

**Educational Staff's Responses to Challenging Behaviour of
Children with Learning Disabilities: the Impact of Diagnosis
& Clinical Research Portfolio**

PART ONE

(Part Two bound separately)

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*Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical
Psychology (D. Clin Psy)*

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Chapter 1

The relationship between staff experience and qualifications and their emotional responses to challenging behaviour in learning disabilities services:

A Systematic Literature Review

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Abstract

Background

Research suggests that stress and burnout, in those working with individuals with learning disabilities who display challenging behaviour, are related to staff's emotional responses to this behaviour. Therefore, identifying factors that influence staff's emotional responses may help to inform future training and support required in learning disability services. The aim of this review was to consider the relationship between staff characteristics, namely experience and qualifications, and their emotional reactions to challenging behaviour.

Method

A systematic search was conducted. The review included studies measuring the relationship between staff experience and qualifications and their emotional responses to challenging behaviour in their work in the field of learning disabilities.

Results

More experienced staff were found not to report significantly different levels of negative emotional reactions to challenging behaviour when compared to their inexperienced colleagues. Due to the small number of studies and inconsistent findings, no conclusions could be drawn regarding the relationship between staff qualifications and emotional responses to challenging behaviour. The findings are discussed in light of methodological strengths and weaknesses.

Conclusions

Implications for staff training and support and directions for future research are considered.

Introduction

Challenging Behaviour

Emerson et al (2001) described challenging behaviour as “*behaviour of such intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit or delay access to and use of community facilities*”. It can be displayed in many different forms, including aggression, self-injurious behaviour, property destruction, sexually inappropriate behaviour and stereotyped behaviour (Lowe et al, 1995).

Care and educational staff in learning disability services, where many of these behaviours are observed, are fundamentally important in providing support for individuals who display these types of behaviour (Rose & Rose, 2005). Staff members’ style of interaction and responses to challenging behaviour can play an important part in the reduction or maintenance of the behaviour (Hastings & Remington, 1994a; Hastings & Brown, 2000; Hastings et al, 2003). In addition, regular exposure to challenging behaviour has been shown to be associated with staff stress, burnout and high turnover (Corrigan, 1993; Hatton et al, 1999). Therefore, it is important to consider staff characteristics that may be linked to staff engaging in appropriate management strategies and which may make them more resilient to the negative effects of working with challenging client groups.

Emotional responses

It is not surprising that research has shown that staff working with this challenging population commonly experience powerful negative emotions when they witness or are the target of challenging behaviour (Bromley & Emerson, 1995; Hastings 1995). Mitchell &

Hastings (1998) reported that emotional responses to aggression could be described along two dimensions, namely feelings of fear and anxiety and feelings of depression and anger. In addition, while self-injurious behaviours are associated with feelings of pity and depression, stereotyped behaviours are described as annoying (Hastings, 1995).

It has been suggested that these emotional reactions can, in turn, make staff more likely to respond to clients in ways that contribute to an increase or reduction in challenging behaviour (Hall & Oliver, 1992; Hastings & Remington, 1994b). For example, Oliver's (1993) Behavioural Systems Model describes the relationships between staff members' emotional responses and behaviour, and clients' challenging behaviour. It is proposed that there is a mutual reinforcement process involving clients' difficult behaviour and the actions of staff. The model suggests that challenging behaviour can be an aversive stimulus, leading to negative emotions, in turn causing staff to behave in ways to reduce or escape it. This behavioural pattern may reinforce the challenging behaviour, thereby contributing to long-term maintenance (Oliver, 1993).

Another theory emphasising the importance of staff emotional reactions is Weiner's model of helping behaviour (1980; 1985). This model suggests that staff's causal attributions about a client's challenging behaviour are related to their willingness to help that client and that this relationship is mediated by the emotional responses of the staff member. For example, it is thought if staff believe the cause of the challenging behaviour to be under the control of the client, they will experience negative emotions, such as anger, and thus help less.

Furthermore, Hastings' (2002) model of staff psychological well-being indicated that these powerful negative emotional responses to challenging behaviour may accumulate over time and lead to staff stress, burnout and mental health problems. Stress is understood in terms of how the demands placed on a person are balanced between their perceptions of them as a threat and their perceived ability to cope with those demands (Firth-Cozens, 1999), while burnout is described as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach et al, 1996). There is research suggesting that high levels of staff stress and burnout are associated with reduced interaction with clients (Rose et al, 1998a; 1998b). Therefore, clearly this stress and burnout could have a significant impact on the clients for which they care.

Overall, recent research suggests that staff emotional responses to challenging behaviour play an important role in determining their own well-being and that of clients with whom they work.

Staff Background Characteristics

It is possible that particular staff characteristics may make them less likely to experience these negative emotional reactions and thus, less likely to experience burnout and display maintaining behavioural responses when exposed to challenging behaviour. Previous qualifications and experience are often important factors considered during candidate selection for caring professions (Bigby, 2004; SCIE, 2008a). Therefore, it is critical to understand the relationship between these staff characteristics and their emotional reactions to clients' challenging behaviour.

A number of studies focusing on the application of Weiner's model of helping behaviour (1980; 1985) to staff working with individuals with learning disabilities have measured staff qualifications and experience. However, these factors have not been the main focus of study so their relationships with staff emotional reactions were not analysed (e.g. Stanley & Standen, 2000; Jones & Hastings, 2003; Bailey et al, 2006). As there is now an emphasis on professionalising the care work force (SCIE, 2008b), it is surprising that few studies have considered the impact of staff background characteristics, such as qualifications, on their reactions to challenging behaviour.

However, Hastings' (1995) exploratory qualitative study found that care staff working with people with severe learning disabilities and challenging behaviours reported that their emotional reactions to challenging behaviour did influence their behavioural responses but that any negative feelings in relation to observing self-injury became less prominent over time. Similarly, the study indicated that over time staff may become less emotionally involved in their work. It seems as though they may become 'detached' in order to manage stress in their work with clients who display challenging behaviour (Gross, 1988-cited in Heinemann, 1990). These findings suggest that staff with more cumulative experience may have fewer negative emotions in response to challenging behaviour than inexperienced staff.

Since then, a small number of quantitative studies have examined the relationship between staff qualifications and experience and their emotional responses to challenging behaviour displayed by individuals with learning disabilities. While Hastings' (1997) review paper briefly considered the effect of staff experience on their attributions about challenging behaviour, to the author's knowledge, a review of recent studies measuring staff's

emotional responses has not been conducted. Therefore, the association between staff characteristics, namely qualifications and experience, and their emotional responses to challenging behaviour was the focus of the current systematic review.

Review Question

How do staff qualifications and experience impact on their emotional responses to challenging behaviour displayed by individuals with learning disabilities?

Search Strategy

Studies were identified by searching the following electronic databases: OVID, PsychINFO, EMBASE, MEDLINE, CINAHL, Web of Science and the Cochrane Library. The following keyword search terms describing intellectual disabilities were used: intellectual disability/disabilities OR learning disability/disabilities OR mental retardation OR mental handicap OR mental deficiency. These were combined with: staff OR carer; and emotion. In addition to the database search, references from key articles were examined and a hand search of the following key journals was conducted: Journal of Applied Research in Intellectual Disabilities, Journal of Intellectual Disability Research, American Journal on Mental Retardation, Mental Retardation and British Journal of Learning Disabilities.

Inclusion and Exclusion Criterion

Studies were included if they specifically measured staff's emotional responses to challenging behaviour displayed by individuals with learning disabilities (including aggression, self-injurious behaviour, sexually inappropriate behaviour, stereotypy and destructive behaviour) and their relationship with either staff qualifications or experience.

