970's and 80's? Alford and Locke (1984) theorised that preconceived clinician stereotypes might be responsible and predicted that working in ID longer might lead to a disconfirmation of stereotypical reactions. Unfortunately, experience has not been found to affect diagnostic overshadowing therefore suggesting that either this is not the explanation or that there is something about working in ID settings that serves to maintain stereotype. Jopp & Keys (2002) therefore cited this area as requiring further research.

4.0 Attribution theory

4.1 History

Attribution theory seeks to explain the information processing that occurs when we try to determine why people behave as they do in a social world and what the causes of that behaviour may be (Weiner, 1986). Heider (1958) is the originator of attribution theory in psychology. He recognised that in trying to understand other people we make a fundamental causal distinction: "The result of an action is felt to depend on two sets of conditions, namely, factors within the person and factors within the environment" (p.89). Whether the locus of causality is in the observer, the environment, or both, will affect our understanding of why someone behaves in a certain way. Jones and Davis (1965) developed a correspondent inference theory which proposed that we, as humans, strive to form stable explanations for people's behaviour so we are able to predict their behaviour in the future. Kelley (1967) took the idea a step further in seeking to explain how we make attributions for both single events and events we experience multiple instances of. Kelley (1967) hypothesised that we make an analysis of cause when we do not have sufficient information with which to function. Specifically, the causal locus (internal versus external) is assessed according to three dimensions: Consensus, Distinctiveness and Consistency. The pattern of the information gained from these three dimensions equips us with logical implications for causation. The locus of causation is internal when the behaviour meets our expectations of the person and not the situation and vice versa for external causation. Kelley's model implies that carers of people with intellectual disabilities may make an assessment of the appropriateness of the behaviour depending on the level of intellectual disability. When someone does not have sufficient information to make these judgements they then use 'causal schemata' to explain events. A kind of causal shorthand based on past experience (e.g. that people with intellectual disabilities are generally difficult and aggressive). Weiner's (1979) model is however the most frequently cited in the healthcare literature and therefore the model that will be the focus of this section.

4.2 Weiner's taxonomy of attributional dimensions

Weiner's (1986) taxonomy of attributional dimensions states that any attributions we make affect our subsequent behaviour. The model states that we will respond to a person's behaviour according to our beliefs about its stability (stable-unstable), generality (general-specific), locus (internal-external) and controllability (controllable-uncontrollable). This makes implicit sense, for example when someone stumbles into you on the street. If you make an internal attribution e.g. that the person is drunk, you are likely to be annoyed. If the attribution is external e.g. the pavement is icy or uneven you are more likely to be sympathetic. The model seeks to explain not only the dimensions upon which we make attributions (the 'why?') but also about how people subsequently respond as a result of these attributions. This approach is commonly used across psychological research to determine the style of attribution in different groups and under different circumstances, often using the 5 questions of the Leeds Attributional Coding System (LACS; Stratton, Munton, Hanks, Heard & Davidson, 1986):

1. Internal-External: 'To what extent do you think that the behaviour (or event) is caused by something specifically to do with the person or something else?'
2. Controllable-Uncontrollable: 'To what extent do you think that person would have control over the behaviour (or event).
3. Stable-Unstable: to what extent do you think that the cause of the behaviour (or event) will be present again in the future?
4. Universal-Personal: 'to what extent do you think that this behaviour is caused by something unique to the person (or event) or by something common to most people (or events)?
5. Global-Specific: 'would the cause influence the person (or event) in other situations or would it only influence this sort of situation?'

4.3 Stable Attribution Biases

There are a number of robust biases in the way people make attributions. In the fundamental attribution error (FAE, Jones & Harris, 1967) people are considered more likely to attribute the actions/mistakes of others to personal characteristics (internal) rather than to situational factors (external). For example, a support worker might assume someone with autism is behaving aggressively because they are an aggressive person (internal) whereas the reason for the aggression may be due to a negative interaction with another person that cannot be effectively communicated.

The self-serving bias (SSB) describes our tendency to take more of our fair share of the credit when things go well and to blame others when things go badly (Heider, 1958). This bias can be understood according to Weiner's (1986) attributional dimensions. Positive events involving the self are rated as more internal, stable and global whereas negative events are rated as external, unstable and specific. For example, a therapist with a good outcome might attribute the success to their well developed skill set (internal), the fact that they have always been a good therapist (stable) and that they will be successful wherever and with whomever they work (global). After a bad outcome the therapist might be more likely to label the person as not motivated or resistant (external), predict that it is unlikely to happen again (unstable) and only relevant to this person (specific). This bias serves an important function in the preservation of self-concept (Baumeister, Dale & Summer, 1998) in the face of criticism or failure. In mental health problems (such as depression) the attribution style can change (Kelin, Fencil-Morse & Seligman, 1976) whereby a mistake would be seen as the fault of the client (internal), the cause of a person's own mistake (their inadequacy) as being present for the foreseeable future (stable) and affecting all situations (global).

4.4 Attribution and Care

Sharrock, Day, Qazi & Brewin (1990) proposed that Weiner's (1986) model of helping behaviour is useful in understanding the behaviour of professionals in health care settings. Weiner's (1986) model introduces the idea of emotion as a factor in determining a person's propensity to help. In dealing with challenging behaviour the member of staff who believes the person is in control of their actions is more likely to be angry and therefore less helpful than the member of staff who believes the cause is beyond the person's control, and as a result, is more positive and helpful. Corrigan (2000) translated Weiner's attribution theory to a model of professional care which predicts how cognitive mediators translate into an affective response and corresponding behaviour.

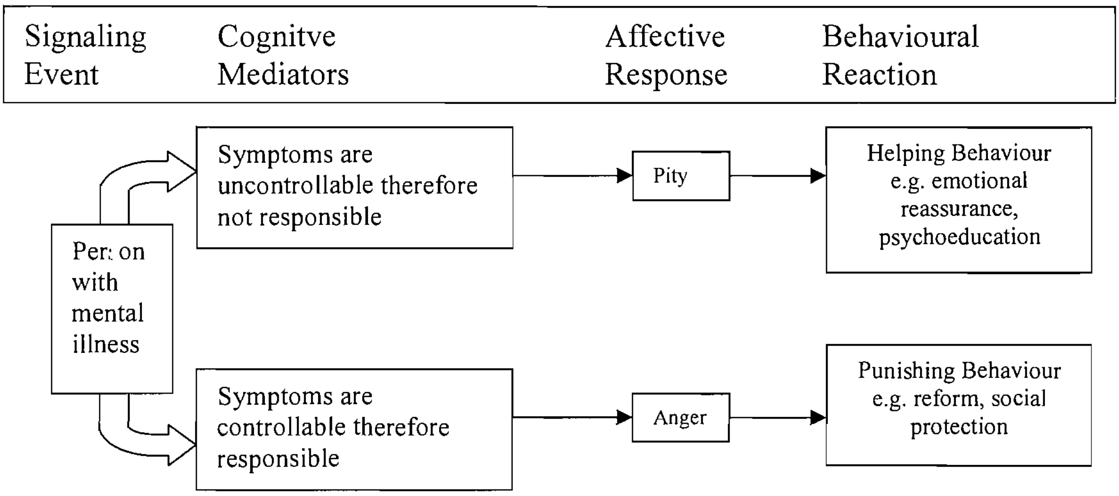

Figure 1. A path model representing the relationship between outcomes, affect and attributions (Corrigan, 2000)

Support for Corigan's (2000) model comes from Dagnan, Trower & Smith (1998) who analysed the responses of staff working with clients with challenging behaviour.

They found staff who were optimistic put extra effort into helping and that staff who reacted negatively to the behaviour believed the person had control over their behaviour. In a further study Hill & Dagnan (2002) examined the relationship between the attributions and emotions reported by support staff working with individuals with intellectual disability and challenging behaviour. They found that attributions for internality and controllability were negatively correlated with sympathy and helping behaviour (as the model would predict). They also found that the staff who adopted a problem solving approach to deal with the person made fewer internal attributions, experienced more sympathy and were more likely to help. Cottle, Kuipers, Murphy and Oakes (1995) interviewed 48 carers who had been victims of violent incidents in a psychiatric hospital. They studied the carers' attributions, finding that they were generally internal to the client and external to themselves. Hastings (1995) reported that a majority of participants in a study of causality of challenging behaviour viewed the behaviour as intentional in 74% of incidents. The clear pattern of findings from these studies is that care staff who attribute externally and judge the person not to be in control of their violent behaviour are generally more optimistic and sympathetic. This concurs with the literature on expressed emotion and attribution (discussed below) which shows a positive correlation between carer hostility and attributions of control.

Markham & Trower (2003) asked staff to rate client level of control, and their own level of sympathy towards a patient exhibiting negative behaviour in people with borderline personality disorder, schizophrenia or depression. They found that attributions of control were significantly and negatively correlated with sympathy ratings. This finding is in line with Weiner's (1985) model but it is also interesting as the staff were less sympathetic towards the borderline group. Indeed, their mean ratings of sympathy fell below the midpoint into the 'not sympathetic' range whereas when the participants imagined the person to have either depression or schizophrenia they were 'extremely sympathetic'. This points to the effect of people's preconceptions and experience of what different mental health labels mean and the influence they have on professional's attributions of causation.

4.5 Attribution and expressed emotion (EE)

Outside of the intellectual disability field there is an extensive literature focussing on the effect of expressed emotion (the extent to which a family member of carer is critical, hostile or emotionally over-involved with the patient) and attribution style. In a review of the literature Barrowclough & Hooley (2003) highlight the consistent finding that there are clear differences in attribution profile between people who show high levels of expressed emotion in the form of hostility compared to those who show low EE. The thirteen articles cited (Barrowclough & Hooley, 2003) all show that critical and hostile relatives have an underlying belief that patients could do more to control their symptoms (and therefore have more control). They also show that the number of criticisms they make and the controllability bias they hold are positively correlated. Studies using LACS have shown that high EE critical relatives are more likely than low EE relatives to attribute problems to stable, internal and personal factors (Brewin, *et al.*, 1991; Hooley & Licht, 1997). Weigel, Langdon, Collins & O'Brien (2006) used measures of EE in carers working with people exhibiting challenging behaviour. They asked 15 members of staff to complete measures of EE and attribution for a client with ID they worked with who also exhibited challenging behaviour. After categorising the support workers into high and low EE groups they found that the high EE group rated the behaviour of the person they were supporting as more controllable and internal to the client than the low EE group.

With the preceding exception EE and attribution studies have mostly been conducted with families of people with schizophrenia however they have implications for the care of people with intellectual disabilities. The greater our understanding of attributional style, EE and staff effectiveness the greater influence Psychology could have in helping staff identify and remedy the maladaptive attributions they make. Brewin (1994) demonstrated that attribution styles can be altered as a result of training designed to reduce EE. This implies that in ID, professional training that encourages a reduction in EE could foster a more positive attribution style.

5.0 Labelling

5.1 Background

In society we widely ascribe labels to different groups. This is a necessary heuristic for organising the complex world in which we live. Within society we use socially constructed labels constantly: lower, middle and upper class, Northerner and Southerner, the list is endless. Clearly some labels are perceived as 'better' than others. Some labels are powerfully negative and used as insults, for example: Nazi, social leper, paedophile. Interestingly, some labels have been 'reclaimed' by the groups they were originally intended to insult. The word 'poof' is now openly used in the gay community; the word 'nigger' appears regularly in the work of black musicians. Labels are therefore highly ambiguous, necessary for organising our social world and, most importantly, are particularly powerful in guiding our views and expectation of the group the label describes. For example, two different people might predict entirely different attributes to someone with the label ‘asylum seeker’. Haney, Banks & Zimbardo’s (1973) infamous ‘prisoner experiment’ assigned psychology undergraduates the role of either ‘prisoner’ or ‘guard’ and placed them in a simulated prison setting. The experiment had to be abandoned two days early due to the abuse the ‘prisoners’ were suffering at the hands of their peers. This emphasises the way people can adopt the role given to them by the label they are assigned. Rosenthal & Jacobson (1966) randomly selected pupils and told their teachers they would learn faster than the other children. They found that these students showed higher than average rises in IQ as a result of teacher expectations and concomitant behaviour.

5.2 The effect of Mental Health Labels

Mental health labels can have particularly stigmatising effects. Rosenhan’s classic (1973) study showed the effect of the schizophrenia label. Participants feigned the symptom of ‘hearing voices’ and once admitted to psychiatric units found the label of being psychotic difficult to shake off despite behaving perfectly normally on admission. The relative advantages and disadvantages of diagnostic labelling mirror the differences between the therapeutic (psychological model) and the medical (psychiatric model). The advantages of diagnostic labels are that as long as everyone uses the same criteria, research and treatment outcomes can be compared in a valid manner both nationally and internationally. This can be especially helpful in clinical research when samples are often relatively small. For example, most psychologists treating depression will use the Beck Depression Inventory (Beck, Steer and Garbin, 1988) to measure outcome. That said the diagnostic labels of the currently used DSM-IV (American Psychiatric Association, 1994) and ICD-10 (WHO, 1992) can lead to rigid treatment approaches that mask the holistic requirements of the person. And, as the Rosenhan (1973) study shows, the label can become a self-fulfilling prophecy.

5.3 Labelling and Intellectual Disability

Markham and Trower (2003) found that staff regarded challenging behaviour to be more under the control of the person when they believed them to have borderline personality disorder as opposed to depression or schizophrenia. In accordance with Weiner's (1986) theory of attribution they also found the staff less sympathetic when they believed the person had borderline personality disorder. The study of heuristics has been used as an explanation. The representing heuristic (Kahneman, Slovic & Tversky, 1982) explains our tendency to assume commonality between objects of similar appearance. It occurs when making judgements about which group (or disorder) an object (or person) belongs to. And, that we stereotype according to our understanding of what that particular group is.

These points are drawn into focus in the long-running debate about labelling in intellectual disability, learning disability or mental retardation depending on your geographical location and professional persuasion. A label that describes people who fall below a particular score on a particular test is of course a social construction itself (Manion & Bersani, 1987) and has been considered by many to be both a dominant and stigmatising one (Beart, Hardy & Buchan, 2005). In the early to mid-twentieth century people with intellectual disabilities were categorised as 'moron', 'cretin', 'idiot' or 'imbecile' depending on their 'mental age'. This became unacceptable and the term 'sub-normal' was adopted only to be subsequently dismissed (McDonald, Gollogy & Mackay, 1987). The next term used was 'mental retardation' a term still widely used in the US. It was used until recently by the eponymous American Association of Mental Retardation (AAMR). Similar to 'imbecile', 'cretin', 'idiot' and 'moron', 'retarded' or 'retard' has become an insult which has entered the popular vernacular, for example, in recent mainstream comedy films *Borat* and *American Pie.* The members of the AAMR recently voted by an overwhelming majority to change the name to the American Association on Intellectual and Developmental Disabilitites (AAMR, 2006).

Is the stigma of significantly below average intelligence so great that any collective description for this group will carry negative connotations? Research by Hastings and Remington (1993) suggests that all labels describing low levels of intelligence do indeed carry negative connotation and that the level of negative connotation varies. They found that all descriptions, ranging from 'mentally retarded' to 'learning difficulties' carried negative connotations with 'mentally retarded' the most stigmatising and 'learning disability' the least. To confound the argument further there are several studies that hint toward a positive impact of the label. Fernald & Gettys (1980) showed that the ID label can provide people around that person with a diagnosis which fosters understanding and acceptance of the person as they are. Similarly, Farina, That, Thelmer & Hust (1976), found that teachers were less likely to punish their students with the label. Logistically, the label also opens up access to specific support services. The key question is whether the response the label generates is useful. There is a problem in the intellectual disability field in that any overt description of people less intellectually able is probably going to be stigmatising (e.g. retarded) and that more subtle labels (e.g. learning disabilities) will be either misunderstood or confused with similar terms (e.g. learning difficulties).

5.4 Perception of Stigma in people with intellectual disabilities

There is also the question of how negatively, if at all, people with intellectual disabilities perceive the label themselves. Despite the interest in the label there is surprisingly little research into the impact of having such a devaluing label on the person themselves. Jahoda & Markova, 2004, conducted a small but qualitatively rich study of 28 people with mild ID. All participants experienced what they perceived to be stigma in their everyday lives irrespective of whether they lived in a hospital or community housing. They also showed a tendency to compare themselves negatively to others, a finding mirrored in the work of Sinason (1992) who recognised this feature in psychodymanic work with people with ID. Similarly, Davies and Jenkins (1997) interviewed 60 young adults all of whom were able to recall times when they felt either different or devalued because of their disabilities.