Studies where the sample exclusively represented non-paid staff, such as parents or foster carers, and those published prior to 1987 were excluded. Also, studies that examined the success of a specific training programme, qualitative studies and reviews were excluded. Finally, studies that solely examined general responses to working with individuals with learning disabilities, such as stress, emotional exhaustion or burnout, were excluded.

Search Process

The initial computerised search identified 50 articles, 46 of which were excluded upon reading the article on the basis of the above inclusion and exclusion criteria. In addition to the remaining 4 articles, a further 2 were identified through a hand search of their references. The final article was identified through a hand search of the key journals detailed above, producing a total of 7 articles, comprising of 8 studies. No additional studies were identified through a hand search of the references from these articles. This process is detailed in Appendix 2.1.

Methodological Quality

Seven generic quality criteria relevant to questionnaire and interview studies were developed based on the Critical Appraisal Skills Programme (PHRU, 2004) and the Scottish Intercollegiate Guidelines Network (SIGN, 2004) guidelines:

- Whether the study has clearly focussed objectives.
- Whether the study uses a longitudinal; cross sectional; or uses only an opportunistic sample from one unit, ward or school.
- Whether the staff demographics are clearly detailed.
- Whether the client demographics are clearly detailed.
- Whether the study clearly indicates the participant response rate.
- Whether the measures used are clearly defined and reliable.
- Whether the data analysis is comprehensive.

An additional specific criterion, pertinent to studies investigating the relationship between staff background characteristics and their emotional responses regarding challenging behaviour, was also used to assess the methodological quality of the papers. This specific criterion was included, as there appeared to be a large amount of variation between studies in this area in their depiction of challenging behaviour:

- Whether the challenging behaviour presented is clearly described.

Further detail on how the papers were rated based on these criteria is provided in Appendix 2.2. Each paper was rated on the basis of these factors and a categorical rating of

“Excellent”, “Very Good”, “Good”, “Adequate” or “Inadequate” was allocated based on the total scores, which are presented in Appendix 2.3. “Excellent” papers consistently achieved the highest rating for each factor, “Very Good” papers achieved a total score of greater than 20, “Good” papers achieved a total score of greater than 15, “Adequate” papers achieved a total score of greater than 10, and “Inadequate” papers achieved a total score of 10 or less.

Using these criteria, three studies were rated as “Very Good” and five studies were rated as “Good” as shown in Appendix 2.3. No papers were “Excellent”, “Adequate” or “Inadequate”. Therefore, it seems that studies in this area are of similar quality.

A second independent reviewer evaluated each of the 7 articles, constituting 8 studies. An inter-rater reliability analysis using the Kappa statistic was performed to determine consistency among raters. The inter-rater reliability was found to be Kappa = 0.787 ($p < 0.001$), 95% CI (0.515, 1.06). In addition, agreement between the raters for overall category was 100%.

Data Extraction

Details of the studies were placed within data extraction tables to facilitate cross-referencing of study design and outcomes. In line with the quality criteria detailed above, data extraction examined study objectives, participant demographics, design, description of challenging behaviour and data analysis. In addition to the quality criteria, study findings and specific details of the measures used were also examined.

As indicated in Tables 1 to 3, five of the studies examined care staff's emotional responses to challenging behaviour, one focussed on nursing staff and two studies examined special educational school staff. The papers also varied in the type of challenging behaviour studied. One study focussed solely on aggression, two solely examined self-injurious behaviour, two studied stereotypy, self-injurious behaviour and aggression and three did not specify the type of challenging behaviour to which staff were responding.

This review addresses how staff qualifications and experience are related to their emotional responses to clients' challenging behaviour. In addition, the methodological challenges in this area of research are considered.

Results

The results are presented in three sections, following the approaches used to investigate staff qualifications and experience and their emotional responses to challenging behaviour. These approaches are real life incidents, video vignettes and written vignettes of challenging behaviour. As Wanless & Jahoda's (2002) study used two methods (real life experiences and written vignettes), it has been discussed in both relevant sections of the review. Additionally, each part of the results section is subdivided into findings related to staff 1) qualifications and, 2) experience. The methodological issues and overall findings are also considered.

Real Life Experiences

Of the eight studies reviewed, three examined staff's emotional responses to real life experiences of challenging behaviour. One study examined the impact of staff qualifications, while all three investigated the effect of cumulative experience. Details of these studies are shown in Table 1.

Insert Table 1 about here

Study Findings

Qualifications

As shown in Table 1, Hastings & Brown's (2002a) study compared 30 qualified special education teachers' feelings of depression, anger, fear and anxiety in response to recent incidents of challenging behaviour directed towards or witnessed by them, to that of 40 unqualified school support staff. They showed that staff with formal teaching qualifications were more likely to experience feelings related to depression and anger in response to challenging behaviour than support staff.

Experience

Hastings & Brown (2002a) also investigated the relationship between staff's cumulative experience and negative emotional reactions to challenging behaviour. Their study indicated that staff's length of experience did not predict their feelings related to depression and anger or fear and anxiety.

Wanless & Jahoda (2002) used a cross sectional study with care staff in day centres to examine the direct emotional responses of individuals to real life incidents of aggressive behaviour. This paper indicated that cumulative experience of working with clients with learning disabilities was not related to staff members' emotional reactions to their challenging behaviour.

In a later study, Rose et al's (2004) Study 1 also investigated 101 care staff's levels of depression, anger, fear and anxiety in response to recent incidents of challenging behaviour. The majority of participants in the study had no formal qualifications in the field of learning disabilities, were in direct support roles in social care settings and all had witnessed or been the victim of at least one incident of self-injury, aggressive or destructive behaviour in the last month. No significant association was found between staff members' emotional reactions to challenging behaviour and their cumulative experience of working with people with learning disabilities.

Methodological considerations

Of the three studies examining staff emotional responses to real life experiences of challenging behaviour displayed by individuals with learning disabilities, two (Hastings & Brown, 2002a; Wanless & Jahoda, 2002) were rated as 'Very Good' and one (Rose et al, 2004 (Study 1)) was rated as 'Good' according to the quality criteria detailed in Appendix 2.2.

However, other methodological issues need to be considered when interpreting the findings of these studies. For example, when using actual incidents of challenging behaviour to elicit emotional responses, it cannot be assumed that staff were responding to the same

type of challenging behaviour. Therefore, participants may have been responding to behaviour of quite different levels of severity, frequency and type, making it difficult to make firm conclusions. While this applies to all studies using this method, it is particularly evident in Hastings & Brown's (2002a) paper and Rose et al's (2004) first study. Neither study advised staff on the type of challenging behaviour they should consider when answering the questionnaire. Also, this 'real life' method relies on participants accurately recalling their thoughts and emotions; it is possible participants may have had difficulty recollecting aspects of their experience.

However, despite the methodological issues arising from using real life events, this method does have the advantage of being more ecologically valid, because it uses events that are likely to have more personal significance than hypothetical situations, used in the more controlled methods described below (Wanless & Jahoda, 2002).

Another drawback to Hastings & Brown's (2002a) study was that the two groups of staff who were compared were not matched by age, gender or cumulative experience. Therefore, the results of this study should be interpreted with caution.

Overall Findings

Taken as a whole, studies asking participants to report their emotional responses to recent incidents of challenging behaviour suggest that there is no relationship between staff cumulative experience and emotional responses. However, in Hastings and Brown's (2002a) study, staff with a higher level of qualification were more likely to experience feelings related to depression and anger in response to challenging behaviour than less qualified staff.

Video Vignettes

Two studies (Mossman et al, 2002; Hastings et al, 2003) investigated emotional reactions to self-injurious behaviour using video vignettes. One of these (Mossman et al, 2002) examined the relationship between both qualifications and cumulative experience and emotional responses. The other (Hastings et al, 2003) focussed on level of experience. These studies are detailed in Table 2.

Insert Table 2 about here

Study Findings

Qualifications

Mossman et al (2002) examined the association between 60 special educational staff's qualifications and the emotions, such as those related to depression or anxiety, they felt in response to video vignettes of self-injurious behaviour. No differences were found between the emotional responses of the 20 qualified teachers and the 40 unqualified classroom assistants. In addition, the study suggested that level of challenging behaviour training was not associated with staff's emotional responses to self-injurious behaviour.

Experience

Mossman et al's (2002) study also suggested that no association existed between special educational staff's cumulative experience and the nature of their emotional responses to challenging behaviour.

Similarly, Hastings et al's (2003) study compared the direct emotional responses to video vignettes of self-injurious behaviour of two groups of individuals. As shown in Table 2, the first group were 60 university students studying a range of subjects, none of whom had 'substantial' experience of working in services for children with learning disabilities but may have had voluntary or part-time work of short duration. The second group were 60 direct care staff working in a residential setting for young people with learning disabilities. University students were found to experience higher levels of negative emotional responses (depression, anger, fear and anxiety) than care staff with substantial experience.

Methodological Considerations

Both Mossman et al's (2002) and Hastings et al's (2003) studies were rated as 'Good' according to the quality criteria in Appendix 2.2. However, both studies had a number of methodological weaknesses. Specifically, neither study matched their comparison groups for age or gender. Furthermore, both studies used video material of an adult self-injuring to elicit responses in participants who usually worked with children. In addition, it was noted that there was also a staff member in the video vignettes of a client self-injuring. Given that participants were asked to respond to the vignette as a whole, participants may have been responding to the behaviour of the staff member and not that of the client with learning disabilities displaying the self-injurious behaviour (Hastings et al, 2003). It is also important to note that while the video vignette method allows for more control than using real life incidents, it does not represent 'real' events (Hastings et al, 2003) and does not allow the participant to interact or have a relationship with the client displaying the challenging behaviour.

In addition to the drawbacks shared by both studies, Hastings et al's (2003) use of students from a range of courses in their comparison group was a further limitation. This lack of control for personality, interests and understanding of challenging behaviour, as pointed out by Hastings et al (1995), may have led to such confounding variables influencing their results.

Also of note, as shown in Table 2, both studies using the video vignette method measured participants' emotional responses to self-injurious behaviour with different functions (attention seeking and avoidance). While Hastings et al (2003) showed that there was no significant interaction between the effects of behavioural function and staff experience on their emotional reactions, no analysis of any interaction was reported in Mossman et al's (2002) paper.

Overall Findings

Overall, these studies produced conflicting results regarding staff qualifications and experience and their association with emotional responses to challenging behaviour. One (Mossman et al, 2002) suggested that neither staff qualifications or experience impacted on their emotional reactions to self-injurious behaviour, while the other indicated that a higher level of experience was associated with fewer negative emotions expressed in response to self-injurious behaviour.

These contradictory results may be explained by the different methods used by each study; Mossman et al (2002) examined the relationship between experience and emotional responses in staff currently working with clients with learning disabilities, whereas Hastings et al (2003) compared individuals attending university with those currently

working in the field of learning disabilities. In addition, it should be noted that the staff group in each study were different, in that Hastings et al (2003) examined direct care staff, while Mossman et al's (2002) study focussed on educational staff.

Written Vignettes

Finally, four studies adopted a written vignette approach to evoke emotional responses in participants. All four studies focussed on individuals' level of experience and did not measure staff's qualifications in relation to emotional responses. Details of these studies are outlined in Table 3.

Insert Table 3 about here

Study Findings

Hastings & Remington's (1995) study compared two groups of individuals in terms of their emotional reactions to written vignettes of stereotypy, self-injurious behaviour and aggression. One group (n=148) were qualified and unqualified nursing staff working in a large institution with people with learning disabilities and challenging behaviour, in addition to nursing students who had experience of challenging behaviour in people with learning disabilities. The other group (n=98) were nursing students who had no experience of working with this group. The authors used nursing students as a comparison group in an attempt to control for personality and attitudes towards people with disabilities that may influence people's models of understanding challenging behaviour. The study showed that those with experience of working with clients with learning disabilities were found to rate challenging behaviours as less disturbing, rate feeling 'nothing' as more likely, and rate

feeling fearful as less likely, than inexperienced individuals. While the study also compared responses according to topography of behaviour for the participant group overall, any interaction between the effects of topography and experience was not analysed.

Rose et al's (2004) Study 2 examined the emotional reactions of direct care staff in response to stereotypy, self-injurious behaviour and aggression. They found no significant relationship between cumulative experience of staff and their emotional responses to challenging behaviour overall. In this study, no comparisons of emotional responses according to topography of behaviour appear to have been conducted.

As indicated in Table 3, Wanless & Jahoda's (2002) study measured care staff's ratings of anger, sadness, fear and disgust in response to written vignettes describing incidents of physical and verbal aggression in relation to their cumulative experience in the field of learning disabilities. They found no significant relationship between length of service and immediate emotional reactions to written descriptions of clients' challenging behaviour.

Similarly, Rose & Rose (2005) studied 150 care staff's ratings of a variety of emotions experienced in response to written vignettes of challenging behaviour. This paper also provided no evidence for a relationship between staff's cumulative experience and immediate emotional responses to challenging behaviour displayed by individuals with learning disabilities.

Methodological Considerations

Two studies (Rose et al, 2004 (Study 2); Rose & Rose, 2005) were rated as 'Good', while the other two (Hastings & Remington, 1995; Wanless & Jahoda, 2002) were rated as 'Very Good', according to the quality criteria in Appendix 2.2.

However it should be noted that, when assessing participants' responses to stereotypy, self-injurious behaviour and aggression, neither Rose et al's (2004) Study 2 or Hastings & Remington (1995) analysed their data concerning the potential interaction between the effects of length of service and topography of behaviour on staff emotional responses. Furthermore, while Rose & Rose (2005) indicated that staff answered questions in relation to vignettes of three behaviours, the study did not clarify the topography of these behaviours, and discussed the results with reference to challenging behaviour in general.

It is also important to recognise that, similar to the video vignette method, written vignettes provide more contextual control than the real life methodology, but are less ecologically valid than approaches using real life incidents of challenging behaviour.

Overall findings

Three of the four studies focussing on staff responses to written vignettes of challenging behaviour found no association between their emotional responses and cumulative experience. However, one study (Hastings & Remington, 1995) suggested that more experienced staff found challenging behaviour to be less disturbing, less frightening and were more likely to experience 'nothing' in terms of emotional responses than inexperienced individuals.

Hastings and Remington's (1995) use of nursing students with no experience as a comparison group may explain the conflicting results, as all the other studies using written vignettes examined care staff with varying levels of experience currently working with clients with learning disabilities.

Discussion

Examining the findings across all methods and staff groups suggests that, perhaps contrary to expectations (Hastings, 1995), staff members who have worked longer in learning disabilities services appear not to report lower levels of negative emotions in response to challenging behaviour than their less experienced colleagues. However, there were conflicting findings from studies examining the impact of staff qualifications on their emotional responses to challenging behaviour, with one finding no relationship (Mossman et al, 2002) and one concluding that more qualifications are related to more negative emotional responses to challenging behaviour (Hastings & Brown, 2002a). Due to the small number of studies and inconsistent findings, no conclusions could be drawn regarding the relationship between staff qualifications and their emotional responses to challenging behaviour.