In a review of how people with ID view their social identity Beart, Hardy and Buchan (2005) concluded that the literature does not offer a complete explanation of why people with ID often reject the label of ID. At the same time people with intellectual disabilities do experience the stigma associated with their identities through interactions with others and this experience is upsetting. The person's level of cognitive function has an impact, firstly on the person's acceptance of a particular label and secondly, on their noticing when the stigma of their social identity leads others to treat them in a negative way. The experience of someone with a mild intellectual disability who understands the connotations the label 'retarded' might be very different to someone with a severe intellectual disability to whom the label might mean little but whom might experience the stigma associated with the label through negative interaction.

Social constructionist theory is useful in providing a framework for understanding the stigmatising effect of the ID diagnosis. Using this approach Gillman, Heyman & Swain (2000) describe how the identities of people with intellectual disabilities become within the 'definitional control of professionals' (p.1). They also make the point that diagnosis leads directly to a narrative of 'problem-saturated stories and construct careers as patients or cases' (p.1). This raises an interesting point. To be diagnosed as 'intellectually disabled' is to receive a 'medical' diagnosis but, as an ID is intractable, how can someone shake free of the label once applied? These problems are off set to a certain degree by the necessity of providing the correct services to the correct people however it is when there is a 'problem' that services become involved and a diagnosis is made. When the problem is addressed, whether it concerns suitable housing, difficulties at school or challenging behaviour, the label remains, often obscuring gender, class and ethnic identities (Scior, 2000).

Clearly, people with intellectual disabilities are far from a homogenous group. The term encompasses profound, severe, moderate and mild intellectual disabilities and often encapsulates various other developmental or genetic disorders e.g. Down's syndrome, Autism or Prader-Willi syndrome. A label within intellectual disability which has become almost synonymous with the area is 'challenging behaviour', a description originally intended to denote when service provision is challenged (Remington, Songua-Barke & Hastings, 1993). Blunden & Allen (1987) have argued that the 'challenging behaviour' label results in long-term stigmatisation of the recipient and can lead to difficulties, such as gaining access to day-care services. Someone with an ID can gain the reputation of being 'challenging' because of a single incident which may well have been the fault of the person's care team e.g. an unexpected change in routine or an external event e.g. the death of a parent. The term puts the onus firmly on the person and takes no account of situation or failure in service provision. This is somewhat ironic since the term was originally intended to describe inadequacies in the person's support system as opposed to the person themselves. It also leaves little room for empathic understanding. For the person with ID who has yelled at a fellow resident it is the behaviour that appears on their permanent 'record' not the underlying emotional reaction to a situation. It appears that because it is the behaviour that challenges the service and not the person's distress it is the behaviour that becomes the focus (Waitman & Reynolds, 1992). This is contrary to the experience of the general population where attributions are much more contextually driven. We tend to celebrate the notion of the bullied child who turns on his bullies and is subsequently left alone as we empathise with the victim's situation. people with intellectual disabilities are often put in situations were they are destined to be angered, confused, upset or scared (like anyone else) but it is the subsequent behaviour that can mistakenly become the focus, possibly because the cause is attributed to internal factors (the person) rather than external factors (the situation), the fundamental attribution error (Heider, 1958).

6. Potential Areas of Further Research

The research suggests that there is a gap between people with intellectual disabilities' ability to describe their own emotions and their carers' expectations of behavioural responses to situations (e.g. Hollins and Esterhuyzen, 1997). There is also evidence that people with intellectual disabilities who struggle to interpret emotions in others benefit from training in emotional recognition (Whittington & Alexander, 2001). Because of impairments in communication, differences in facial features and perhaps the shortage of staff time, the emotions of people with intellectual disabilities can be difficult to read. There seems a great need for research which attempts to disseminate whether there is a bias towards focussing on behaviour because staff do not have adequate skills or lack confidence to interpret emotion. It could be hypothesised that it is because people with intellectual disabilities are an out-group with challenging members, the social processes of which mean that they are shown less empathy. Research which looked at the effects of emotional recognition training in staff *and* people with intellectual disabilities on staff *and* service user satisfaction would be instrumental in helping answer investigating this hypothesis.

Hastings and Remington (1994) suggest that inappropriate care staff beliefs about causes of challenging behaviour make inappropriate intervention more likely. It would be useful to investigate whether professionals and carers assume the way in which people with intellectual disabilities react to situations is more controllable and more internal compared to people without ID or with a different diagnosis. There is very little literature which compares staff predictions for either reactions or attributions for reactions of people with intellectual disabilities versus general population controls. Surely without this approach the literature is unable to explain whether it is because of the ID that people behave differently or whether the experience of working within a particular institution or profession leads people to understand others with a certain rigidity. There is also little research which directly compares the attitudes, style of attribution or emotional recognition between staff groups. Different professions have different cultures and group identities all of which impact differently on the patient groups with which they work. For the provision of training and ultimately for the quality of interaction between service users and professionals it would be useful to highlight professional 'blindspots' or to develop a measure which highlights individual training needs.

Also, with behavioural approaches historically superseding therapies concerned with emotional distress, there remains a question about what is currently being used by clinicians. There is no research that informs whether we currently have a workforce that works across treatment paradigms in an appropriate and creative manner. Similarly, are we equipping clinicians with the skills to not only feel confident in working with 'challenging behaviour' but also in screening for, and working with psychological problems? An audit of the practical skills that the clinicians working in ID have and use as well as their feelings of efficacy in doing so would elucidate what further directions, if any, this area of healthcare might take in enabling the people working within it.

Finally, there is no better source of information about the experience of emotion and self-identity as from both people with intellectual disabilities themselves and their families. Qualitative research that investigated key themes of emotional recognition by others, opportunities for emotional expression and frequency of emotional validation would build understanding of the emotional experience of people with intellectual disabilities. Similarly, further psychometric development is needed to unable better understanding of how mental health problems present according to the level of intellectual impairment.

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Empirical Paper*

Do people with Intellectual Disabilities experience bias at the hands of the professionals trained to support them?

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*Applying guidelines for publishers for submission to the Journal of Applied Research in Intellectual Disabilities (Appendix A)

Abstract

Objectives. The purpose of this study was to investigate whether professionals working with people with intellectual disabilities show bias towards them. A number of predictions were tested: A) That in making predictions about a person's reaction to a typical situation they would focus more on behaviour than emotion if they believed the person had an intellectual disability. B) That professionals would perceive the reactions of people with intellectual disabilities as more specific, more universal, more global and as having more control than people without intellectual disabilities. C) That professionals working with people with ID would report feeling more efficacious in dealing with challenging behaviour than screening for emotional problems.

Design and Method. The participants were 223 professionals allied to intellectual disability. Participants were randomly divided in two groups and asked to read vignettes describing typical situations involving people with or without intellectual disability. Participants were asked to describe how the person in the vignette might react to the situation and were required to rate the response according to five attribution dimensions. Measures of self-efficacy, empathy and general demographics were also taken.

Results. MANOVA results confirmed a propensity to describe a higher number of behaviour to emotion in the ID group. Results revealed both significant between groups and within subject effects for the attribution dimensions, however these effects were not all in the predicted direction. In addition significant interaction effects were found, i.e. the effect of group status (ID vs. no-ID) on attribution ratings varied for different vignettes. Participants indicated that they felt equally efficacious dealing with challenging behaviour as with screening for psychological problems.

Conclusions

Contrary to predicted results professionals did not show a negative bias although different situations had significant effects on the way professionals anticipate people with intellectual disabilities will react and the way in which these reactions are attributed. The results are discussed in relation to the values and training of clinical psychologists and what psychology has to offer intellectual disability services as a whole.

1. Introduction

1.1 Historical Mistreatment of People with Intellectual Disability

In the 1970's it was the norm for people with intellectual disabilities to be incarcerated in long-stay 'sub-normality' hospitals (Arthur, 2003). People with higher levels of intellectual disability were routinely prescribed aversion treatments involving the purposeful infliction of pain in the form of electric shock, slapping, hair-pulling, restraint, exposure to white noise and the inhalation of ammonia (O'Brien, 1991). In the latter stages of the last century the majority of these hospitals have been closed and their residents moved to community based care and support. It seems generally accepted (e.g. Young, Ashman, Sigafoos & Grevell, 2001) that the quality of residential living has improved for people with intellectual disabilities. However, a recent report on Sutton and Merton Primary Care Trust (Health Commission, 2007) described the presence of institutional abuse in most parts of the intellectual disability service. Contingent electric shock is still being used by some psychologists in the treatment of self-injurious behaviour (e.g. Salvy, Mulick, Butter, Bartlett and Linscheid, 2004).

1.2 Professional Focus on Behaviour

One of the pioneers of person-centred approaches to people with intellectual disabilities, Herb Lovett, observed the tendency of support workers and professionals to describe people with intellectual disabilities in seemingly objective but actually meaningless ways (e.g. attention-seeking) rather than describing the emotion or motivation that may be the cause of the behaviour (Lovett, 1985). This approach increases the likelihood that inappropriate behavioural intervention (Hollins &

Esterhuyzen, 1997; MacHale & Carey, 2002) or chemical restraint (Stenfert-Kroese, Dewhurst & Holmes, 2001) will be used to ameliorate 'target challenging-behaviour'.

The tendency of professionals to focus on behaviour rather than emotion was highlighted in an ID bereavement study by Harper & Wadsworth (1993). They asked people with intellectual disabilities and their support workers to describe their reactions to recent bereavements. The support workers used mainly behavioural descriptions whereas in contrast the people with intellectual disabilities described mainly emotions. Simply put, the support workers showed little vicarious understanding of, or focus on emotion and motivation in the people they were supporting. MacHale & Carey (2002) matched 20 people with intellectual disabilities who had suffered recent bereavement with 20 people with intellectual disabilities who had not. They found that, on commonly used measures, the bereaved group scored highly for 'psychiatric disturbance' and 'disturbed challenging behaviour'. This emphasises the ease with which the medical system designed to support people with intellectual disabilities can pathologise normal, understandable responses to everyday problems.

1.3. Prevalence of Psychological problems in People with Intellectual Disabilities

There is also evidence that the prevalence of psychological problems is significantly higher in people with intellectual disabilities than in the general population (e.g. Jopp & Keys, 2001; Chaplin, 2004). It seems somewhat counter-intuitive then that there is a history of 'therapeutic disdain' towards people with intellectual disabilities (Bender, 1993) and that approaches which focus on emotional distress have been largely submerged by behavioural technologies (Arthur, 2003). One explanation may be that people working with people with intellectual disabilities feel more efficacious in the application of behavioural techniques compared to the assessment and treatment of underlying emotional problems. To date there is no research that assesses the legacy of these approaches on psychologists. In this respect it would be interesting to directly compare the confidence psychologists have in using behavioural technologies to deal with 'challenging behaviour' and their confidence in screening for the actual distress that may underpin it, as both are features of care. An additional factor contributing to the reported focus on behaviour may be the presence of social support systems. people with intellectual disabilities generally have small or non-existent social network (Dykens, 1999) compared to people in the general population. A father with depression, for example, who becomes reclusive and lacks motivation will generally be noticed and supported by his family and friends and symptoms will be interpreted as indications of emotional instability for which treatment may be sought. For someone with an ID suffering from depression, withdrawal symptoms could be interpreted as a 'choice' to opt out (Bush, 2006) or a behavioural intervention may be applied to deal with 'challenging' behaviour. Hence, here the symptom not the cause becomes the index problem.

1.4 Diagnostic Overshadowing

The support network for people with intellectual disabilities encompasses support staff, social workers, nurses, psychiatry and psychology, all of which have different roles to fulfil. The little research that exists in comparing the attitude and behaviour of different professional groups can be found in the diagnostic overshadowing literature. Diagnostic overshadowing (Reiss, Levitan & Szyszko, 1982) refers to the phenomena whereby secondary diagnoses such as phobia are made less accurately (by psychologists and psychiatrists) in ID groups compared to other cohorts such as normal controls, alcoholics or people with schizophrenia. The robust finding from the literature is that secondary diagnoses are less commonly made (Jopp & Keys, 2001) and if they are made they are less likely to be treated using either psychotherapy or psychopharmacology (Spengler, Strohmer & Prout, 1990*)*. This suggests that there is an inherent bias in psychologists and psychiatrists which results in either misdiagnosis or the failure to prescribe appropriate treatment. In a recent UK based diagnostic overshadowing study Mason & Scior (2004) compared psychologists and psychiatrists, finding that psychiatrists were more susceptible to overshadowing but that both groups exhibited the bias.

1.5 Attribution Theory

Attribution theory provides a theoretical framework for understanding diagnostic overshadowing and the focus on observable behaviour rather than environmental and emotional causation. Attribution theory seeks to explain the information processing that occurs when we try and determine how people behave and what the causes of that behaviour were (Weiner, 1986). Weiner (1986) stated that we understand the actions of others along three distinct dimensions; locus, stability and control. He went on to predict that the pattern of attributions on these dimensions controls how positively we feel about the person's actions and how likely we are to help. For example, if a support worker comes across somebody behaving aggressively they will judge them negatively if they believe them to be in control of their actions, that it is something about the person (locus) and that they always behave aggressively (stability). Conversely, someone in the same situation who believes the person is not in control, is at the mercy of a difficult situations (locus) and is rarely like this (stability) will react more positively and will be more inclined to help.

Dagnan, Trower & Smith (1998) analysed the responses of staff working with clients with challenging behaviour. They found staff that reacted negatively to the behaviour believed the person had relatively more control over their behaviour. More optimistic staff were also found to put extra effort into helping. Hill & Dagnan (2002) examined the relationship between the attributions and emotions reported by support staff working with individuals with intellectual disability and challenging behaviour. They found that attributions for internality (locus) and controllability were negatively correlated with sympathy and helping behaviour (as the model would predict). They also found that the staff who adopted a problem solving approach to deal with the person made fewer internal attributions, experienced more sympathy and were more likely to help. Cottle, Kuipers, Murphy and Oakes (1995) interviewed 48 carers who had been victims of violent incidents in a psychiatric hospital. They studied the carer's attributions, finding that the causes of the behaviours were generally attributed as internal to the client and as external to themselves. Hastings (1995) reported that a majority of participants in a study of causality of challenging behaviour viewed the behaviour as intentional in 74% of incidents. If support staff are subject to attribution biases in their work with people with intellectual disabilities, the understanding of these biases may aid service development, staff training and staff recruitment.

1.6 Policy and Reality

The 'Valuing People' white paper (Department of Health, 2001) outlines the importance of people with intellectual disabilities having access to effective multidisciplinary teams i.e. access to psychologists, psychiatrists, nurses, social workers, speech language therapists and occupational therapists. Bush (2006) describes psychologists as being a scarce resource in ID services but identifies them as having an important role in supporting people with intellectual disabilities with both mental health needs and challenging behaviour. He also identifies further areas where expert psychological input will be required including community forensic services, people with dementia, the emotional needs of people with profound disabilities and communication problems. Psychologists should be well placed to meet these demands. They are taught to be empathic, use reflective practise in their work and that therapeutic alliance is a key component of good therapeutic outcome. Given that psychologists have such an important role in ID service provision it seems important they are not subject to the biases seen in the diagnostic overshadowing literature and are motivated to establish a vicarious understanding of both the emotions and behaviours of the people they work with.

1.7 Research Questions and Hypotheses

The current paper focuses on the extent to which professionals' predictions of peoples' reactions are affected by the fact that such people are diagnosed with intellectual disability or not. More specifically to what extent do professionals show a bias in their prediction towards a behavioural versus emotional response when informed that the person has an intellectual disability? The study was conducted in two parts. Experiment 1 describes the development of a measure to assess such predictions. Experiment 2 explores the extent to which these predictions are associated with ID, situation, attributions, self-efficacy and empathy.

The hypotheses for this study are that:

1. That professionals will make more behavioural predictions than emotional ones for the ID group.
2. In making attributions for people's reactions to situations an effect of attributional target (ID versus non-ID) was anticipated whereby attribution ratings for the ID group were expected to reflect more control, more internal cause, more stability, more universality and more globality.
3. That professionals working with people with ID feel less efficacious in screening for psychological problems than dealing with challenging behaviour.

2. Experiment 1 – Development of Measures

Vignettes are used extensively in emotion research and provide good stimulus control. Although vignettes cannot fully reflect everyday situations that professionals find themselves in, for the independent variable to be controlled satisfactorily the situations must be the same across conditions (i.e. ID versus non-ID). This approach has been used extensively in the Intellectual Disability literature (e.g. Dagnan, Trower & Smith, 1998; Fenwick, 1995; Hastings & Remington, 1994; Hastings, 1995) most commonly to aid our understanding of the way in which support staff members react to challenging behaviour. Vignettes were developed for this study and tested for their face validity and the extent they could detect differences between target groups. In addition associations with attributions were investigated.