Yet, the overall results relating to staff experience suggest staff do not become less emotionally involved with their clients with learning disabilities over time, which contradicts Hastings' (1995) findings that experienced staff were more emotionally detached than newly appointed staff. It would seem that staff do not necessarily become

'hardened' to working with this challenging population in order to cope, as anecdotal evidence would suggest.

An alternative explanation for these findings might be that staff with more experience do in fact feel fewer negative emotions, such as those related to depression or anxiety, in response to challenging behaviour as they become 'habituated' to these behaviours (Hastings, 1995) but do not want to appear unfeeling or unsympathetic towards their clients. This may lead them to report what they perceive to be socially desirable answers when asked about their emotional reactions to their clients' challenging behaviour, thus masking any effects of cumulative experience on emotional responses. Of note, none of the reviewed studies assessed for any social desirability biases in staff's responses.

It is also possible that the staff in the reviewed studies who have worked the longest in learning disabilities services are those who do not become emotionally detached from their clients and are also somehow protected from the accumulation of negative emotional responses (Hastings, 2002). Perhaps, staff who have become stressed and 'burnt out' have left their jobs and therefore, would not be included in these studies. Consequently, the results of these studies may only be capturing the experienced staff members who are able to remain engaged with clients and are resilient to stress and burnout, and thus remain in post.

Interestingly, the two papers that did show that staff with more experience (Hastings et al, 2003; Hastings & Remington, 1995) report less negative emotions to challenging behaviour, used a different methodological approach from the other studies. Both compared university students (inexperienced group) with care or nursing staff (experienced

group), instead of examining the impact of cumulative experience in those working with clients with learning disabilities. Therefore, perhaps individuals with no experience of challenging behaviour or who are not currently working with clients with learning disabilities, have negative preconceptions and more stereotyped views of individuals with learning disabilities who display challenging behaviour. It may be that staff who have regular contact with these clients have a more balanced view, with a better appreciation of their positive characteristics, thus reducing their negative emotional reactions to any challenging behaviour the clients may display.

However, the findings from these cross sectional studies need to be interpreted with caution. In order to determine causation, future studies using a 'within subjects' longitudinal design are required. Prospective studies using qualitative measures, such as diary keeping, with individuals from the beginning of their training (e.g. as nurses or special education teachers) through to when they are first appointed and throughout their careers may also be useful.

It should be noted that the quantitative measures used in the reviewed studies may not be sufficiently sensitive to detect any subtle changes in emotional response as staff progress through their careers. Different measures were used to determine emotional responses in the reviewed articles. The most reliable appeared to be the Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998), which is reported to have good internal consistency and test-retest reliability. However, the reliability of emotion rating scales was not reported. In addition, staff experience was most commonly assessed by length of time working in the field or comparisons were made between naïve individuals, qualified and unqualified staff members. Hastings et al (1997) noted the crudeness of such

measurements and highlighted that this is a very simplistic model of experience. Perhaps, more detailed measures such as the level of frequency, intensity, severity and type of challenging behaviour to which the staff member is exposed would be a more precise measure of experience. However, it should be recognised that for many of the studies this was not the main focus, perhaps explaining the paucity of valid, comprehensive measures.

Interestingly, any variability in study findings did not appear to be related to the method used to elicit emotional responses. While there has been suggestion that staff respond differently to real life incidents of challenging behaviour than to hypothetical descriptions (Wanless & Jahoda, 2002) and that there are differences in the ecological validity and level of control between methods, this review provides support for the use of vignettes to examine staff responses to challenging behaviour.

Finally, the conceptual limitations of this review should be considered. The current paper has focused on staff members' immediate emotional responses to challenging behaviour as they have been suggested to have an important mediating role in recent models of staff responses to challenging behaviour (Hastings, 2002; Oliver, 1993; Weiner, 1980; 1985). Nonetheless, it is important to recognise that staff experience or qualifications may be related to other emotional responses to working with a challenging population, such as stress (Hatton et al, 1999) and emotional exhaustion (Hastings & Brown, 2002b). While this was out with the scope of the current review, perhaps an exploration of the relationship between staff background variables and these less immediate emotional responses to challenging behaviour could be the focus of future reviews.

Conclusions

The findings of this systematic review go some way to dispelling the commonly held belief that the longer a person has worked in a caring profession, the more emotionally detached they will become. It seems that staff continue to be emotionally effected by exposure to challenging behaviour throughout their careers, suggesting that it is important to provide continuing and timely support for staff who work with individuals presenting with challenging behaviour at all stages of their careers. Moreover, it should not be assumed that because a staff member has a number of years of experience that exposure to challenging behaviour will not impact on them negatively. Encouragingly, McGill et al (2007) showed that training courses in positive behaviour support can significantly reduce staff negative emotional reactions in relation to challenging behaviour. Furthermore, focus on staffing levels (Firth & Myers, 1985; Potts et al, 1995), communication and support from managers (Crawford, 1990; Robertson et al, 2005), provision of supervision (Hingley et al, 1986) and job security (Robertson et al, 2005) may also help to prevent the accumulation of negative emotional responses, resulting in staff stress and burnout (Hastings, 2002).

Clearly, further exploration of staff experience and qualifications, in addition to other background factors such as age and knowledge, may be fundamental in understanding why some staff members are more resilient than others at coping with the effects of working with clients who display challenging behaviour. This in turn could inform training and support required to reduce staff burnout and turnover and improve relationships between staff and clients.

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Table 1: Studies examining staff emotional responses to real life experiences of challenging behaviour

Study	Aims of Study	Sample demographics	Design	Description of Challenging Behaviour	Measures of Qualification/ Experience	Measures of Emotional Responses	Analysis	Findings
Behavioural Knowledge, Causal Beliefs and Self-Efficacy as Predictors of Special Educators' Emotional Reactions to Challenging Behaviours <i>Hastings & Brown (2002a)</i>	To explore psychological factors with a potential for intervention which may be related to staff's emotional reactions to challenging behaviour	N=70 special educational school staff 17 males 53 females Mean age=38.61 years 30 teachers and 40 support staff	Cross sectional	Recent incidents of challenging behaviour directed toward or witnessed by them	<u>Qualification</u> Presence or absence of teaching qualification <u>Experience</u> Cumulative experience in learning disabilities services	Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998)	Regression	Staff with formal teaching qualifications had more feelings of depression and anger than support staff but they did not differ in terms of fear and anxiety. Length of experience did not predict feelings of depression and anger or fear and anxiety.
Responses of Staff towards People with Mild to Moderate Intellectual Disability who behave Aggressively: a Cognitive Emotional Analysis <i>Wanless & Jahoda (2002)</i>	To examine different methods of obtaining the responses of staff to challenging behaviour To replicate previous findings concerning the utility of Weiner's model of helping behaviour	N=38 staff working in day centres for adults with learning disabilities 16 males 22 females Mean age=42.7 years 33 day centre officers and 5 management	Cross sectional	Recent incident of challenging behaviour with a particular client identified as frequently displaying aggressive behaviour	<u>Qualification</u> None <u>Experience</u> Cumulative experience working with people with learning disabilities.	Ratings of anger, disgust, sympathy, fear, sadness, happiness and relaxation on seven-point bipolar scales	Correlations	No significant correlations between length of experience and emotional reactions

Study	Aims of Study	Sample demographics	Design	Description of Challenging Behaviour	Measures of Qualification/ Experience	Measures of Emotional Responses	Analysis	Findings
<p>Negative Reactions to Challenging Behaviour and Staff Burnout: Two Replication Studies- Study 1</p> <p><i>Rose, Horne, Rose & Hastings (2004)</i></p>	<p>To examine the association between negative emotional reactions to challenging behaviour and staff burnout</p>	<p>N=101 care staff 31 males 70 females</p> <p>Mean age=33.65 years</p> <p>32.7% with formal qualifications 67.3% with no formal qualifications</p>	<p>Cross sectional</p>	<p>Recent incidents of challenging behaviour directed toward or witnessed by them</p>	<p><u>Qualification</u> None</p> <p><u>Experience</u> Cumulative experience working with people with learning disabilities.</p>	<p>Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998)</p>	<p>Correlations</p>	<p>No significant correlations between length of experience and emotional reactions.</p>

Table 2: Studies examining staff emotional responses to video vignettes of challenging behaviour

Study	Aims of Study	Sample demographics	Design	Description of Challenging Behaviour	Measures of Qualification/ Experience	Measures of Emotional Responses	Analysis	Findings
<p>Mediators' Emotional Responses to Self-Injurious Behaviour: An Experimental Study</p> <p><i>Mossman, Hastings & Brown (2002)</i></p>	<p>To explore the effects of behavioural function on staff's emotional reactions to challenging behaviour</p>	<p>N=60 special educational school staff</p> <p>18 males 42 females</p> <p>Mean age=38.8 years</p> <p>20 teachers and 40 classroom assistants</p>	<p>Cross sectional</p>	<p>Video of a man self injuring with one of three functions:</p> <ol style="list-style-type: none"> 1. Attention seeking 2. Avoidance 3. Not related to environment 	<p><u>Qualification</u> Presence or absence of a teaching qualification</p> <p>The level of challenging behaviour training</p> <p><u>Experience</u> Cumulative experience of working with children with learning disabilities.</p>	<p>Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998)</p>	<p>Kruskal Wallis tests</p> <p>Mann Whitney tests</p> <p>Correlations</p>	<p>No relationship between cumulative experience, qualifications, quantity of challenging behaviour training and emotional reactions.</p>
<p>Determinants of Negative Emotional Reactions and Causal Beliefs about Self-Injurious Behaviour: an Experimental Study</p> <p><i>Hastings, Tombs, Monzani & Boulton (2003)</i></p>	<p>To explore the impact of behavioural function, staff experience of challenging behaviour and severity of challenging behaviour on staff emotional and cognitive responses to challenging behaviour.</p>	<p>N=120 participants</p> <p><u>60 care staff</u></p> <p>20 males 40 females</p> <p>Mean age=31.47 years</p> <p><u>60 university students</u></p> <p>31 males 29 females</p> <p>Mean age=20.92 years</p>	<p>Cross sectional</p>	<p>Video of a man self injuring with one of two functions:</p> <ol style="list-style-type: none"> 1. Attention seeking 2. Avoidance 	<p><u>Qualification</u> None</p> <p><u>Experience</u> University students with no substantial experience of challenging behaviour vs care staff</p>	<p>Emotional Reactions to Challenging Behaviour Scale (Mitchell & Hastings, 1998)</p>	<p>ANOVAs</p>	<p>Students were more likely to experience negative emotions than care staff.</p>

Table 3: Studies examining staff emotional responses to written vignettes of challenging behaviour

Study	Aims of Study	Sample demographics	Design	Description of Challenging Behaviour	Measures of Qualification/ Experience	Measures of Emotional Responses	Analysis	Findings
<p>The Emotional Dimension of Working with Challenging Behaviours</p> <p><i>Hastings & Remington (1995)</i></p>	<p>To compare the emotions associated with self-injury, aggression, and stereotypy, and to investigate the impact of experience on participants' reports of their likely emotional reactions.</p>	<p>N=246 participants</p> <p><u>148 experienced staff</u> qualified and unqualified nursing staff, students in nursing training</p> <p>41% males 59% females</p> <p>Median age=26-35 years</p> <p><u>98 inexperienced students in nursing training</u></p> <p>12% males 88% females</p> <p>median age=21-25 years</p>	Cross sectional	<p>Participants respond to one of three vignettes depicting:</p> <ol style="list-style-type: none"> 1. Stereotypy 2. Self-injurious behaviour 3. Aggressive behaviour 	<p><u>Qualification</u> None</p> <p><u>Experience</u> Whether the participant had experience of working with people with learning disabilities and challenging behaviour or not.</p>	<p>Ratings of how disturbing staff behaviour to be on a seven-point likert scale anchored at "very disturbing" and "not disturbing", on a scale ranging from "very likely" to "very unlikely" to indicate the probability of experiencing each of five emotional states (anger, sadness, fear, disgust, and "nothing")</p>	ANOVAs	<p>Experienced individuals rated challenging behaviours as less disturbing, rated feeling nothing as more likely, and fearful as less likely, than inexperienced individuals.</p>
<p>Responses of Staff towards People with Mild to Moderate Intellectual Disability who behave Aggressively: a Cognitive Emotional Analysis</p> <p><i>Wanless & Jahoda (2002)</i></p>	<p>To examine different methods of obtaining the responses of staff to challenging behaviour</p> <p>To replicate previous findings concerning the utility of Weiner's model of helping behaviour</p>	<p>N=38 staff working in day centres for adults with learning disabilities</p> <p>16 males 22 females</p> <p>Mean age=42.7 years</p> <p>33 day centre officers and 5 management</p>	Cross sectional	Vignettes describing physical and verbal aggression	<p><u>Qualification</u> None</p> <p><u>Experience</u> Cumulative experience working with people with learning disabilities.</p>	<p>Ratings of anger, disgust, sympathy, fear, sadness, happiness and relaxation on seven-point bipolar scales</p>	Correlations	<p>No significant correlations between length of experience and emotional reactions</p>

Study	Aims of Study	Sample demographics	Design	Description of Challenging Behaviour	Measures of Qualification/ Experience	Measures of Emotional Responses	Analysis	Findings
<p>Negative Emotional Reactions to Challenging Behaviour and staff burnout: Two Replication Studies- Study 2</p> <p><i>Rose, Horne, Rose & Hastings (2004)</i></p>	<p>To examine the association between negative emotional reactions to challenging behaviour and staff burnout</p>	<p>N=99 care staff</p> <p>30 males 69 females</p> <p>Mean age=35.24 years</p> <p>Qualifications: not specified</p>	<p>Cross sectional</p>	<p>Three vignettes describing:</p> <ol style="list-style-type: none"> 1. Self-injurious behaviour 2. Stereotyped behaviour 3. Aggression for ratings scales 	<p><u>Qualification</u> None</p> <p><u>Experience</u> Cumulative experience working with people with learning disabilities.</p>	<p>Ratings of anger, sadness, fright and disgust on seven-point scales</p>	<p>Correlations</p>	<p>No significant correlations between length of experience and emotional reactions.</p>
<p>Staff in Services for People with Intellectual Disabilities: the Impact of Stress on Attributions of Challenging Behaviour</p> <p>Rose & Rose (2005)</p>	<p>To test the applicability of a model for the impact of perceived stress on the quality of care provided to individuals with learning disabilities</p>	<p>N=150 care staff</p> <p>31 males 76 females</p> <p>Mean age=35.73 years</p> <p>Qualifications: not specified</p>	<p>Cross sectional</p>	<p>Three vignettes of challenging behaviour – topographies not specified</p>	<p><u>Qualification</u> None</p> <p><u>Experience</u> Cumulative experience of working with people with learning disabilities.</p>	<p>Ratings of anger, disgust, sympathy, fear, sadness, happiness and relaxation on seven-point bipolar scales</p>	<p>Correlations</p>	<p>No significant correlations between length of experience and emotional reactions.</p>

Chapter 2

Educational staff's responses to challenging behaviour of children with learning disabilities: the impact of diagnosis

Major Research Project

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Abstract

Background

Current behavioural models of challenging behaviour suggest that the way in which difficult behaviour is managed by staff can serve to either reduce or maintain the behaviour in the long term (Hastings & Remington, 1994; Hastings & Brown, 2000; Hastings et al, 2003). Therefore, it is important to consider factors that may influence special education staff's behavioural responses to pupils' challenging behaviour and the associated causal attributions and emotional reactions. One area that has received little attention is the potential impact of a pupil's diagnosis in addition to their learning disability on staff members' responses.