It was hypothesised that the vignettes in the ID condition would evoke more behavioural than emotional predictions. In addition it was hypothesised that attributions regarding the behaviour in the ID condition would reflect more internality, more control, more stability, more uniqueness and more globality. Put simply, because a person is presented as having an ID a member of staff might assume that their reaction may be caused by something specific to the person, that they had control over their reactions, that such a reaction will be present again, that the cause of the reaction is quite unique to this person and that it will affect most situations in their life. Such association would therefore support the validity of the vignette.

2.1 Purpose

The purpose of experiment 1 was to develop a measure to assess the style in which care-professionals make predictions about people's behaviour and emotions. The measure needed to be applicable to all professionals allied to Intellectual Disability services. To this extent vignettes were developed that could be used to assess the extent to which professionals make behavioural versus emotional predictions of a person's reaction to a situation in 2 conditions (ID vs non-ID).

2.2 Method

2.2.1 Procedure and Participants

Ethical approval was received from the University of Southampton, School of Psychology Ethics Committee (Appendix B). Nineteen clinical psychology students with between 2 and 3 years of clinical training experience rated the vignettes. Participants were aged between 24 and 38 years. The sample included 16 female and 3 male trainees. Experience working with people with intellectual disabilities is a core component of clinical psychology training, hence all participants had at least 6 months experience of working in ID services, with many trainees having additional previous experience gained prior to the course.

Participants were asked to make predictions on how people would respond in the described situations. After reading each vignette the participant was asked to answer the question 'how do you think 'X' is most likely to react?' Answers were subsequently examined and the key categories extracted. This approach is similar to that used by Dodd *et al.* (2005) who used an open-ended question related to the reactions of people with intellectual disabilities to bereavement and coded answers according to whether they were emotional, behavioural, cognitive or physical descriptions.

After each vignette participants also completed attribution questions relating to the reactions they had predicted across the five attribution dimensions; internal-external; controllable-uncontrollable; stable-unstable; universal-personal; global-unique. Finally, the participants were asked to re-read the final vignette and, as quickly as they were able, to list all the emotional reactions they could think of and all the behavioural reactions they could predict.

In addition, the Implicit Attitude Testing (IAT) paradigm (Pruett & Chan, 2006), was applied to determine the extent to which professionals are making automatic assumptions about people with intellectual disabilities and challenging behaviour. IAT is an experimental approach which measures how quickly a person can classify words or pictures into categories. Typically, it attempts to measure the automatic associations people have between groups (e.g. disabled and non-disabled) and characteristics of that group (e.g. worthwhile and not worthwhile). This pilot study used a simplified version of the pen and pencil categorisation task used by Nosek & Lane, 1999). At the end of the study participants are asked to re-read the final vignette then spend 60 seconds writing done as many behavioural reactions they could think of followed by another 60 seconds spent doing the same for emotional reactions.

The questionnaire was administered in the form of an online survey with the participants invited to take part via email. Informed consent was obtained from all participants. All responses were confidential.

2.2.2 Measures

2.2.2.1. Vignettes

The vignettes were devised to reflect a range of negatively and positively natured situations that could provoke emotional and/or behavioural reactions in people with and without disabilities. The main aim of the experiment was to select a group of vignettes that provided a range of situations and maximised differences between conditions (ID versus non-ID). For each target emotion 4 vignettes were devised. Each vignette was presented in an ID and non-ID condition. The positive emotions were chosen to determine whether the predictions made by professionals were subject to the same biases when they perceived the situation to be positive. The situations were examples from the clinical experiences of the author and colleagues working within ID services. The situations were chosen on the basis that the person with the intellectual disability had reacted emotionally to situations in an understandable and adaptive manner synonymous with the way in which someone without an ID might react. The vignettes therefore carry good face validity. 28 vignettes were initially evaluated by a small focus group of trainee clinical psychologists to establish:

1. That vignettes appeared real and relevant (Neff, 1979)
2. That they contained sufficient information for participants to have an understanding of the situation being depicted but vague enough to allow participants to apply additional factors (Barter & Renold, 1999).

The 14 vignettes that met these criteria were retained for the pilot study.

Of the remaining 14 vignettes, 10 scenarios described situations likely to elicit a negative emotion (grief, sadness, anger, fear, jealousy) and 4 described situations associative with positive emotions (happiness and pride).

In condition A the participants were told that all the characters in the vignettes had an intellectual disability (IQ< 70 and present since birth). In condition B the vignettes contained references to the person's occupation, intimating that they did not have an intellectual disability. 10 participants received condition A and 9 participants condition B

After reading each vignette the participants were asked to describe in a couple of sentences, how they thought the person would react to the situation.

2.2.2.2. Attribution

A 5 items attribution questionnaire (Cornah, 2001; Geller & Johnston, 1995) was adapted for use in this study. The 5 items on the scale reflect the attributional dimensions as outlined by Weiner (1986):

6. Internal-External: 'To what extent do you think that the behaviour (or event) is caused by something specifically to do with the person or something else?'
7. Controllable-Uncontrollable: 'To what extent do you think that person would have control over the behaviour (or event)?'
8. Stable-Unstable: 'To what extent do you think that the cause of the behaviour (or event) will be present again in the future?'
9. Universal-Personal: 'To what extent do you think that this behaviour is caused by something unique to the person (or event) or by something common to most people (or events)?'
10. Global-Specific: 'Would the cause influence the person (or event) in other situations or would it only influence this sort of situation?'

Attributions were measured on a 7-point Likert scale.

2.2.2.3. Free-text and Implicit Attitude Measures

In the current study a free-text response was chosen as it was assumed this would provide clearer insight into the types of reactions and behaviours professionals predict. More specifically the last vignette was followed by the questions: ‘As quickly as you can write down all the behavioural reactions they may have to this situation. Do not worry about spelling, punctuation or grammar.’ And, ‘As quickly as you can write down all the emotional reactions they may have to this situation’. These questions were only applied to the last vignette so as not to bias the participant in respect to their predictions on behavioural versus emotional reactions.

2.3 Results Experiment 1

The free-text responses showed differentiation between conditions in terms of the number of behavioural predictions versus the number of emotional predictions. In both conditions more emotional reactions were predicted but in the ID condition there were more behavioural predictions (42% in the ID condition and 27% in the non-ID condition). It also highlighted the participant’s propensity to predict coping behaviours in the non-ID group and challenging behaviours in the ID group. In total, for the ID group, the participants predicted 5 coping behaviours and 55 challenging behaviours whereas the non-ID group predicted 66 coping behaviours and 7 challenging behaviours (see Table 1).

Table 1. Comparison Between Number of Behavioural, Emotional and Other Predictions.

Reaction	Example	Non-ID		ID	
		Number	%	Number	%
Behavioural	Withdrawn, incessant talking	108	27	139	42
Emotional	Sadness, joy, anger	258	64	187	56
Cognitive	Confusion, 'Can't go on'	34	8	4	1
Depends on other factors	Depends on personality, relationship to individual etc.	2	<1	3	1

In addition vignettes were reviewed in regards to the attribution ratings. Vignettes which produced the greatest difference on one or more of the 5 attribution dimensions were selected for the main study. The attribution data was analysed using t-tests (see Table 2).

Four vignettes were immediately excluded due to no significant effects on all 5 dimensions ($p>0.05$) and 3 were selected due to a significant effect ($p<0.05$) on 2 attribution dimensions. The remaining vignettes were selected on the basis that they produced a significant difference on one dimension AND produced a higher number of predicted behavioural reaction to emotional reaction in the ID condition of the free-text response section. 4 further vignettes met these criteria and were included, along with the original 3, in the main study. The vignettes selected contained examples of situations which might elicit grief, anger,anxiety, fear, happiness, frustration and sadness. This constitutes a good range of emotions, the key exclusion being envy/jealousy. It is interesting to note that positive emotion also differentiated.

Table 2. Descriptive Statistics and t-test Results for Attribution Ratings per Vignette

	Attribution														
	Control			Stability			Specificty			Universality			Globality		
Vignette	Non-ID	ID	t-score	Non-ID	ID	t-score	Non-ID	ID	t-score	Non-ID	ID	t-score	Non-ID	ID	t-score
1.	3.36	3.31	.10	3.07	5.46	-	5.21	5.08	.25	5.86	5.46	.96	3.50	4.69	-
(Grief)	(1.45)	(1.03)		(1.90)	(.97)	**4.16***	(1.58)	(1.32)		(1.17)	(.97)		(1.83)	(.75)	**2.24***
2.	5.64	4.42	**2.47***	5.71	5.33	.96	3.86	4.67	-1.29	4.57	4.42	.23	3.71	4.75	-1.69
(Disappointment)	(1.45)	(1.08)		(1.14)	(.89)		(1.88)	(1.30)		(1.56)	(1.78)		(1.77)	(1.36)	
3.	4.57	3.60	1.69	4.57	5.00	-.85	3.79	4.50	-1.25	5.21	6.00	-1.52	4.14	4.40	-.44
(Jealousy)	(1.79)	(1.08)		(.85)	(1.41)		(1.81)	(.97)		(1.25)	(1.25)		(1.23)	(1.51)	
4.	3.77	3.11	.83	2.54	4.67	-	5.85	5.11	1.38	3.00	4.78	-	2.77	3.78	-1.15
(Anxiety)	(2.20)	(1.54)		(1.45)	(1.87)	**2.87***	(.80)	(1.45)		(1.35)	(1.64)	**2.68***	(2.09)	(1.99)	
5.	4.63	4.33	.42	4.85	4.89	-.06	4.15	5.44	-	4.92	5.89	-1.82	4.08	4.78	-.92
(Happiness)	(1.81)	(1.32)		(1.73)	(1.76)		(1.82)	(.88)	**2.21***	(1.44)	(1.05)		(1.61)	(1.86)	
6.	4.00	3.10	1.34	4.77	5.00	-.37	5.38	6.00	-1.48	4.38	4.7	-.52)	3.67	3.90	.45
(Sadness)	(1.78)	(1.45)		(1.42)	(1.56)		(1.04)	(.94)		(1.39)	(1.49)		(1.21)	(1.56)	
7.	4.50	3.70	1.09	4.50	5.00	-.63	3.50	5.30	-	4.75	5.90	-2.06	3.92	4.60	-.83
(Pride)	(1.73)	(1.70)		(2.02)	(1.70)		(1.57)	(.95)	**3.32***	(1.60)	(.99)		(1.88)	(1.96)	

8.	3.00	3.00	.00	5.27(1.42)	4.70	.72	4.75	5.70	-1.31	5.42	6.20	-1.40	3.55	4.8	-1.80
(Grief)	(1.71)	(1.63)			(2.11)		(2.05)	(1.34)		(1.62)	(.92)		(1.21)	(1.87)	
9.	3.67	3.10	.89	3.75(1.49)	4.25	-.66	4.08	5.40	-	4.67	5.4	-1.30	3.58	4.6	-1.51
(Frustration)	(1.44)	(1.52)			(1.75)		(1.62)	(1.17)	**2.20***	(1.56)	(1.08)		(1.56)	(1.58)	
10.	4.42	3.60	1.21	3.58(1.73)	4.90	-1.90	3.42	4.20	-1.12	4.42	5.00	-.90	4.33	4.40	-.11
(Sadness)	(1.73)	(1.43)			(1.52)		(1.56)	(1.69)		(1.44)	(1.56)		(1.30)	(1.51)	
11.	3.25	2.56	1.14	4.75(1.77)	5.40	-.91	4.33	5.60	-1.83	5.00	5.70	-1.47	4.42	4.50	-.14
(Anxiety)	(1.55)	(1.24)			(1.58)		(2.15)	(.97)		(1.28)	(.95)		(1.51)	(1.35)	
12.	4.75	3.50	1.82	3.83(2.37)	4.60	-.78	4.08	5.20	-1.73	5.42	5.90	-.89	3.82	4.20	-.50
(Happiness)	(1.55)	(1.65)			(2.22)		(1.78)	(1.23)		(1.62)	(.87)		(1.60)	(1.87)	
13.	4.00	2.90	1.72	4.55(1.92)	5.10	-.72	3.58	4.60	-1.65	4.58	5.70	-1.77	4.33	5.00	-1.05
(Pride)	(1.54)	(1.45)			(1.60)		(1.62)	(1.27)		(1.93)	(.95)		(1.56)	(1.41)	
14.	3.17	3.30	-.18	5.08(1.08)	5.40	-.52	4.25	5.3	-1.64	4.50	5.80	-	4.55	4.90	-.61
(Disappointment)	(1.75)	(1.77)			(1.65)		(1.82)	(1.16)		(1.24)	(.92)	**2.82***	(1.29)	(1.37)	

*** Denotes p<.05**

Results regarding the implicit attitude measure were deemed unreliable with most participants failed to provide more than one or two responses within the given time limit. The difficulty with the online software was that there was no way of detecting how much time participants spent on this question, i.e. if they had difficulty in suggesting suitable behavioural / emotional responses within the given time or that they only used part of the time available to provide an answer as opposed to accurately using the 60 second time limit. This task was included to derive a measure of implicit attitude. Such a measure is only successful if valid comparisons can be made between the relative ease of producing a list of behavioural reactions compared to emotional responses in the two conditions. As participants only provided one or two behavioural and emotional reactions it was not possible to make a valid judgement on the effect of condition (ID versus non-ID) in this respect. Clearly, participants are able to formulate more than a couple of responses and, due to the design of the study were simply choosing not to complete it. Therefore these results were not analysed and the IAT task dropped from the study.

2.4 Summary/Discussion

Even in this small sample there was a differential response to the ID and non-ID conditions. Not only does this validate the use of the 7 selected vignettes but also the purpose of the study. There seems to be clear differences in the way professionals predict people with and without and ID will react and differences in the attributions they make. The sample used exclusively trainee clinical psychologists, a profession that teaches people to be empathic. It is for this reason that the free-text response section will be retained for the main study. The final section of the study that asked people to list all the emotional and behavioural reactions they could think of will however be discarded. The authors do not deem it to be a sensitive or accurate measure of implicit attitude, the original aim of its inclusion.

Clearly, having problems with communication, idiosyncratic sensory experiences of the world and difficulties understanding social context will affect how people react to particular situations. These problems can be associated with Intellectual Disability and therefore could be related to distress and behavioural difficulties in people with intellectual disabilities. Indeed, some people with ID behave in ways that often are difficult to manage and equally, some do not. Although people with intellectual disabilities may react differently to common situations compared to people in the general population, it would be potentially problematic if there are inherent biases in the way people make attributions about people with intellectual disabilities. For example, there seems to be a genuine problem with undetected emotional problems in people with intellectual disabilities (McBrien, 2003) and a lack of consensus about how exactly to diagnose emotional problems. It is often at the behest of others that someone seeks professional intervention for a mood disorder but if people working with people with intellectual disabilities are less sensitive to or ignore emotionality then the likelihood of access to appropriate treatment is slim.

Also, if reactions to typical situations are seen as internal, professionals supporting the person might be less likely to consider the influence of the environment, something people with intellectual disabilities are often sensitive to. If people with ID are seen as in control of their challenging behaviour and negative emotions staff are more likely to react in a negative, punitive manner and if attributions are global and stable for negative behaviour/emotion the person could be labelled as difficult and 'written off'.

There is also the question of how professionals might work alongside someone if they have little or no expectation that the person can respond in an appropriate manner or in a way that adaptively 'copes' with the situation. This belief might lead them to infantilise the person or to constantly protect them from life experiences that may lead to a situation in which the professional predicts they will not cope. Conversely, if the professional or carer expects challenging behaviour to occur anyway, even in 'typical situations', what then is the motivation to communicate and educate with a view to preventing it?

3. Experiment 2: Main Study

3.1 Aims and Hypotheses

The hypotheses for this study are that:

1. That professionals will make more behavioural predictions than emotional ones for the ID group.
2. In making attributions for people's reactions to situations the attributions are expected to be seen as more internal, more universal, more global and as having more control for the ID group.
3. That professionals working with people with ID feel less efficacious in screening for psychological problems than dealing with challenging behaviour.

3.2 Method

3.2.1 Participants and Procedure

The study received full ethical approval from the University of Southampton School Ethics Committee (Appendix B). Clinical Psychologists were approached through email lists for university courses and via electronic newsletter from the British Psychological Society. In addition emails were sent to intellectual disability and paediatric psychology networks. To recruit a range of nurses, psychiatrists, social workers and psychologists the managers of the community teams for people with intellectual disabilities in the South-West were approached by email and telephone. The manager of day service provision for Southampton city was also contacted in order to recruit support workers. To recruit trainee nurses a number of universities with specialist intellectual disability nursing training modules were also asked to participate.