Materials and Methods

This present study involved 102 special education staff who were asked to provide cognitive, emotional and behavioural responses to written vignettes of one of three conditions: (1) a pupil with a learning disability without an additional diagnosis displaying aggressive behaviour, (2) a pupil with a learning disability and an Autism Spectrum Disorder displaying aggressive behaviour, and (3) a pupil with a learning disability and Epilepsy displaying aggressive behaviour. Staff background characteristics were also measured.

Results

Planned analysis showed that participants did not significantly differ in their responses to challenging behaviour of a pupil with and without additional diagnoses. Secondary analysis indicated that only a minority of participants considered the additional diagnosis

to be the main cause of the pupil's challenging behaviour. In addition, a number of significant associations between staff background characteristics and self-efficacy were found.

Conclusions

The results are discussed in relation to recent literature. Methodological issues and implications for clinical practice are also considered.

Keywords: challenging behaviour, staff responses, Weiner's model

Introduction

Challenging Behaviour in Special Education Schools

Staff in special education schools are exposed to challenging behaviours, including aggression, self-injury and destructive behaviour, on a daily basis (Harris et al, 1996). They are expected to manage this behaviour while assisting pupils to learn. However, Krakouer (2007) noted that special education staff are often ill-prepared to manage their pupils' challenging behaviour.

Harris and colleagues' (1996) study showed that special education teachers tended to report that they managed challenging behaviour using 'behaviour modification'. They also mentioned time out, detention, seclusion, ignoring, avoiding the problem and removing the pupil from the situation. In addition, Kiernan and Kiernan's (1994) study reported that special education teachers responded with one-to-one staffing and the use of drugs to control behaviour. There have also been reports that on occasion staff responses to challenging behaviour may include abuse, inappropriate treatment, deprivation and systematic neglect (Emerson, 1995).

Current behavioural models of challenging behaviour suggest that the way in which the behaviour is managed can serve to reduce or maintain challenging behaviour in the long term (Hastings & Remington, 1994; Hastings & Brown, 2000; Hastings et al, 2003). More specifically, it has been proposed that the behavioural responses of staff are maintained by the avoidance of the negative emotions elicited by challenging behaviours, which may in turn reinforce the difficult behaviour (Hall & Oliver, 1992; Oliver, 1993).

Therefore, it is important to consider factors that may influence special education staff's responses to challenging behaviour. One area that has been examined is the impact of client characteristics on staff perceptions. For example, Tynan and Allen (2002) showed that staff perceived service users with mild learning disabilities to have greater control over factors causing aggressive behaviour than those who have severe learning disabilities. Recently, Autism Spectrum Disorders (ASD) have increasingly been diagnosed in children and adults (Mandell et al, 2005; Bishop et al, 2008) and there is a considerable focus on specialist training in this area (Jordan & Jones, 2007). Hence, it might be assumed that this diagnosis could influence special education staff's responses to challenging behaviour. However, to the researcher's knowledge, whether staff respond differently to challenging behaviour displayed by individuals with diagnoses in addition to their learning disability, such as an ASD, has not been explored to date.

Weiner's Model

Recent research (e.g. Hastings and Brown, 2002a; Mossman et al, 2002) examining variation in special education staff responses to challenging behaviour has utilised Weiner's model of helping behaviour (1980; 1985). This model suggests that a person's attributions about the cause of an event may impact on their emotional reactions, which will in turn influence the likelihood that they will demonstrate helping behaviour. This would indicate that staff attributions of high internality (when the cause of the challenging behaviour is viewed as internal to the person being observed), high stability (when the cause of the behaviour is viewed as being the same each time) and high controllability (when the cause of the behaviour is viewed as under the control of the person being observed) lead to feelings of anger and thus, less helping behaviour. In other words, emotional responses may mediate the relationship between staff attributions and

behavioural responses. Sharrock et al (1990) and Dagnan et al (1998) added to this model by suggesting that carers' negative emotional responses (e.g. anger) predict their optimism for change of the challenging behaviour, which in turn determines their willingness to help.

Additional Diagnoses

As mentioned, it is possible that special education staff differ in terms of the aspects of Weiner's model (1980; 1985), namely attributions, emotions or willingness to help, when exposed to challenging behaviour of pupils with learning disabilities and an additional diagnosis, when compared with that of pupils with no additional condition.

In the last few decades, there has been an increase in diagnosis of childhood disorders, including Attention Deficit Hyperactivity Disorder (ADHD) and ASD (Mandell et al, 2005). Currently, parents and schools may seek diagnoses for children in an attempt to gain understanding of their difficulties and obtain access to specialist schools, resources and financial assistance. While there may be several advantages to a child receiving such a diagnosis, it is important to consider how this diagnosis may affect how others perceive their behaviour within the educational context.

Previous studies (Markham & Trower, 2003; Forsyth, 2007) have shown that, in the area of mental health, nursing staff are more willing to help patients with a label of 'schizophrenia' or 'depression' when they display difficult behaviour, and are less likely to think that they are in control of their behaviour, than patients with a diagnosis of 'borderline personality disorder'. Therefore, one might expect that a pupil having a diagnosis, such as ASD, which tends to be associated with behaviour that is generally

considered to be out with their control, would encourage staff to be more sympathetic and more likely to help when they display challenging behaviour.

Staff Background Characteristics

In addition to client attributes, it has been suggested that staff characteristics can play an important role in influencing their willingness to help individuals displaying challenging behaviour. Age (Wanless & Jahoda, 2002), experience (Hastings et al, 2003), training (Hastings & Brown, 2002a), perceived knowledge (Hastings & Brown, 2002a) and self-efficacy (Hastings & Brown, 2002a) have all been shown to be associated with staff attributions and/or emotional responses to challenging behaviour.

Research into school staff's perceptions and background characteristics has important practical implications. Findings that staff responses to pupils who display challenging behaviour are affected by their knowledge, experience and qualifications could have a significant impact on future staff training and selection. McGill and colleagues (2007) investigated the influence of staff training on knowledge, causal attributions and emotional responses and found that training can successfully increase knowledge, reduce the likelihood of attributing challenging behaviour to emotional causes and reduce negative emotional responses, such as those related to depression and anger.

Aims of Current Study

This study aimed to address how the presence of an additional diagnosis, namely ASD, impacts on the predictions of Weiner's model (1980; 1985). It used the written vignette method developed by Dagnan and colleagues' (1998), and aimed to address special education school staff's causal attributions, emotional and behavioural reactions to the

challenging behaviour of children with learning disabilities, with and without a diagnosis of an ASD. A control group of staff responding to a pupil with learning disabilities and Epilepsy was also added, to allow analysis of whether any differences between the groups were due to any additional diagnosis or specifically ASD. In addition, the study aimed to contribute to the understanding of the relationship between school staff's background characteristics and their responses to pupils' challenging behaviour.

Hypothesis 1 proposed that staff would attribute less control, less stability and less internality; report less anger and more sympathy; report greater optimism for change and more helping behaviour for children with a learning disability and ASD displaying challenging behaviour, compared to those without a specific diagnosis.

In terms of staff characteristics, Hypothesis 2 proposed that older staff with more training, more experience and more perceived knowledge about learning disabilities and challenging behaviour would report greater confidence in being able to manage the challenging behaviour and more willingness to help.

Materials and Methods

A group comparison design, where participants were randomly assigned to one of three conditions (1. moderate learning disabilities, 2. moderate learning disabilities and ASD, and 3. moderate learning disabilities and Epilepsy), was utilised to examine the impact of diagnosis on special education staff members' predicted attributions, emotions, optimism and helping behaviour in response to challenging behaviour.

Participants

A total of 122 questionnaires were distributed to special education staff recruited from four special education schools for children with mild to severe learning disabilities aged 4 to 19 years, with and without ASDs and additional medical problems. Research and Development Management approval was granted. Ethical approval was also obtained from the Central Office for Research Ethics Committee (Reference Number: 07/S0701/86), the educational authorities involved and head teachers also agreed to their school's participation. Approval letters are shown in Appendices 3.1 to 3.4. Informed consent was obtained from each teacher and classroom assistant who participated in the study. The participant information sheet and consent form are shown in Appendices 3.5 and 3.6 respectively.

Of the 122 questionnaires distributed, 110 were returned, producing a response rate of 90.2%. No data were available on those who did not return a questionnaire. Of the returned questionnaires, four omitted ratings on the Adapted Questionnaire Pack (adapted from Dagnan et al, 1998) described below, and thus, were excluded from the analysis. Four participants who had less than six months experience in the field of learning disabilities were also excluded, to ensure that participants had sufficient experience on which to base their responses to the questionnaire. The demographic characteristics of the 102 participants who were included in the study and that available from the excluded participants are presented in Table 1.

Insert Table 1 about here

The 102 special education staff (96 females and 6 males; mean age= 44.8 years) had worked in the field of learning disabilities for a mean of 111.6 months (9.3 years) and in their school for a mean of 82.2 months (6.85 years). Fifty-seven participants were qualified teachers, while the remaining 45 were classroom assistants.

Kruskal Wallis tests highlighted that, in the most part, participants from different schools did not significantly vary in their responses on the questionnaires, with the exception of their ratings of anger ($X(3, 102)=14.910; p=0.002$). Participants from one school were found to give significantly lower ratings of anger than two of the other schools using Mann Whitney tests. However, for the purpose of this study, participants were analysed as one group and not according to their school.

Measures

The questionnaire, shown in Appendix 3.7, consisted of four sections to obtain information regarding (1) staff background characteristics, (2) the nature of special education school staff's attributions, emotional responses, optimism and helping behaviour in relation to an incident of aggressive behaviour (named the Adapted Questionnaire Pack in the present study), (3) staff perceived knowledge, and (4) staff self-efficacy.

(1) Staff Background Characteristics

Participants were asked for demographic information about their age, gender and occupation. They were also asked about their cumulative experience in the school and in the field of learning disabilities and whether they had received training on learning disabilities and challenging behaviour.

(2) The Nature of Staff's Responses to Aggressive Behaviour using the Adapted Questionnaire Pack

Following the method used by Dagnan and colleagues (1998), participants were asked to read one of three vignettes describing a pupil with a moderate learning disability displaying challenging behaviour by hitting out. In one vignette, the child had no additional diagnosis, in a second the child also had an ASD and in a third the child also had Epilepsy. These vignettes followed the same skeleton outline as Dagnan et al (1998) to allow participants to use their own experiences to inform their responses. The vignettes and questionnaire used is shown in Appendix 3.7. A pilot study with five trainee clinical psychologists was conducted to assess the salience of the vignettes. When asked to discuss the vignettes, all participants raised that the person had a particular diagnosis if it was stated in the vignette.

The following measures were used:

- a. The Attributional Style Questionnaire modified by Peterson et al (1982) was used. This questionnaire allowed open-ended identification of causes and fixed scale ratings of three attributional dimensions. Staff were asked to suggest possible causes for the aggressive behaviour described above. They then selected the most likely cause and rated their attributions of this cause on a seven-point bipolar scale for locus of control, stability and controllability. Higher scores on these scales indicated greater internality, stability and controllability.
- b. Staff were also asked for their emotional responses to the behaviour by rating two emotions (anger, sympathy) on a seven-point bipolar scales from 'not at all' to 'extremely'. Higher scores indicated greater levels of emotion.

- c. Staff were asked to indicate their agreement or disagreement with three statements concerning the potential for changing the challenging behaviour on seven-point bipolar scales. Higher scores indicated greater optimism. This scale was derived from the optimism-pessimism scale used by Sharrock et al (1990), which had been derived from work by Garety & Morris (1984), Moores and Grant (1976) and Allen, Gillespie and Hall (1989). The three ratings were added together to form a total optimism score.
- d. Staff were asked one question regarding their willingness to provide extra effort to help a person showing this behaviour (Sharrock et al, 1990; Weiner, 1980; 1985). This was scored on a seven-point bipolar scale. Higher scores indicated a greater willingness to put extra effort into helping.

(3) Staff Perceived Knowledge

Participants were asked to rate their level of perceived knowledge of working with people with learning disabilities on a seven-point bipolar scale, ranging from 'no knowledge' to 'expert knowledge'.

(4) Staff Self-Efficacy using Hastings & Brown's (2002a) Measure

Finally, participants were asked to rate their self-efficacy in relation to managing challenging behaviour on an adapted version of Hastings & Brown's (2002a) measure. The measure used a scale of four self-efficacy items: feelings of (1) confidence, (2) satisfaction in dealing with behaviours, (3) a perception that they have a positive impact on challenging behaviour, and (4) a rating of how difficult they find it to work with challenging behaviour. Each item was rated on a seven-point scale. Hastings and Brown's (2002a) original scale had an additional measure of control and is reported to have an excellent level of internal consistency (Cronbach's $\alpha=0.94$). The control item was

removed in this study as it is addressed in the Attributional Style Questionnaire discussed above. The ratings were added together to form a total self-efficacy score.

Procedure

Special education staff were invited to participate in the research on their in-service days. All four schools were visited on one occasion for data collection. Questionnaires were completed in the researcher's presence in either the dining room or staff room. This was to ensure that the participants did not confer with each other about their responses. Questionnaire completion took approximately 30 minutes. The three conditions (vignettes of a child with (a) moderate learning disability (b) moderate learning disability and ASD (c) moderate learning disability and Epilepsy) were distributed randomly to the participants.

Data analysis

The planned data analyses were conducted in three stages. The first stage of analysis examined the differences between the vignette conditions, using a series of Kruskal Wallis non-parametric analysis of variance tests, as the Kolmogorov-Smirnov statistic indicated that the data set was non-normally distributed. At the second stage of analysis, Spearman correlations and Mann Whitney tests were used to examine whether participants' background characteristics were related to their self-efficacy and helping behaviour. In addition to Spearman correlations, Sobel tests were used to determine whether the current study's data supported Weiner's model (1980; 1985) and Dagnan et al's (1998) and Sharrock et al's (1990) addition of optimism to the model. Specifically, the relationship between the attribution of controllability and willingness to help mediated by anger was examined as this relationship has been frequently assessed in previous studies (Dagnan et

al, unpublished). The relationship between anger and helping behaviour mediated by optimism proposed by Dagnan et al (1998) and Sharrock et al (1990) was also explored using this method. The Sobel tests assessed whether there was a significant difference between the unstandardised regression coefficients for the mediated and unmediated paths. Finally, secondary analysis involved coding and categorising the causes for the challenging behaviour generated by the participants in response to the open-ended question.