Participants were directed to a URL which linked them, at random, to either the ID or non-ID experimental condition. On entering the study each participant was presented with the briefing statement (Appendix B) which outlined the anonymity of their data and their right to withdraw from the study at anytime. The briefing page also contained a tick-box which represented their consent to take part in the study. The online software prevented the questionnaire from progressing without this consent. Each participant was presented with a series of demographic questions, the 7 vignettes and corresponding attribution questions, an adapted version of the Jefferson Scale of Physician Empathy (JSPE, Appendix G) and self-efficacy questions. At the end of the study each participant was presented with a de-briefing statement (Appendix B) which again, reiterated the confidential nature of the study, outlined the purpose of the study and gave my contact details in case the participant wished to have their responses removed from the study. The study used data obtained exclusively online.

420 people entered the study with 168 providing complete data sets suitable for analysis. This was probably due to the study being conducted online with people clicking through to the study out of curiosity but being unwilling to complete it. 80% of participants were working full-time and 84% were female. 46% were aged between 20 and 29, 26.6% between 30 and 39, 12.7% between 40 and 49 and 6.5% between 50 and 60 years. 9% of participants had no experience working with people with intellectual disabilities, 45% less than 1 year, 33% 2-5 years, 6% 5-10 years and 7% over 10 years. The studies' inclusion criterion was that all participants should have had experience working with people with intellectual disabilities and consequently anyone that did not was excluded from the study.

Table 3 shows the occupational distribution of participants. As can be seen the majority of participants came from a psychology background. Participants who selected the job title "other" consisted of 11 Assistant Psychologists, 5 Occupational Therapists and 1 Administrator.

Table 3. Participant Occupation.

Occupation	Frequency	Percent
Clinical psychologist	122	32.4
Trainee clinical psychologist	218	57.8
Nurse	2	.5
Support Staff Manager	8	2.1
Other	17	4.5
Support Staff	1	.3
Trainee Nurse	4	1.1
social Worker	3	.8
Trainee Social Worker	2	.5
Total	377	100.0

3.3.2 Measures

Copies of all measures used are provided in the Appendices (D,E,F & G).

3.3.2.1 Prediction difference scores (behaviour – emotion) and Attribution

In order to assess the style of attributions made by health professionals the vignettes from the pilot study that showed differentiation between the ID and non-ID conditions (7 in total) were used. 5 vignettes described situations that would be likely to engender negative emotions in people and 2 that would engender positive emotions. Participants were required to state how they thought the person would react to that situation. Participants' responses were classified as 'behaviour' or 'emotion'. The behaviour /emotion difference score was computed by subtracting the number of emotion predictions from the number of behavioural predictions. Hence higher positive scores reflect relative higher number of behavioural predictions.

Each vignette was then followed by a set of 5 attribution questions. A 5 items attribution questionnaire (Cornah, 2001; Geller & Johnston, 1995) was adapted for use in this study. The 5 items on the scale reflect the attributional dimensions as outlined by Weiner (1986):

1. Internal-External: 'To what extent do you think that the behaviour (or event) is caused by something specifically to do with the person or something else?'
2. Controllable-Uncontrollable: 'To what extent do you think that person would have control over the behaviour (or event)?'
3. Stable-Unstable: 'To what extent do you think that the cause of the behaviour (or event) will be present again in the future?'
4. Universal-Personal: 'To what extent do you think that this behaviour is caused by something unique to the person (or event) or by something common to most people (or events)?'
5. Global-Specific: 'Would the cause influence the person (or event) in other situations or would it only influence this sort of situation?'

Attributions were measured on a 7-point Likert scale.

3.3.2.2 Jefferson Scale of Physician Empathy

The Jefferson Scale of Physician Empathy (JSPE, Hojat, 2002) is a self-administered, 20-item inventory designed to measure empathy among physicians and other health professionals. Participants indicate their degree of agreement or disagreement with 20 statements (half of which are reverse coded) on a 7-point likert scale. Possible scores on the test range from 20 to 140, with higher values indicating greater degrees of empathy. The authors used a sample of medical students and residents to assess the internal consistency of the measure. They found a Cronbach's coefficient alpha of 0.89 for the medical students and 0.87 for the residents indicating good internal consistency. It was necessary to modify the scale slightly to make it culturally relevant to both the UK and the Intellectual Disability field. For example, item *1. My understanding of how my patients and their families feel does not influence medical or surgical treatments,* was changed to read*: my understanding of how service users and their families feel does not influence how I go about my job.*

3.3.2.3 Perceived Self efficacy

A measure assessing the perceived self efficacy in dealing with challenging behaviours and screening for psychological problems was devised based on a measure developed by Hastings and Brown (2002). Hastings and Brown (2002) measured staff perceived self-efficacy according to feelings of confidence, control, satisfaction, the perception that they have a positive impact on the behaviours and how difficult they find working with the behavious. Each of the five items is measured on a 7 point Likert scale. The scale was found to have excellent levels of internal consistency (Cronbach's alpha = .94). The same scale was adapted to measure self-efficacy in screening for psychological problems simply by changing the words ‘challenging behaviour’ to ‘emotional problems’.

3.4 Results

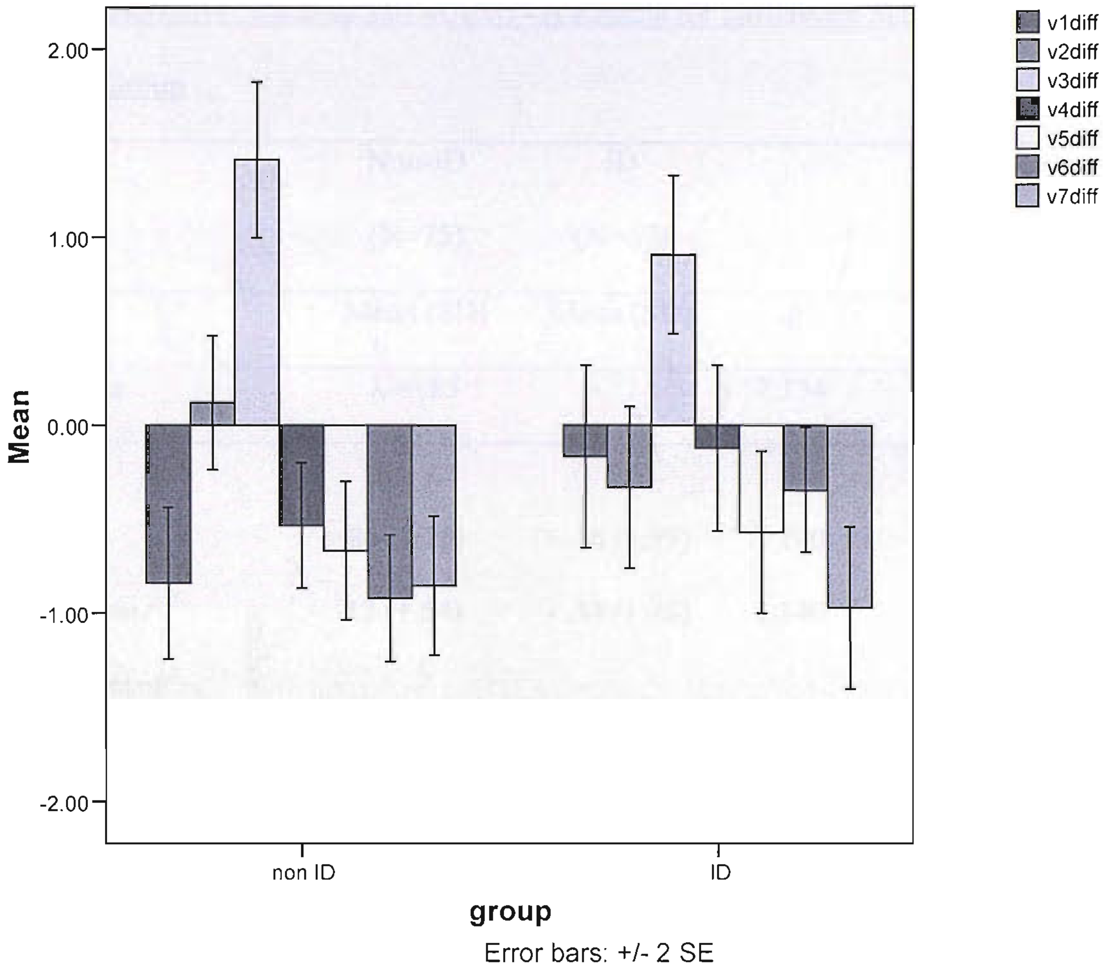
According to Cohen (1992), the sample size in this study is sufficient for .80 power in reporting medium effect sizes.

3.4.1. Research question 1: To what extent are the number of behavioural versus emotional predictions affected by ID status? It was expected that professionals would make relatively less emotional predictions when they believed a person had an ID.

Firstly, to establish inter-rater reliability, a doctoral-level psychologist with significant experience using content analysis procedures coded 26 (15%) randomly selected responses using the codebook. Agreements between coders’ ratings were scored when both signified statements corresponded to a category in the codebook or when both did not indicate the presence of a statement corresponding to a category. Inter-rater agreement was calculated in two ways. Using Kappa (Cohen, 1960), overall agreement was .80 ($p < .001$). Agreement ranged from 86% to 100% (mean = 92%) using a simple percentage agreement index formula ([agreements/[agreements +disagreements]] x 100%). Both measures indicate acceptable inter-rater reliability.

Results showed that, irrespective of ID condition, professionals generally made more emotional predictions than behavioural predictions, except for vignette 3 (anxiety/phobia) which elicited more behavioural predictions in both groups (See Figure 2).

Figure 2. Mean Behaviour-Emotion Difference Scores per Vignette for 2 Conditions (Non-ID (N=75) and ID (N=67)).



Multivariate analyses of variance (MANOVA) showed a significant overall difference between groups regarding the difference scores (number of behavioural predictions minus number of emotional predictions), λ = .85, F(7,134) = 3.35, p<.005. Univariate results showed that this effect was caused by group differences in vignettes 1 (Grief) and 6 (happiness) (See Table 4). More specifically in the ID condition professionals reported significantly more behavioural explanations than in the non ID conditions. The hypothesis is therefore supported in 2 of the 7 emotion vignettes (grief and happiness). The results for the grief vignette are in line with earlier findings (Harper & Wadsworth, 1993.

Table 4: Descriptive Statistics and MANOVA Results for Difference Scores by Disability Group

	Non-ID (N=75)	ID (N=67)			
	Mean (SD)	Mean (SD)	*df*	F	P
Multivariate	λ = .85		7,134	3.35	<0.01
Univariate:					
1. Grief	- .84 (1.75)	- .16 (1.99)	1,140	4.64	<0.05
2. Frustration / Disappointment	.12 (1.54)	- .33 (1.76)	1,140	2.62	n.s.
3. Anxiety	1.41 (1.79)	.91 (1.72)	1,140	2.89	n.s.
4. Pride	- .53 (1.45)	- .12 (1.81)	1,140	2.30	n.s.
5. Anger / Frustration	- .67 (1.60)	- .57 (1.76)	1,140	.12	n.s.
6. Happiness	- .92 (1.46)	- .34 (1.35)	1,140	5.91	<0.05
7. Sadness	- .85 (1.60)	- .97 (1.77)	1,140	.17	n.s.

Additional analyses were performed to test for differences between professional groups (Clinical psychologists, trainee clinical psychologists and other professions allied to people with intellectual disabilities). ANOVA and MANOVA results showed no significant differences between groups for the total difference scores or individual vignette difference scores, respectively.

3.4.2 Research Question 2: To what extent are attribution ratings affected by ID status of the attribution target?

It was expected that professionals' attribution ratings of people with ID would be scored towards the dimensional poles of 'more control', 'specific', 'stable', 'personal' and more 'global'.

In order to analyse the different attribution dimensions 5 repeated measures ANOVAs were conducted with one within subjects factor (the different situations, i.e. 7 levels) and one between subjects factor (ID versus non-ID). Descriptive statistics are shown in Table 5. The results suggest that there was a significant difference in the attributions made by professionals between the two groups but the interpretation of findings is complex.

Table 5: Descriptive Statistics for the Attribution Dimensions Measures for the 2 groups (ID (N=75) Versus non-ID (N=67) for Each Vignette.

	Attribution									
	Control		Stability		Specificty		Universality		Globality	
Vignette	nonID Mean (SD)	ID Mean (SD)	nonID Mean (SD)	ID Mean (SD)	nonID Mean (SD)	ID Mean (SD)	nonID Mean (SD)	ID Mean (SD)	nonID Mean (SD)	ID Mean (SD)
1. Grief	3.91 (1.28)	3.53 (1.29)	3.13 (1.74)	2.48 (1.45)	4.48 (1.50)	5.06 (1.49)	5.68 (1.24)	5.61 (1.47)	4.44 (1.53)	4.69 (1.64)
2. Frustration / Disappointment	5.47 (1.11)	4.50 (1.27)	5.33 (1.30)	5.02 (1.34)	3.54 (1.50)	4.33 (1.58)	4.62 (1.42)	4.77 (1.67)	4.38 (1.46)	4.54 (1.20)
3. Anxiety	3.23 (1.45)	4.01 (1.57)	5.36 (1.01)	5.11 (1.29)	2.50 (1.38)	4.06 (2.02)	2.97 (1.23)	5.19 (1.41)	2.79 (1.54)	3.20 (1.66)
4. Pride	4.98 (1.27)	4.72 (1.37)	4.80 (1.39)	5.15 (1.31)	3.94 (1.46)	4.23 (1.67)	5.24 (1.28)	5.82 (1.22)	4.76 (1.33)	4.59 (1.53)
5. Anger / Frustration	4.31 (1.48)	3.43 (1.36)	4.60 (1.44)	4.70 (1.31)	4.02 (1.41)	4.85 (1.56)	5.16 (1.23)	5.55 (1.34)	4.07 (1.51)	4.09 (1.57)
6. Happiness	4.90 (1.60)	4.62 (1.39)	4.48 (1.81)	4.47 (1.65)	4.41 (1.55)	4.65 (1.51)	5.52 (1.27)	5.48 (1.34)	4.37 (1.42)	4.45 (1.54)
7. Sadness	4.19 (1.41)	3.65 (1.37)	5.51 (1.14)	5.09 (1.28)	3.54 (1.40)	4.71 (1.60)	4.54 (1.33)	5.55 (1.29)	5.14 (1.12)	4.80 (1.32)

3.4.2.1 Control

Results showed that for the Control dimension ("To what extent do you feel the person in the vignette would have control over his/her response?") there was a significant within-subjects effect, F(6,1406) = 57.001, p<.001, i.e. ratings varied significantly as a result of the vignette. There was also a significant between subjects effect, F(1,227)= 9.37, p<.001, i.e. irrespective of the vignette there is an overall difference between the ID and non-ID groups in the level of attributed control. Review of the mean scores suggest professionals generally attribute less control over the response when the attribution target has ID, especially in regards to vignette 2 (disappointment/frustration) and 5 (anger/frustration). The exception is that people with intellectual disabilities are seen as more in control of their reactions in vignette 3 (anxiety/phobia). Figure 3 shows the mean attribution scores on the control dimension.

3.4.2.2 Stability

For the stability dimension ("to what extent do you think the cause of the response will be present again in the future?") results for the within-subjects test were significant (F(6, 1964)= 87.612, p<.001. For the Stability measure the between subjects effects were not significant. These results indicate significant differences in ratings between vignettes but no significant differences between the ID and non-ID groups.

3.4.2.3 Specificity

For the specificty dimension ("do you think this response was caused by something specific about the person or something else?") results for both the within-subjects and between subjects test were significant (F(6,2212) = 22.696, p<.001 and F(1,921) = 43.949, p<.001, respectively). These results indicate significant differences in ratings between vignettes and also significant differences between the ID and non-ID groups. In contrast with our predictions, professionals' ratings for all 7 vignettes were indicative of more causal specificity for the non-ID group (see Appendix H).

3.4.2.4 Universality

For the universality dimension ("was the reaction caused by something unique about the person or something common to most adults?") results for both the within-subjects and between subjects test were significant (F(6,1596)= 46.839, p<.001 and F(1,789)= 25.204, p<.001, respectively). These results indicate significant differences in ratings between vignettes and also significant differences between the ID and non-ID groups. In line with our prediction ratings for vignette 1 (grief) and 6 (happiness) indicated more universality. In contrast, professionals' ratings for vignette 2 (frustration), 3 (anxiety), 4(pride), 5(anger) and 7 (sadness) were indicative of less universality for the non-ID group (see Appendix H).

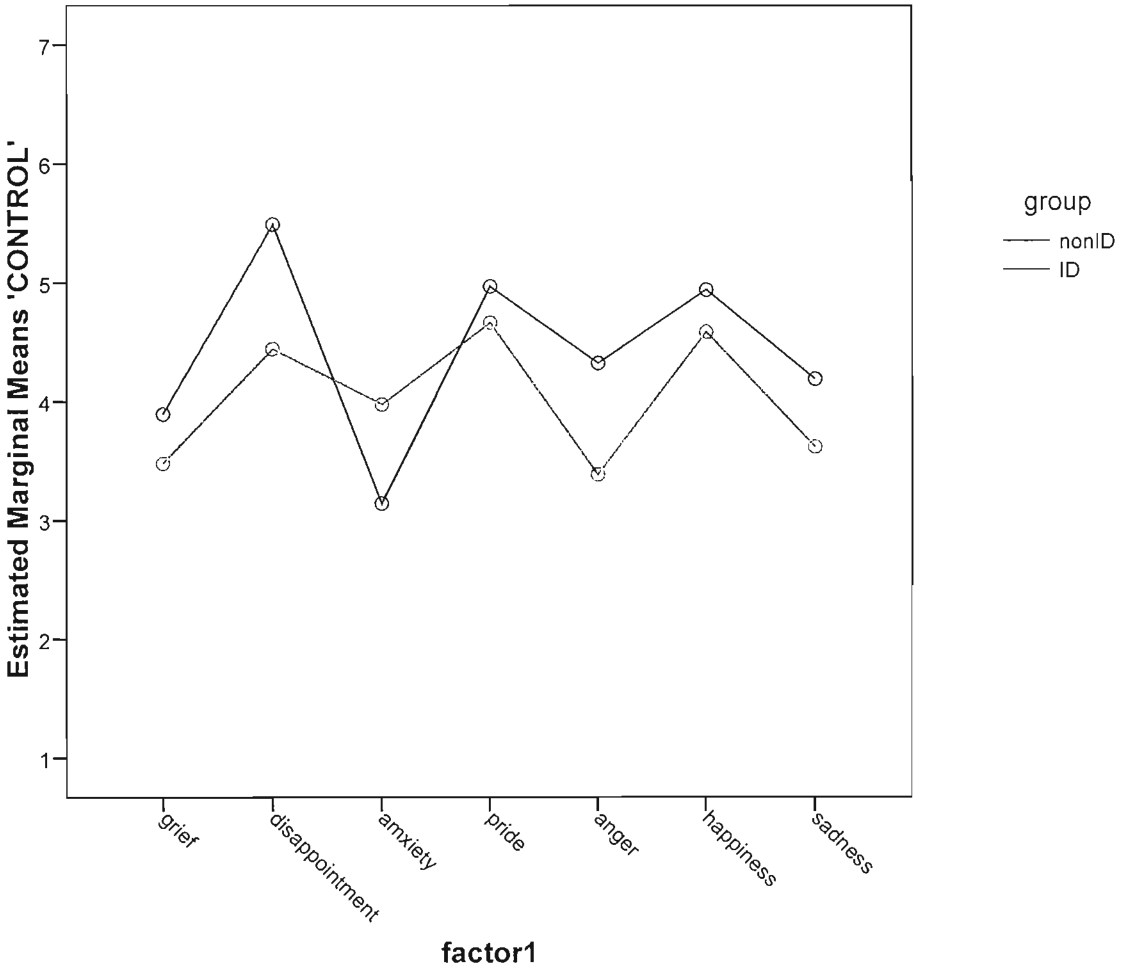
3.4.2.5 Globality

For the globality dimension ("would the cause of their reaction only influence this situation or would it influence all situations in their life?") results for the within-subjects test were significant F(6,1677)= 50.673, p<.001) however the results for the between subjects test were not significant. These results indicate significant differences in ratings between vignettes but not between the ID and non-ID groups.

3.4.3.6 Interaction

We also found significant interaction between group x situation which was unexpected, e.g. that for some situations ID shows more control and less for others. Figure 3 shows an example of this interaction effect of group x situation.

Figure 3: Estimated Marginal Means for Attribution Dimension 'Control' per Vignette for the 2 Groups (ID versus non-ID)



3.4.2.7 Summary of Attribution Findings

For the internal dimension professionals attributed the responses relatively more often to something specifically to the person in the non-ID condition for all vignettes but especially so for the anxiety vignette (ratings for non-ID groups drop). To a lesser extent this drop (i.e. response relatively attributed to internal causes in no-ID group) is seen for the sadness vignette. A similar pattern appears for the universal dimension, i.e. in general responses are more often attributed to causes unique to people in no-ID group and this is especially true for the anxiety and sadness vignettes (for plots see Appendix H)

For the stability dimension it is the pride vignette that shows a different rating pattern. Here, the differences in rating patterns for different vignettes cause the interaction. More specifically, for the grief, disappointment anxiety and sadness vignettes the professionals attribute relatively more stability in the cause of the response in the non-ID group whilst this patterns is reversed for the pride and anger vignettes (for plots see Appendix H).

3.4.3 Research Question 3. The third hypothesis was that professionals might feel more efficacious working with CB than screening for psychological problems (PP). Descriptive statistics are provided in Table 6. Analyses (paired sample t-test) revealed no significant differences in efficacy ratings for CB versus PP (t (1)= -.64, non-significant). Additional analyses showed the two efficacy ratings to be highly correlated (r =.77). This indicates that psychologists feel equally efficacious in dealing with CB and screening for PP. The high correlation suggests that the ratings are not really independent, i.e. professionals may not be able to distinguish their perceived efficacy in these two domains.

Table 6. Means and Standard Deviations for Measures of Self-Efficacy.

Measure	Mean	SD
Self-Efficacy CB	18.21	7.65
Self-Efficacy PP	18.57	9.30

Scores on the adapted empathy scale (see Table 7) for our cohort were slightly higher than the mean scores of the healthcare professionals used to develop the empathy scale (Hojat, 2002) This suggests relatively high levels of empathy for this group in comparison with a large cohort of US physicians.

Table 7. Descriptive Statistics JSPE.

Group	N	Mean	Std. Deviation
Clinical Psychologists	73	122.25	8.74
Trainee Clinical Psych	105	124.46	8.42
Other	17	116.29	9.36
Physician Sample (Hojat, 2002)	704	120	11.9

3.5 Further Exploratory Analysis

In order to investigate the relationships between difference scores, attributions and empathy a correlation matrix was used. This revealed the sign association between variables listed below (correlation matrices provided in appendix C):

1. Vignette Difference Score 1 (VDS1) x Universality (positive correlation, i.e. more perceived universal effect and relatively more emotional prediction).
2. VDS2 x Control (positive correlation, i.e. more perceived control and relatively more emotional predictions)
3. VDS4 x Universality (negative correlation i.e. more perceived universal effect, relatively more behavioural predictions)
4. VDS7 x Control (positive correlation, i.e. more perceived control and relatively more emotional predictions)
5. VDS7 x Stability (negative correlation i.e. more perceived stability and relatively more behavioural predictions)

There is however an inflated probability of computing many correlations and after conducting Bonferroni corrections the sign correlations were non-significant. Based on this outcome regression analyses seem redundant as regression is normally applied to datasets in which the IVs are correlated with one another and with the DV in varying degrees (Tabachnick & Fidell, 2001).

4.0 Summary and Discussion

4.1 Summary of results

Hypothesis 1 was that professionals would make more behavioural than emotional predictions in the ID group than the non-ID group. Overall, there were more emotional predictions than behavioural but for 2 of the 7 vignettes the number of behavioural to emotional predictions was significantly higher in the ID condition. Hypothesis 2 was that in making attributions for people's reactions to situations the attributions are expected to be seen as more internal, more universal, more global and as having more control for the ID group. The attribution results showed that the participants in the study did indeed show significantly different attributions between the ID and non-ID groups. However, attributions varied significantly between the different situations, sometimes in the predicted direction and sometimes not. Generally, people with intellectual disabilities were seen as less in control. In regards to the other attribution dimensions results are more mixed. Generally attributions regarding predicted reactions of people with intellectual disabilities were rated as less specific, less universal and less global. The third hypothesis for this study was that professionals working with people with ID feel less efficacious in screening for psychological problems than dealing with challenging behaviour. The results however, showed that the participants felt equally efficacious in dealing with challenging behaviour and screening for psychological problems. There was little difference between groups on the empathy measure with the mean empathy scores for the clinical psychologist and trainee clinical psychologist groups scoring higher than the original sample of physicians used to develop the measure. Finally, contrary to our predictions, associations between measured constructs (difference scores, attribution, empathy and efficacy) were small.

4.2 Discussion of Results

The relatively high numbers of psychologists completing this investigation means that the study has reasonable statistical power and can allow conclusions about the way in which psychologists working in ID perceive their client group. Psychologists are trained to develop collaborative, empathic relationships with their clients and it is reassuring that the results of this study seem to suggest that these skills remain intact in understanding circumstances in which someone is likely to become distressed. The hypothesis that professionals often do not consider the emotion of the people with intellectual disabilities they work with is not well supported by the current findings. However, two vignettes showed significantly greater behavioural to emotional predictions (Grief and Happiness). This is in support of previous findings in grief studies (e.g. Harper & Wadsworth, 1993). The results justify the use of situations other than bereavement. This study attempted to replicate findings from the research into the response of people with intellectual disabilities to grief and apply them to other situations. What is found is that the difference in situation has a considerable impact on the number of behavioural to emotional predictions made. Further comparisons with existing literature are not straightforward as most studies use support workers rather than psychologists. It is possible that differences in day to day responsibilities account for these differences. Clinical psychologists typically see patients for short periods and provide consultancy based upon the observations they make. Support staff are required to work with people with intellectual disabilities for long sustained periods possibly resulting in higher levels of stress and exposure to challenging behaviour which may contribute to a change in attribution style and concomitant helping behaviour.

The attribution measures also generated interesting findings. The expectation was that there would be a significant difference between attribution scores between the groups and that this difference would be relatively linear across the situations. The finding however, was that the scores on the attribution dimension varied according to the situation being described resulting in the interaction effect we see (that the influence of group (ID-non-ID) on attribution depends on vignette).

The specificity dimension was the only dimension that showed a linear relationship across all situations. This suggests that psychologists evaluate the behavioural and emotional responses of people with intellectual disabilities as being more about the situation than personal characteristics. This is again reassuring since the evidence from the literature (e.g. Hollins & Esterhuyzen, 1997) is that support workers tend to attribute reactions to the individual and not the situation they have been placed in. The pattern of attributions for the anxiety dimension is also worthy of note. This scenario was the only one which indicated an individual psychological problem (i.e. phobia) in contrast to the others which were everyday situations. The reactions of people without ID were seen as much more about the person than the situation and that the reaction is much less common to most other adults. This is the pattern one would expect in a cohort accurately detecting phobia but the pattern was quite different in the ID group where the reaction was seen as being more akin to most other adults. It is therefore possible that the interaction effect we see is the result of a diagnostic overshadowing - type effect whereby the presence of ID prevents the accurate detection of salient information about distress. The lack of these salient predictors of emotional distress in the other vignettes compared to the anxiety vignette could explain part of this interaction effect.

Finally, the results of the self-efficacy scales suggest that psychologists feel as efficacious in dealing with challenging behaviour as they do in screening for psychological problems. This could well be a reflection of the varied training and skills psychologists have to draw on. Psychologists are taught not only behavioural approaches but are equipped with skills to adapt measures of psychological distress and modify resources in treating psychological problems.

4.3 Limitations of study

This study has investigated, for the first time, the different style of attributions that psychologists make for people with and without ID. The conclusions drawn from this study must be treated with some caution however since the testing situation has a number of limitations.

4.3.1 Use of Vignettes

Vignettes are used extensively in psychological research. The advantage of using them is that they are convenient to present to participants and can quickly represent a situation in an experimental situation. The key advantage is that the experimenter has good control over situations presented as well as manipulations, (i.e. in regards to design of the study 'noise' or error variance is therefore reduced). The key disadvantage is that they are a simplistic, artificial representation of the complex social world in which we live. The vignettes used here were brief descriptions of typical situations but not totally synonymous with the experience of someone at work.

Therefore, in drawing conclusions from these results it must be borne in mind the study is limited by the necessity of using this approach. Recommendations for further research are difficult to make since using an observational approach would make controlling variables across ID and non-ID extremely difficult. It would be interesting to use longer, more descriptive vignettes and analyse whether this has a corresponding affect on the style of attribution. Multimedia vignettes might also serve to better represent people in real-life settings although, again, the practicalities of taking this approach are more complex.

4.3.2 Participants

Clinical psychology has a lot to offer in the care of people with intellectual disabilities (Bush, 2006) but in reality the profession is one of many involved in the care of people with intellectual disabilities. Nurses, psychiatrists, social workers, occupational therapists and most importantly the 'front-line' support workers are all involved, normally to a greater extent than psychologists. The comparison of the attributional styles, empathy and self-efficacy of these distinct groups would have been highly informative. If it were found for example, that support workers rated their self-efficacy in dealing with challenging behaviours significantly higher than that for detecting psychological problems, a clear training need would have been identified. Similarly, if a particular professional group appears to show consistent, negative bias, there are ramifications for the way in which the people in that group are trained. It is therefore a strong recommendation that similar research investigates the differences in these biases between professional groups.

4.3.3 Social Desirability

The between subjects design of the study meant that it was not entirely obvious to participants that the aim of the study was to directly compare their reactions to both intellectually and non-intellectually disabled people. However, it is possible that participants' tendency to give socially desirable responses could have negatively affected the validity of the results. It is unfortunate then that the constraints of the online data collection did not allow the inclusion of an effective measure of implicit attitude. Further investigations that compared implicit attitudes with attribution style would clarify the validity of this kind of experimental design.

The cohort used for this study was skewed towards trainee clinical psychologists with relatively little experience in ID. Although the comparison between qualified and trainee clinical psychologists was of interest the study was particularly concerned with professionals working full-time in ID services. Conclusions drawn about the profession as a whole should therefore be made with caution.

4.4 Theoretical implications

Previous psychological research investigating the attributions made by staff working with people with intellectual disabilities has focussed on support workers. There was previously very little evidence about how highly trained professionals make attributions for the reactions of people with intellectual disabilities. If psychologists are involved in the training and mentoring of support staff and other professionals it is important to understand the style of attributions they make and the overall biases they may or may not show in their work.

Also, in this type of research it is rare to compare attributions between non-ID and ID groups. Investigations of staff attributions using vignettes often compare attributions to staff morale and motivation but rarely incorporate a non-ID ‘control group’. This study has been the first to demonstrate that professionals working with people with intellectual disabilities do understand people’s reactions differently when they believe them to have an ID and the method was sensitive enough to find these differences. The study also incorporated situations outside of death and bereavement with the results showing differential patterns. The interaction effects suggest the picture is not as linear as previously thought in that there may be certain situations in which professionals do indeed focus on behaviour and attribute internally but equally there may be certain situations when they do not.

The differences in cohort (i.e. psychologists not support workers) may account for differences between results of this study and previously reported data. This not only highlights the importance of including multiple professions in these types of studies but also may have theoretical implications. If the patterns of response are indeed different for different professional groups then the underlying constructs that account for this require further exploration.

4.5 Clinical Implications

A key finding of this project is that psychologists generally seem to be empathic and although their attribution style does vary when they believe someone has an ID this bias is often a positive one which takes into account situational factors. This is indicative of a good values base and a healthy respect of the people with which psychologists work. It is also in line with the advent of the person centred planning approach where the needs and understanding of the individual supersede convenience in the care process. With concerning reports of institutional abuse in the media perhaps there is a need for greater input from psychology into intellectual disability services. Since many community intellectual disability teams are funded by social services there are regional differences in the involvement of psychologists (Bush, 2006). The availability of psychological therapy for people with intellectual disabilities is therefore often limited with psychologists often only having time for brief assessments and recommendations for support workers. There is a need for greater consistency between health and social support for people with intellectual disabilities and psychologists, if funded correctly, appear to be able to offer the correct values and a range of skills to support people with intellectual disabilities.

Interestingly, one of the two vignettes that caused psychologists to show the least empathy (i.e. a decreased number of emotion to behavioural predictions) was for happiness. Psychologists generally deal in distress and their training is mostly in assessing and treating negative affect, cognition and behaviour. This training could be protective against showing negative bias towards people with intellectual disabilities in distress. It could be that the paucity of attention paid to positive emotion means that the protective factor of training is removed and latent stereotypical views of how people with intellectual disabilities might react are activated.

It is also reassuring that psychologists generally feel as efficacious dealing with challenging behaviour as they do in screening for psychological problems. There is a general consensus that there is a higher prevalence of emotional disorders in people with intellectual disabilities than in the general population (e.g. Jopp & Keyes, 2001). The psychological treatment of psychological problems is arguably more complex in people with intellectual disabilities due to communication difficulties, the ability to retain and manipulate information and the corresponding impact on insight. For treatment to be effective spoken interventions need to be effectively modified and to be ethical, behavioural interventions need to be in line with the person's best interests. In this study psychologists are reporting that they believe they have the skills and resources to be able to work effectively with people with intellectual disabilities and seem well placed to do so.

The implications for the way in which clinical psychologists are trained are also positive. The sample contained more trainee clinical psychologists than psychologists and no differences between the two groups were found. It could be concluded that relative inexperience is no barrier to a respectful understanding of people with intellectual disabilities among clinical psychology trainees and that psychologists do not appear to take more stigmatising approaches when they have worked in services for longer periods of time. In order to establish whether it is the training course itself that is responsible for this or whether it is the type of person that is attracted to clinical psychology could be determined by using a control group of psychology undergraduates planning a career in clinical psychology. The presence of negative bias in this group might suggest a positive impact of psychology training and the lack of any significant difference might suggest that clinical psychology is successful in recruiting the right people onto its training programmes.

4.6 Further research

The recruitment process for this study was successful in attracting a good sample of psychologists. However the recruitment of other professionals was less successful. The direct comparison of different professional groups would have been of great interest since it would have highlighted any differences in overall perception within different professions of the people with which they work. A similar method, applied to professionals from different area would allow this analysis.

Further research may also focus on positive vignettes. Person-centred approaches to ID utilise strength-based approaches (O'Brien, 2003). Further research would clarify whether psychologists are problem focussed in their approach and whether this impairs their ability to empathise with positive emotion in the people with which they work.

Finally, research which further explores differences in attributional style across different situations and investigates these interaction effects would continue to develop our understanding of how professionals go about understanding the reactions of people with intellectual disabilities. Previous research shows that this understanding can be simplistic in the observation of grief in people with intellectual disabilities (Harper & Wadsworth, 2003) or clouded by the intellectual disability label (Jopp & Keys, 2001). A continued focus on the understanding of emotional response in people with intellectual disabilities in different situations will further elucidate where such biases may be occurring and should ultimately lead to better clinical judgement and detection of emotional difficulty.

5. Summary Statement

This study aimed to investigate whether people paid to support people with intellectual disabilities focus on behaviour rather than emotion and show a pattern of attribution that leads people to conclude that the person with the disability is at fault for negative behaviour, not the situation they find themselves in. The majority of participants were either clinical psychologists or trainee clinical psychologists. Firstly, the results showed that psychologists did indeed report more behaviour when they believed a person in a vignette had an ID. Secondly, the results suggested that psychologists had significantly different styles of attribution when they believed the person either did or did not have an ID. However, the first finding was caused by an effect on only 2 of the 7 scenarios presented. Also, the style of attribution varied significantly between situations and often indicated positive bias towards the ID group, making interpretation complex. It was also found that clinical psychologists report feeling as efficacious in dealing with challenging behaviour as screening for psychological problems. The main conclusion drawn was that psychologists with experience working with people with intellectual disabilities have good values and appear well equipped to work with people with intellectual disabilities with various levels of impairment. The limitations of this study do mean that conclusions should be cautious however the findings do suggest that a consistent provision of psychological services within ID care would be beneficial.

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Appendix A: Author guidelines JARID

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Author Guidelines

Papers (in English) should be sent by email to the editorial assistant and copied to the editors. Please find the details for doing this below.

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Manuscripts should be formatted with a wide margin and double spaced. Include all parts of the text of the paper in a single file, but do not embed figures. Please note the following points whihc will help us to process your manuscript successfully:

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- Turn the hyphenation option off.
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- Use a tab, not spaces, to separate data points in tables.
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A cover page should contain only the title, thereby facilitating anonymous reviewing. The authors' details should be supplied on a separate page and the author for correspondence should be identified clearly, along with full contact details, including e-mail address. A suggested running title of not more than fifty characters, including spaces; and up to six key words to aid indexing should also be provided.

Main Text

All papers should be divided into a structured summary (150 words) and the main text with appropriate sub headings. A structured summary should be given at the beginning of each article, incorporating the following headings: Background, Materials and Methods, Results, Conclusions. These should outline the questions investigated, the design, essential findings and main conclusions of the study.

The text should proceed through sections of Abstract, Introduction, Materials and Methods, Results and Discussion, and finally Tables. Figures should be submitted as a seperate file. The reference list should be in alphabetic order thus:

Emerson E. (1995) *Challenging Behaviour: Analysis and Intervention in People with Learning Disabilities*. Cambridge University Press, Cambridge.
McGill P. & Toogood A. (1993) Organising community placements. In: *Severe Learning Disabilities and Challenging Behaviours: Designing High Quality Services* (Eds E. Emerson, P. McGill & J. Mansell), pp. 232-259. Chapman and Hall, London.
Qureshi H. & Alborz A. (1992) Epidemiology of challenging behaviour. *Mental Handicap Research* 5, 130-145

Journal titles should be in full. References in text with more than two authors should be abbreviated to (Brown *et al.* 1977). Authors are responsible for the accuracy of their references.

Spelling should conform to *The Concise Oxford Dictionary of Current English* and units of measurements, symbols and abbreviations with those in *Units, Symbols and Abbreviations* (1977) published and supplied by the Royal Society of Medicine, 1 Wimpole Street, London W1M 8AE. This specifies the use of S.I. units.

Illustrations and Tables

These should be referred to in the text as Figures using Arabic numbers, e.g. Fig. 1, Fig. 2, etc, in order of appearance. Figures should be clearly labelled with the name of the first author, and the appropriate number.

Each figure should have a separate legend; these should be grouped on a separate page at the end of the manuscript. All symbols and abbreviations should be clearly explained. In the full-text online edition of the journal, figure legends may be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should inform the reader of key aspects of the figure.

Tables should include only essential data. Each table must be typewritten on a separate sheet and should be numbered consecutively with Arabic numerals, e.g. Table 1, and given a short caption.

Please save vector graphics (e.g. line artwork) in Encapsulated Postscript Format (EPS), and bitmap files (e.g. half-tones) in Tagged Image File Format (TIFF). Ideally, vector graphics that have been saved in metafile (.WMF) or pict (.PCT) format should be embedded within the body of the text file. Detailed information on our digital illustration standards is available on the Blackwell web site at http://www.blackwellpublishing.com/authors/digill.asp.

Appendix B: School ethics approval letter, briefing statement and de-briefing statement.

Email Request

Dear Colleagues

I am a Trainee Clinical Psychologist conducting research into the predictions that healthcare staff make about people's reactions to everyday situations. We are recruiting different professionals working in health care settings (e.g. nurses, psychologists, psychiatrists). Completing the survey takes approximately 10 minutes and will help us understand the different ways in which professional staff understand the actions of others.

Your help will be most appreciated. Please follow the link below to enter the study:

`http://www.psychology.soton.ac.uk/psychosurvey/condition_start.php?conditionID=28`

Again, many thanks for your consideration.

Kind regards

Duncan Thomson
Trainee Clinical Psychologist
University of Southampton
Drt104@soton.ac.uk

Briefing Statement

Main Study

I am Duncan Thomson, a trainee clinical psychologist at the University of Southampton. I am requesting your participation in a study regarding predictions of people's reactions to everyday situations. This will involve reading about situations, making predictions and rating some reasons behind these predictions. There are no right or wrong answers, I am really just interested in what you think/feel about a number of different situations.

The task takes approximately 10 minutes. Personal information will not be released to, or viewed by anyone other than the researchers involved in the project. Results of this study will not include your name or any other identifying characteristics. Published results will maintain your confidentiality and you may withdraw from the study at any time.

I will be glad to provide the results of the project and the accompanying literature review on completion. To request a copy please either contact me, Duncan Thomson, at drt104@soton.ac.uk or provide your email address at the end of the study.

If you have questions about your rights as a participant in this research, or if you feel that you have been placed at risk, you may contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. 023 8059 3995.

☐ Please tick this box to show you are happy to take part in this survey

---

Debriefing Statement

Thank you for spending the time to complete the study.

The aim of the research is to investigate if predictions made about the reaction to situations are related to the respondent's belief that the person in the scenario had an intellectual disability or not. It is expected that people will be less empathic towards people with intellectual disabilities, will make more predictions about challenging behaviour, less predictions about coping behaviour and will attribute their reaction more to the person than the situation.

Your data will help in our understanding of the effect of the intellectual disability label. We are also interested in whether different professional groups make different predictions.

Once again, results of this study will not include your name or any other identifying characteristics. The experiment did not use deception. You may have a copy of this summary if you wish. If you have any further questions or would like to withdraw your data from the study please contact me, Duncan Thomson, on drt104@soton.ac.uk

Appendix C: Correlation Matrices

Correlations

		v1ratio	How much control does Cathy have over her reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about Cathy or something else?	Was the reaction caused by something unique about Cathy or by something common to most adults?	Would the cause of Cathyâ€™s reaction only influence this type of situation or would it influence all situations in her life?
v1ratio	Pearson Correlation	1	.003	.035	.080	-.008	.146(*)
	Sig. (2-tailed)		.963	.634	.282	.912	.048
	N	191	184	184	184	185	184
How much control does Cathy have over her reaction(s)?	Pearson Correlation	.003	1	.192(**)	.004	.038	.032
	Sig. (2-tailed)	.963		.007	.960	.592	.656
	N	184	198	197	196	197	196
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	.035	.192(**)	1	.126	.065	-.145(*)
	Sig. (2-tailed)	.634	.007		.079	.362	.043
	N	184	197	198	196	197	195
Was the predicted reaction caused by something specific about Cathy or something else?	Pearson Correlation	.080	.004	.126	1	.483(**)	-.015
	Sig. (2-tailed)	.282	.960	.079		.000	.834
	N	184	196	196	197	197	195
Was the reaction caused by something unique about	Pearson Correlation	-.008	.038	.065	.483(**)	1	-.036
	Sig. (2-tailed)	.912	.592	.362	.000		.618

Cathy or by something common to most adults?	N	185	197	197	197	198	196
Would the cause of Cathyâ€™s reaction only influence this type of situation or would it influence all situations in her life?	Pearson Correlation	.146(*)	.032	-.145(*)	-.015	-.036	1
	Sig. (2-tailed)	.048	.656	.043	.834	.618	
	N	184	196	195	195	196	196

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

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

Correlations

		v2ratio	How much control does Tom have over his reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about Tom or something else?	Was the reaction caused by something unique about Tom or by something common to most adults?	Would the cause of Tomâ€™s reaction only influence this type of situation or would it influence all situations in his life?
v2ratio	Pearson Correlation	1	.240(**)	.096	.032	.023	.001
	Sig. (2-tailed)		.001	.206	.677	.762	.988
	N	183	177	177	176	176	174
How much control does Tom have over his reaction(s)?	Pearson Correlation	.240(**)	1	.005	-.178(*)	.051	-.151(*)
	Sig. (2-tailed)	.001		.940	.012	.474	.035
	N	177	198	198	197	197	195
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	.096	.005	1	.061	.161(*)	.228(**)
	Sig. (2-tailed)	.206	.940		.395	.024	.001
	N	177	198	198	197	197	195
Was the predicted reaction caused by something specific about Tom or something else?	Pearson Correlation	.032	-.178(*)	.061	1	.359(**)	-.047
	Sig. (2-tailed)	.677	.012	.395		.000	.513
	N	176	197	197	197	196	195
Was the reaction caused by something unique about Tom or by something common to most adults?	Pearson Correlation	.023	.051	.161(*)	.359(**)	1	-.024
	Sig. (2-tailed)	.762	.474	.024	.000		.741
	N	176	197	197	196	197	194
Would the cause of	Pearson Correlation	.001	-.151(*)	.228(**)	-.047	-.024	1

Tomâ€™s reaction only influence this type of situation or would it influence all situations in his life?	Sig. (2-tailed)	.988	.035	.001	.513	.741	
	N	174	195	195	195	194	195

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

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

Correlations

		v3ratio	How much control does Sam have over her reaction(s)?	Was the predicted reaction caused by something specific about Sam or something else?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the reaction caused by something unique about Sam or by something common to most adults?	Would the cause of Samâ€™s reaction only influence this type of situation or would it influence all situations in her life?
v3ratio	Pearson Correlation	1	-.005	-.074	-.013	-.043	-.106
	Sig. (2-tailed)		.943	.326	.867	.567	.158
	N	188	180	180	180	180	180
How much control does Sam have over her reaction(s)?	Pearson Correlation	-.005	1	.057	-.094	.209(**)	.113
	Sig. (2-tailed)	.943		.426	.190	.003	.116
	N	180	197	196	196	196	196
Was the predicted reaction caused by something specific about Sam or something else?	Pearson Correlation	-.074	.057	1	-.107	.557(**)	.256(**)
	Sig. (2-tailed)	.326	.426		.135	.000	.000
	N	180	196	197	196	196	196
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	-.013	-.094	-.107	1	-.049	.034
	Sig. (2-tailed)	.867	.190	.135		.499	.638
	N	180	196	196	197	196	196
Was the reaction caused by something unique about Sam or by something common to most adults?	Pearson Correlation	-.043	.209(**)	.557(**)	-.049	1	.142(*)
	Sig. (2-tailed)	.567	.003	.000	.499		.048
	N	180	196	196	196	197	196

Would the cause of Samâ€™s reaction only influence this type of situation or would it influence all situations in her life?	Pearson Correlation	-.106	.113	.256(**)	.034	.142(*)	1
	Sig. (2-tailed)	.158	.116	.000	.638	.048	
	N	180	196	196	196	196	197

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

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

Correlations

		v4ratio	How much control does James have over his reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about James or something else?	Was the reaction caused by something unique about James or by something common to most adults?	Would the cause of Jamesâ€™s reaction only influence this type of situation or would it influence all situations in his life?
v4ratio	Pearson Correlation	1	.037	-.068	.036	-.047	-.175(*)
	Sig. (2-tailed)		.617	.355	.626	.518	.018
	N	194	188	189	187	188	183
How much control does James have over his reaction(s)?	Pearson Correlation	.037	1	.193(**)	-.113	.109	-.054
	Sig. (2-tailed)	.617		.007	.114	.129	.461
	N	188	197	197	195	196	191
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	-.068	.193(**)	1	.112	.351(**)	.458(**)
	Sig. (2-tailed)	.355	.007		.118	.000	.000
	N	189	197	198	196	197	192
Was the predicted reaction caused by something specific about James or something else?	Pearson Correlation	.036	-.113	.112	1	.344(**)	.125
	Sig. (2-tailed)	.626	.114	.118		.000	.087
	N	187	195	196	196	196	190
Was the reaction caused by something unique	Pearson Correlation	-.047	.109	.351(**)	.344(**)	1	.286(**)
	Sig. (2-tailed)	.518	.129	.000	.000		.000

about James or by something common to most adults?	N	188	196	197	196	197	191
Would the cause of Jamesâ€™s reaction only influence this type of situation or would it influence all situations in his life?	Pearson Correlation	-.175(*)	-.054	.458(**)	.125	.286(**)	1
	Sig. (2-tailed)	.018	.461	.000	.087	.000	
	N	183	191	192	190	191	192

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

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

Correlations

		v5ratio	How much control does John have over his reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about John or something else?	Was the reaction caused by something unique about John or by something common to most adults?	Would the cause of Johnâ€™s reaction only influence this type of situation or would it influence all situations in his life?
v5ratio	Pearson Correlation	1	.114	.003	-.049	-.030	.045
	Sig. (2-tailed)		.121	.973	.510	.680	.538
	N	193	187	187	186	186	187
How much control does John have over his reaction(s)?	Pearson Correlation	.114	1	.130	-.242(**)	-.271(**)	.154(*)
	Sig. (2-tailed)	.121		.067	.001	.000	.030
	N	187	198	198	197	197	198
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	.003	.130	1	.007	-.079	.420(**)
	Sig. (2-tailed)	.973	.067		.919	.269	.000
	N	187	198	198	197	197	198
Was the predicted reaction caused by something specific about John or something else?	Pearson Correlation	-.049	-.242(**)	.007	1	.516(**)	-.198(**)
	Sig. (2-tailed)	.510	.001	.919		.000	.005
	N	186	197	197	197	196	197
Was the reaction caused by something unique about	Pearson Correlation	-.030	-.271(**)	-.079	.516(**)	1	-.264(**)
	Sig. (2-tailed)	.680	.000	.269	.000		.000

John or by something common to most adults?	N	186	197	197	196	197	197
Would the cause of Johnâ€™s reaction only influence this type of situation or would it influence all situations in his life?	Pearson Correlation	.045	.154(*)	.420(**)	-.198(**)	-.264(**)	1
	Sig. (2-tailed)	.538	.030	.000	.005	.000	
	N	187	198	198	197	197	198

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

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

Correlations

		v6ratio	How much control does Bob have over his reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about Bob or something else?	Was the reaction caused by something unique about Bob or by something common to most adults?	Would the cause of Bobâ€™s reaction only influence this type of situation or would it influence all situations in his life?
v6ratio	Pearson Correlation	1	.075	-.088	.004	.006	.012
	Sig. (2-tailed)		.306	.230	.952	.940	.873
	N	197	191	190	190	190	189
How much control does Bob have over his reaction(s)?	Pearson Correlation	.075	1	.067	-.166(*)	.037	-.023
	Sig. (2-tailed)	.306		.346	.019	.609	.750
	N	191	198	197	197	197	196
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	-.088	.067	1	-.083	.059	.382(**)
	Sig. (2-tailed)	.230	.346		.247	.411	.000
	N	190	197	197	196	196	195
Was the predicted reaction caused by something specific about Bob or something else?	Pearson Correlation	.004	-.166(*)	-.083	1	.502(**)	.026
	Sig. (2-tailed)	.952	.019	.247		.000	.718
	N	190	197	196	197	196	196
Was the reaction caused	Pearson Correlation	.006	.037	.059	.502(**)	1	.081

by something unique about Bob or by something common to most adults?	Sig. (2-tailed)	.940	.609	.411	.000		.258
	N	190	197	196	196	197	195
Would the cause of Bobâ€™s reaction only influence this type of situation or would it influence all situations in his life?	Pearson Correlation	.012	-.023	.382(**)	.026	.081	1
	Sig. (2-tailed)	.873	.750	.000	.718	.258	
	N	189	196	195	196	195	196

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

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

Correlations

		v7ratio	How much control does Paul have over his reaction(s)?	Do you think the cause of this reaction will be present again in the future or was a one-off?	Was the predicted reaction caused by something specific about Paul or something else?	Was the reaction caused by something unique about Paul or by something common to most adults?	Would the cause of Paulâ€™s reaction only influence this type of situation or would it influence all situations in his life?
v7ratio	Pearson Correlation	1	.187(**)	.131	-.150(*)	-.133	-.061
	Sig. (2-tailed)		.010	.071	.039	.067	.403
	N	197	190	189	190	190	190
How much control does Paul have over his reaction(s)?	Pearson Correlation	.187(**)	1	.070	-.234(**)	-.181(*)	.013
	Sig. (2-tailed)	.010		.329	.001	.011	.852
	N	190	197	196	197	197	197
Do you think the cause of this reaction will be present again in the future or was a one-off?	Pearson Correlation	.131	.070	1	-.240(**)	-.036	.535(**)
	Sig. (2-tailed)	.071	.329		.001	.619	.000
	N	189	196	196	196	196	196
Was the predicted reaction caused by something specific about Paul or something else?	Pearson Correlation	-.150(*)	-.234(**)	-.240(**)	1	.585(**)	-.169(*)
	Sig. (2-tailed)	.039	.001	.001		.000	.017
	N	190	197	196	197	197	197
Was the reaction caused by something unique about Paul or by something common to most adults?	Pearson Correlation	-.133	-.181(*)	-.036	.585(**)	1	-.058
	Sig. (2-tailed)	.067	.011	.619	.000		.419
	N	190	197	196	197	197	197

Would the cause of Paulâ€™s reaction only influence this type of situation or would it influence all situations in his life?	Pearson Correlation	-.061	.013	.535(**)	-.169(*)	-.058	1
	Sig. (2-tailed)	.403	.852	.000	.017	.419	
	N	190	197	196	197	197	197

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

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

Appendix D: Example of vignette and attribution questions

Scenario 1

1. Cathy has lived next door to the same neighbour for 15 years and wakes up one morning to find that they have died during the night. She still has to go to work as she has an important meeting that day. How might she react?

---

2. How much control does Cathy have over her reaction(s)?

Has no control	1	2	3	4	5	6	7	Has complete control
	○	○	○	○	○	○	○	

3. Do you think the cause of this reaction will be present again in the future or was a one-off?

Will be present again	1	2	3	4	5	6	7	Was a one-off
	○	○	○	○	○	○	○	

4. Was the predicted reaction caused by something specific about Cathy or something else?

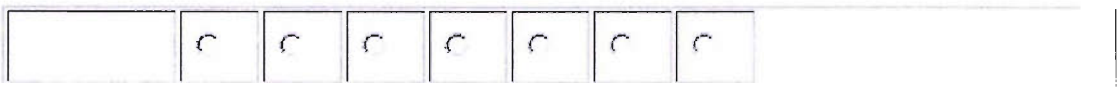
Specific to Cathy	1	2	3	4	5	6	7	Something else
	○	○	○	○	○	○	○	

5. Was the reaction caused by something unique about Cathy or by something common to most adults?

Something unique	1	2	3	4	5	6	7	Common to most
	○	○	○	○	○	○	○	

6. Would the cause of Cathy's reaction only influence this type of situation or would it influence all situations in her life?

This	1	2	3	4	5	6	7	All situations



	○	○	○	○	○	○	○

Appendix E: Vignettes used in study.

Non-ID Condition

Cathy has lived next door to the same neighbour for 15 years and wakes up one morning to find that they have died during the night. She still has to go to work as she has an important meeting that day. How might she react?

Tom has gone out for a meal with some of his friends from the bank. Tom loves his food but orders badly and his meal is pretty terrible and not really what he wanted. How might Tom react?

Sam is terrified of spiders. She gets home from work one day and goes to the toilet. As she is sitting there she notices a huge spider between her and the door. How might she react?

James is out with a group of college mates at the bowling alley. He is normally pretty rubbish at bowling but is on a roll and has scored 3 strikes in a row, something he has never even looked like doing before. How might he react?

John has an abscess in his tooth which is extremely painful. His wife phones the dentist but cannot get an appointment until the following afternoon. How might John react?

Bob wakes up early, as always, to get ready for work at the opticians. He goes downstairs to find some post. He opens it and realises he has won a competition he entered last month and now has a two cinema passes valid for a year at his local cinema. How might he react?

Paul is quite shy but normally gets on well with people at work. He walks past a bar on the way back from work and sees some of his colleagues from the sales team. He goes and tries to join them but they pretty much ignore him all evening. How might he react?

ID Condition

Cathy has lived in the next room to one of her fellow residents for 15 years. She wakes up one morning to find that they have died during the night. She is still required to go to her day centre. How might she react?

Tom has gone out for a meal with some of the other service users from the care home. Tom loves his food but orders badly and his meal is pretty terrible and not really what he wanted. How might Tom react?

Sam is terrified of spiders. She gets back to her supported living, shared house and goes to the toilet. As she is sitting there she notices a huge spider between her and the door. How might she react?

James is out with his social activity group at the bowling alley. He is normally pretty rubbish at bowling but is on a roll and has scored 3 strikes in a row, something he has never even looked like doing before. How might he react?

John has an abscess in his tooth and is able to communicate to his care staff that it is extremely painful. They phone the dentist but cannot get an appointment until the following afternoon. How might John react?

Bob wakes up early, as always, to get ready for his supported employment placement at McDonalds. He goes downstairs to find some post. He opens it and realises he has won a competition he entered last month and now has a two cinema passes valid for a year at his local cinema. How might he react?

Paul is quite shy but normally gets on well with people at 'Expressions', an arts and crafts day service. He walks past a bar on the way home from Expressions and sees some of his colleagues and carers there. He goes and tries to join them but they pretty much ignore him all evening. How might he react?

Appendix E: Self Efficacy Scale

7. How confident are you in dealing with challenging	**Not at all Confident**	1	2	3	4	5	6	7	**Very Confident**

behaviour?

	○	○	○	○	○	○	○	

8. How difficult do you find it personally to deal with challenging behaviour?

Very Difficult	1	2	3	4	5	6	7	Not at all Difficult
	○	○	○	○	○	○	○	

9. To what extent do you feel that the way you work with challenging behaviour has a positive effect?

Has no positive effect	1	2	3	4	5	6	7	Has a very positive effect
	○	○	○	○	○	○	○	

10. How satisfied are you with the way in which you work with challenging behaviour?

Not satisfied at all	1	2	3	4	5	6	7	Very satisfied
	○	○	○	○	○	○	○	

11. To what extent do you feel in control of the challenging behaviours of the people with learning disabilities you work with?

Not in control	1	2	3	4	5	6	7	Very much in control
	○	○	○	○	○	○	○	

12. How confident are you in screening for psychological problems?

Not at all confident	1	2	3	4	5	6	7	Very confident
	○	○	○	○	○	○	○	

13. How difficult do you find it personally to screen for psychological problems?

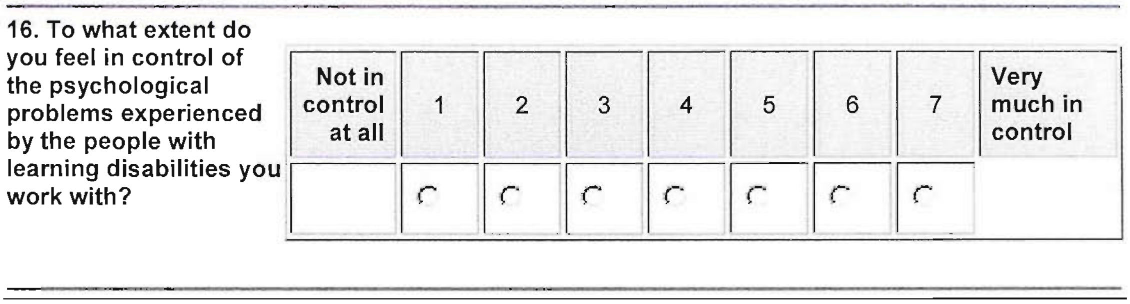
Very Difficult	1	2	3	4	5	6	7	Not at all Difficult
	○	○	○	○	○	○	○	

14. To what extent do you feel that the way you attempt to screen for psychological problems has a positive effect?

Has no effect at all	1	2	3	4	5	6	7	Has a very positive effect
	○	○	○	○	○	○	○	

15. How satisfied are you with the way you screen for psychological problems?

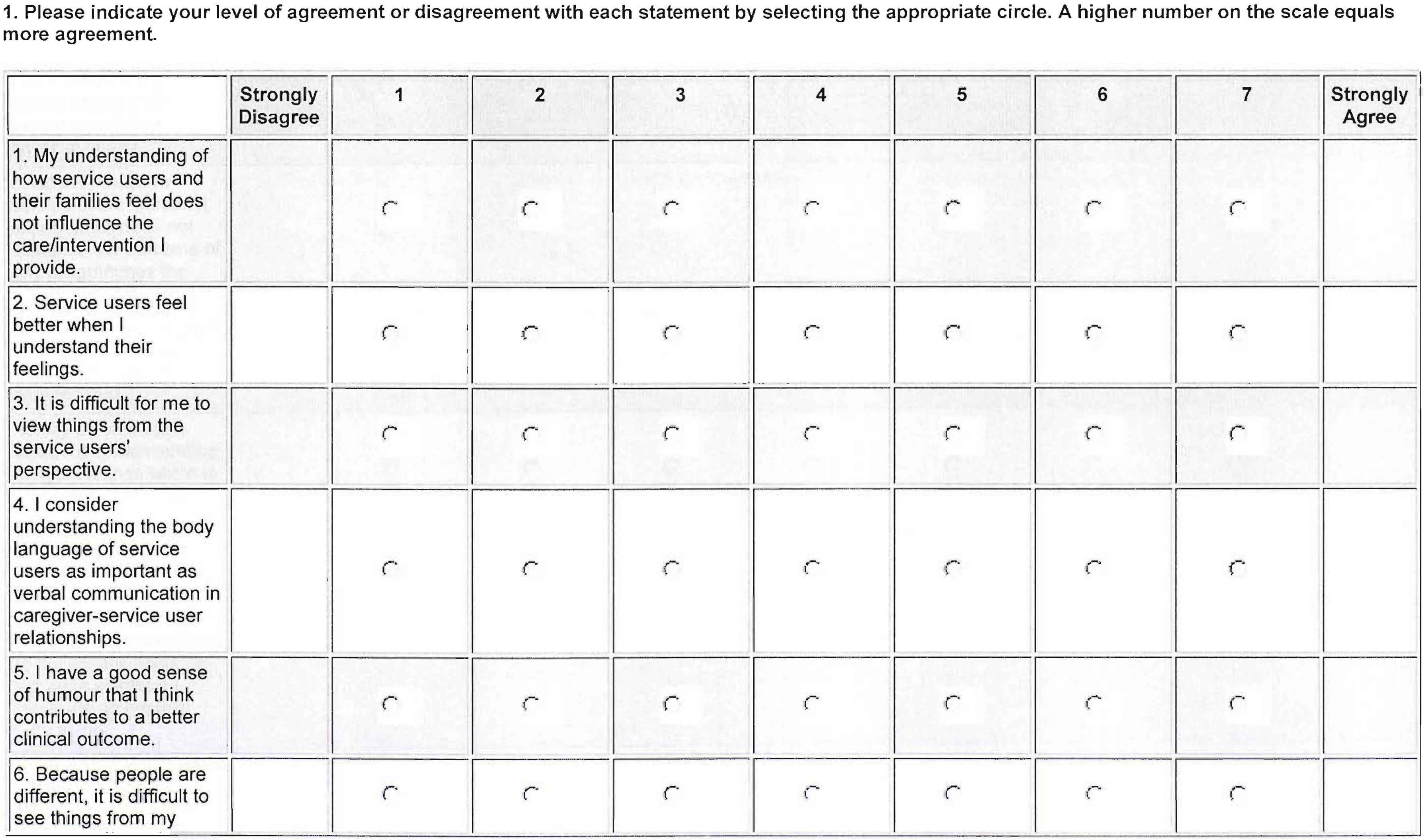
Not satisfied at all	1	2	3	4	5	6	7	Very satisfied
	○	○	○	○	○	○	○	



16. To what extent do you feel in control of the psychological problems experienced by the people with learning disabilities you work with?

Not in control at all	1	2	3	4	5	6	7	**Very much in control**
	○	○	○	○	○	○	○	

Appendix F: Modified JSPE



1. Please indicate your level of agreement or disagreement with each statement by selecting the appropriate circle. A higher number on the scale equals more agreement.

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
1. My understanding of how service users and their families feel does not influence the care/intervention I provide.		○	○	○	○	○	○	○	
2. Service users feel better when I understand their feelings.		○	○	○	○	○	○	○	
3. It is difficult for me to view things from the service users' perspective.		○	○	○	○	○	○	○	
4. I consider understanding the body language of service users as important as verbal communication in caregiver-service user relationships.		○	○	○	○	○	○	○	
5. I have a good sense of humour that I think contributes to a better clinical outcome.		○	○	○	○	○	○	○	
6. Because people are different, it is difficult to see things from my		○	○	○	○	○	○	○	

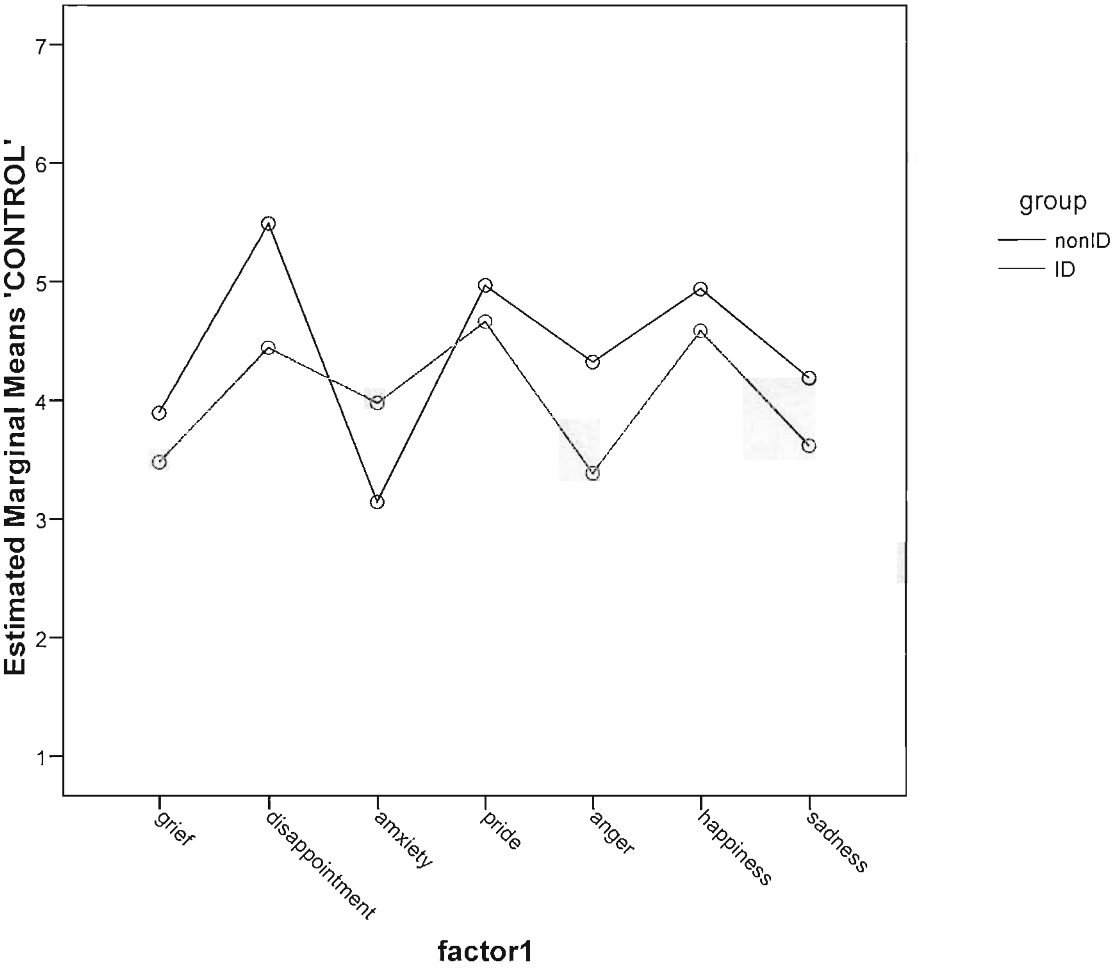
service users' perspective.									
7. I try not to pay attention to my service users' emotions in history taking or in asking about their physical health.		○	○	○	○	○	○	○	
8. Attentiveness to service users' personal experiences does not influence the outcome of any programmes the person might be on.		○	○	○	○	○	○	○	
9. I try to imagine myself in my service users' shoes when I provide care to them.		○	○	○	○	○	○	○	
10. My service users value my understanding of their feelings which is therapeutic in its own right.		○	○	○	○	○	○	○	
11. Service user's illnesses can be cured only by medical or surgical treatment; therefore, emotional ties to my service users do not have significant influence on medical outcomes.		○	○	○	○	○	○	○	
12. Asking service users what is happening in their personal lives is		○	○	○	○	○	○	○	

not helpful in understanding their physical problems.									
13. I try to understand what is going on in my service user's minds by paying attention to non-verbal cues and body language.		○	○	○	○	○	○	○	
14. I believe that emotion has no place in the work I do with service users.		○	○	○	○	○	○	○	
15. Empathy is a therapeutic skill without which success in caregiving/intervention is limited.		○	○	○	○	○	○	○	
16. An important component of my relationship with service users is my understanding of their emotional status, as well as that of their families.		○	○	○	○	○	○	○	
17. I try to think like my service users in order to render better care.		○	○	○	○	○	○	○	
18. I do not allow myself to be influenced by strong personal bonds between service users in my care and their family members.		○	○	○	○	○	○	○	

19. I do not enjoy reading non-healthcare literature or the arts.		○	○	○	○	○	○	○	
20. I believe that empathy is an important factor in my work with service users.		○	○	○	○	○	○	○	

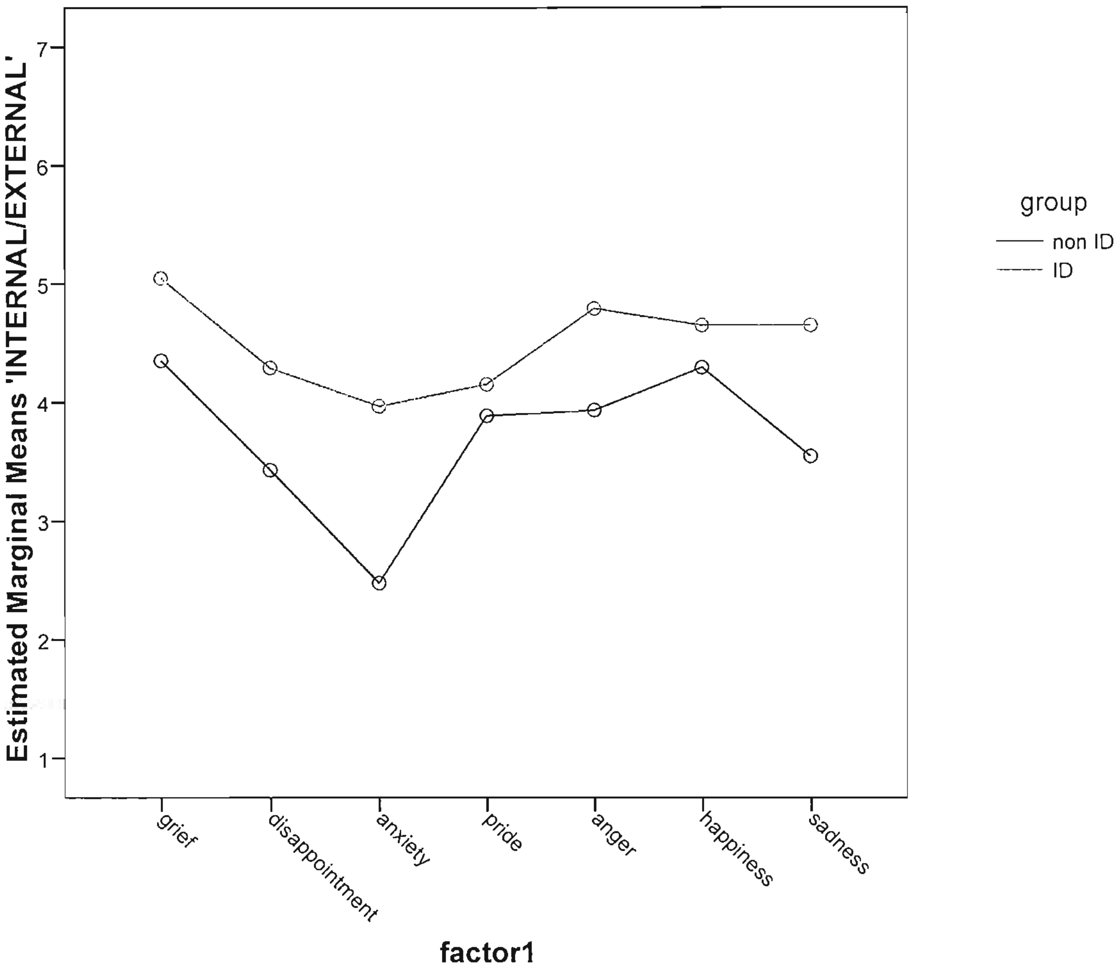
Appendix G: Attribution plots for control, specificity, globality, universality and stability.

Mean Attribution Scores for 'Control'

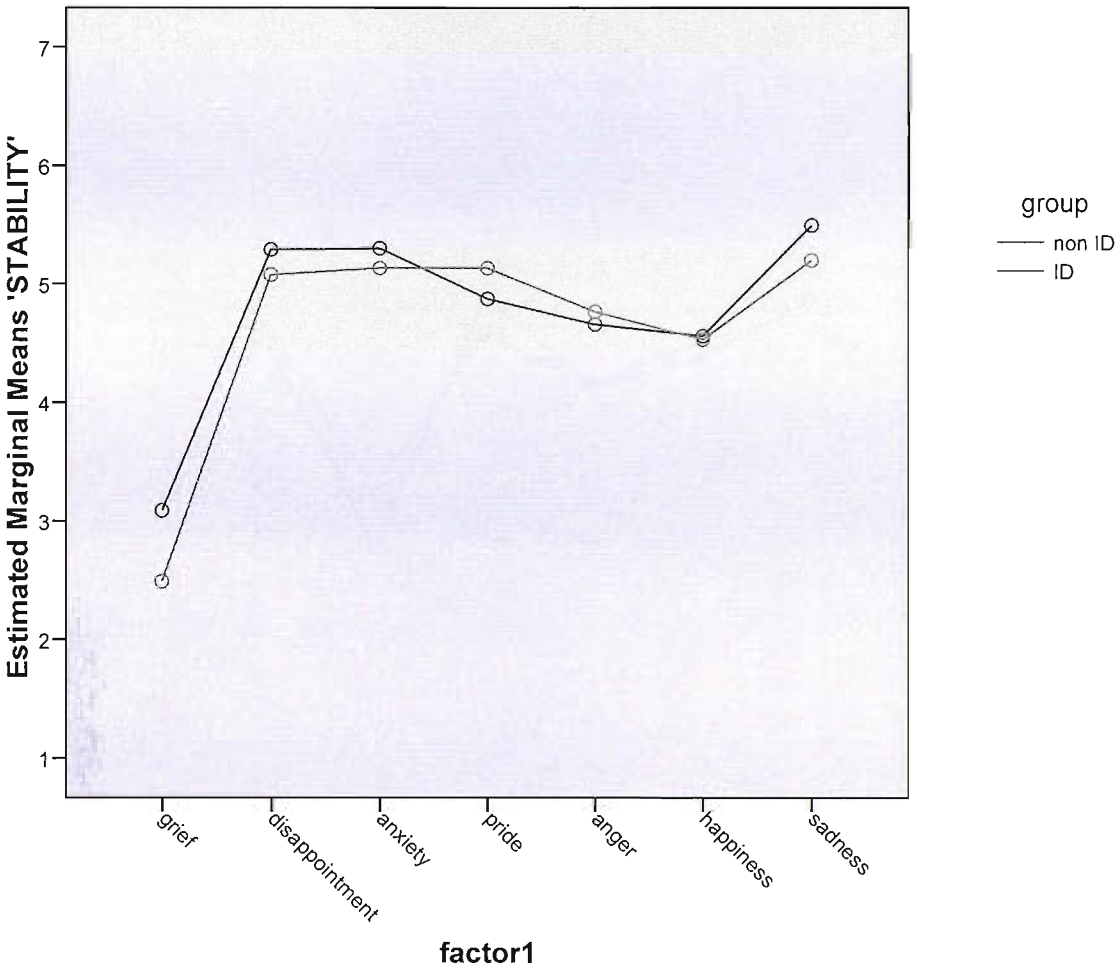


Note: Higher the score reflect the more control.

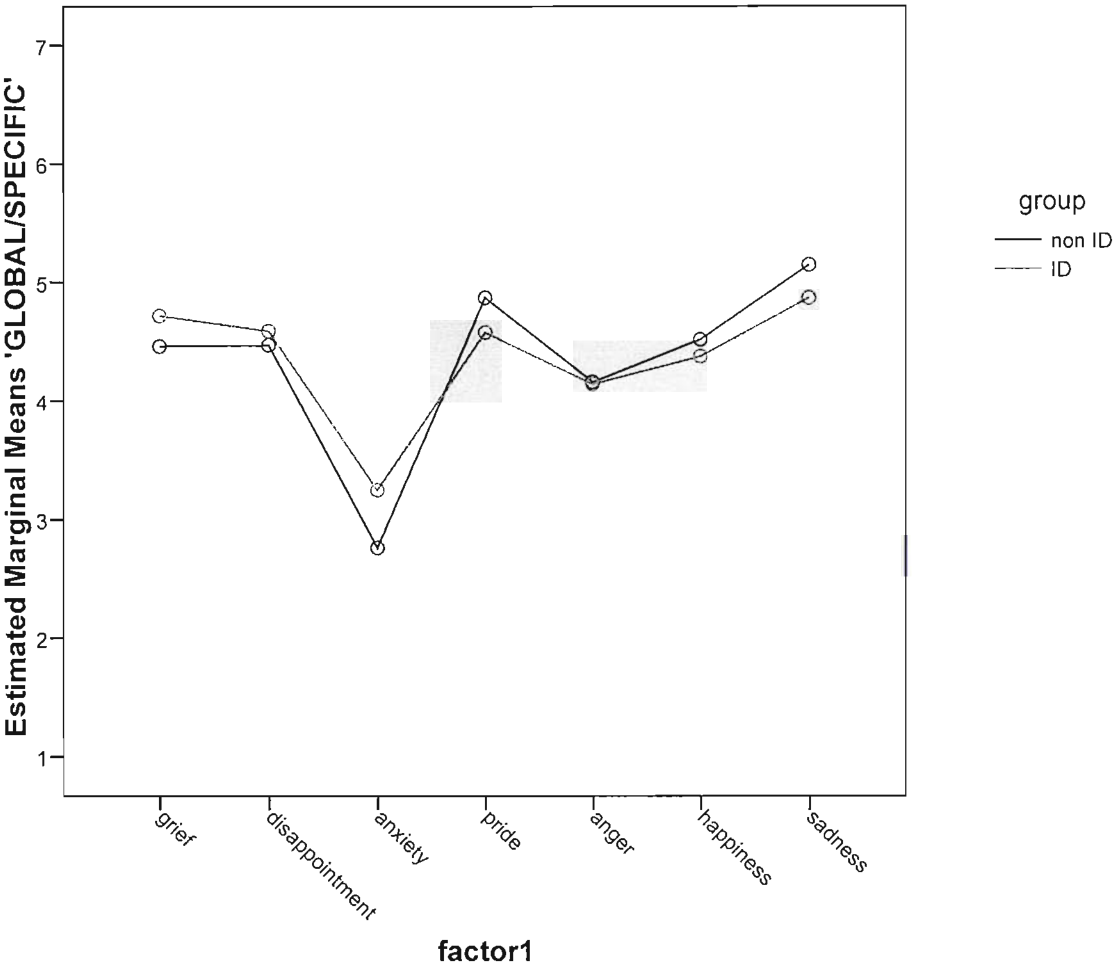
Mean Attribution Scores for 'Internal-External'



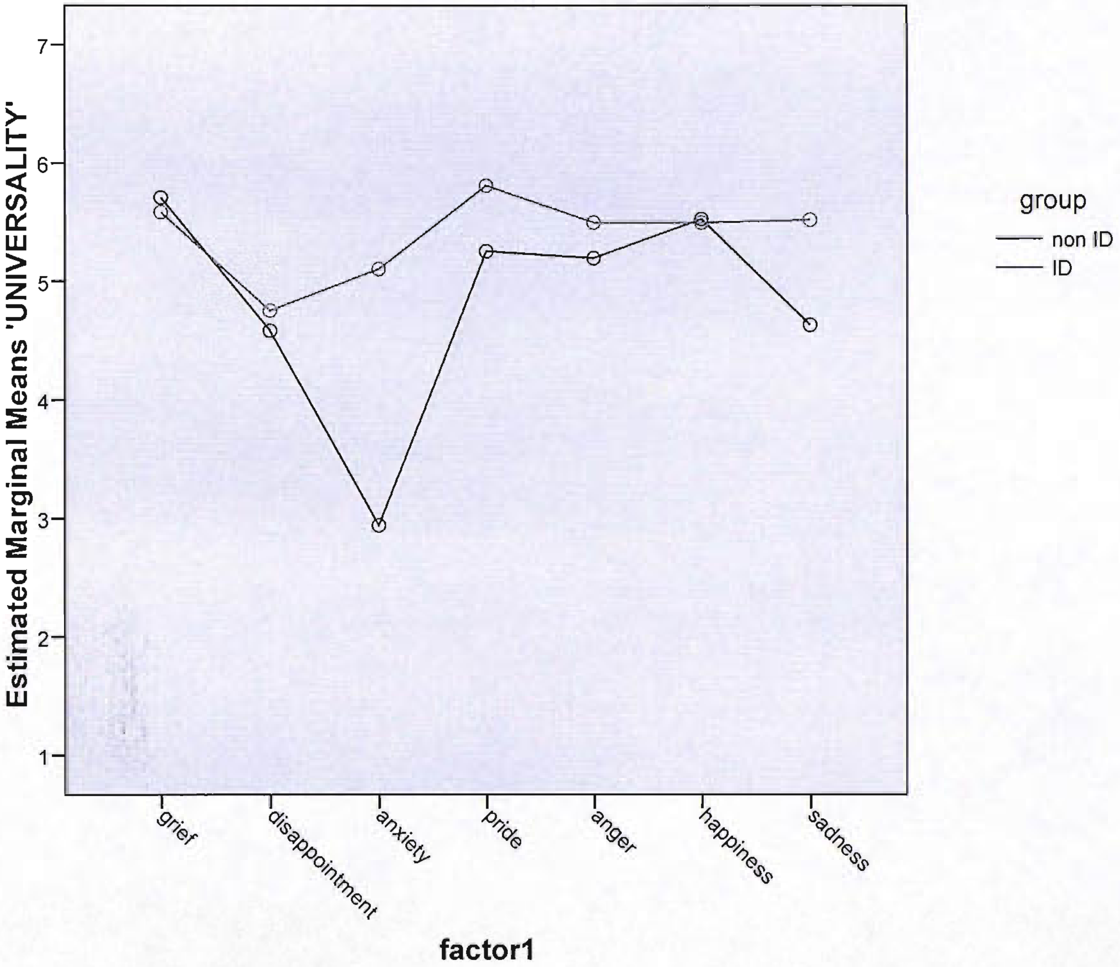
Mean Attribution Scores for 'Stability'



Mean Attribution Scores for 'Globality'



Mean Attribution Scores for 'Universality'


Estimated Marginal Means 'UNIVERSALITY'
7
6
5
4
3
2
1
grief
disappointment
anxiety
pride
anger
happiness
sadness
factor1
group
non ID
ID