A more conservative alpha level of 0.01 (two-tailed) was used as a number of statistical tests were performed on the data set and this type of study has not previously been conducted with this population. Bonferroni adjustments were not utilised in light of the concern of increased likelihood of type II errors raised by Perneger (1998).

Results

Planned Analyses

Staff Responses to Learning Disability Vignette Compared to Additional Diagnoses Vignettes (Hypothesis 1)

The means and standard deviations of responses to the three vignettes are presented in Table 2.

Insert Table 2 about here

Kruskal Wallis tests and chi square analyses showed that the three groups did not significantly differ in terms of the demographic variables of age, experience and training.

No statistically significant effects of vignette condition were found for responses on the Adapted Questionnaire Pack using a series of Kruskal Wallis tests. The results of these are shown in Table 3.

However, it should be noted that whilst the p-value for Internality did not reach the required level of significance, it did represent a significant trend. Post hoc analyses suggested that special education staff may be more likely to attribute the cause of the challenging behaviour to coming from within the child when the pupil has a diagnosis of a learning disability alone than when the child also has a diagnosis of Epilepsy ($Z(1, 66)=-2.291$; $p=0.022$). Also, staff were more likely to attribute the cause of the challenging behaviour as being within the child when the pupil has an additional diagnosis of ASD than when the additional diagnosis was Epilepsy ($Z(1, 65)=-2.476$; $p=0.013$). Finally, staff did not differ in their attributions of internality in response to pupils with a diagnosis of learning disability alone and with an additional diagnosis of ASD ($Z(1, 73)=-0.645$; $p=0.519$).

Insert Table 3 about here

Relationship between staff background characteristics, self-efficacy and helping behaviour (Hypothesis 2)

As there were no statistically significant differences between responses to the three vignettes, the data were collapsed into one group for subsequent planned analyses. Table 4 shows the bivariate correlations between the background variables, self-efficacy and helping behaviour.

Insert Table 4 about here

Age, cumulative experience in the field of learning disabilities and cumulative experience in the school were not found to be statistically significantly correlated with either self-efficacy or helping behaviour. Although they did not reach the required significance level, there were trends showing positive correlations between experience in both the school and the field of learning disabilities in general and self-efficacy.

Perceived knowledge of learning disabilities was found to be significantly positively correlated with self-efficacy but was not statistically significantly correlated with helping behaviour. However, again whilst not reaching the required significance level, there was a trend in terms of a positive correlation between perceived knowledge and helping behaviour.

The results of Mann Whitney tests showed that there was a significant difference in the reported level of self-efficacy between staff who indicated that they had received training in learning disabilities and those who had not ($Z(1, 102)=-4.062$; $p<0.001$). Examination of the mean ranks suggested that those who reported having received training in learning disabilities rated themselves as having higher levels of self-efficacy than those who reported they had not received training. No significant differences were found in terms of helping behaviour ($Z(1, 102)=-1.539$; $p=0.124$).

In addition, there was a significant difference in terms of self-efficacy between staff who reported they had received training in challenging behaviour and those who reported they had not ($Z(1, 102)=-2.722$; $p=0.006$). Examination of the mean ranks suggested that those

who reported having received training in challenging behaviour had higher levels of self-efficacy than those who had not. No significant differences were found in terms of helping behaviour ($Z(1, 102)=-0.383$; $p=0.702$).

When qualified teachers and classroom assistants were compared using Mann Whitney tests, they were not found to differ significantly in their self-efficacy ($Z(1, 102)=-2.232$; $p=0.026$) or helping behaviour ($Z(1, 102)=-0.894$; $p=0.371$). While the former p-value did not reach the required statistical significance there was a trend, and examination of the mean ranks suggested that qualified teachers may have a greater sense of self-efficacy than classroom assistants.

The relationship between responses on the Adapted Questionnaire Pack

The bivariate correlations carried out to examine the associations between the participants' attributions, emotional responses, level of optimism and helping behaviour are shown in Table 4. All correlations were in the direction predicted by Weiner's model (1980; 1985) and Dagnan et al's (1998) and Sharrock et al's (1990) addition of optimism to the model. However, only the correlations between controllability and sympathy, and between optimism and helping behaviour were significant at the 0.01 level.

Two Sobel tests were carried out, firstly using the relationships between controllability, anger and helping behaviour and secondly, the relationships between anger, optimism and helping behaviour. A bootstrapping technique was used as the sample was not normally distributed. For the first test, using 3000 repetitions of the bootstrap, the mean Sobel statistic was -0.0144 (standard error = 0.0151 ; 99% confidence interval = $-0.0707-0.0186$).

For the second test, using 3000 repetitions of the bootstrap, the mean Sobel statistic was -0.0728 (standard error = 0.0639; 99% confidence interval = -0.2778-0.0682).

As the 99% confidence interval of the Sobel statistic included zero in both tests, these analyses showed that there was no significant difference between the mediated and unmediated paths at the 0.01 level for either set of relationships.

Secondary Analyses

The planned analyses indicated that knowing a pupil had a particular diagnosis (ASD or Epilepsy) did not significantly impact on participants' ratings on the Adapted Questionnaire Pack. The pilot study suggested that the child's diagnosis was noteworthy but it is possible that this was not considered important when responding to questions about the challenging behaviour. Therefore, the participants' attributions, generated when asked the open-ended question about cause in the Adapted Questionnaire Pack, were examined in the secondary analyses to determine whether participants had taken account of the child's diagnosis in their responses.

Description of Participants' Generated Causes

Of the 102 participants, 71 provided a cause for the pupil's behaviour. It should be noted that participants who provided more than one cause underlined the cause they felt was most likely to explain the behaviour. Only underlined causes were used for the purpose of these analyses.

Content analysis, using an inductive approach (Patton, 1990), was used to group these perceived causes into rational categories. This bottom-up approach produced seven categories of causes for the pupil's behaviour (1. Environmental Factors; 2. Communication Difficulties; 3. Frustration; 4. Avoiding or Refusing Others' Demands; 5. Other Emotional States; 6. Direct Aspect of Condition; 7. Home Life). These causes and categories are shown in Table 5.

Insert Table 5 about here

To ensure reliability of the categories, a second rater allocated a random sample of 30 of the generated causes to the categories, and an inter-rater reliability analysis using the Kappa statistic was performed to determine consistency among raters. The inter-rater reliability for the raters was found to be $Kappa = 0.861$ ($p < 0.001$). All disagreements were resolved through discussion.

The nature of the child's condition appeared to influence only a minority of the participants' attributions. Out of the 22 participants responding to the vignettes about the child with Epilepsy, only 4 attributed the challenging behaviour to factors directly linked to Epilepsy e.g. 'anticipating seizure activity'. Of the 22 participants who responded to the challenging behaviour displayed by a child with ASD, none suggested the most likely cause for the behaviour was directly linked to ASD. However, in the ASD group, 8 identified an environmental factor as the most likely reason for the behaviour. Most of these attributions (e.g. 'changes in pupil's routine', 'noise levels') might be considered to be related to difficulties associated with a diagnosis of ASD. These attributions are shown in Appendix 3.8.

Nevertheless, 32 out of the 44 participants who responding to vignettes about a child with an additional diagnosis (ASD or Epilepsy) generated more generic causes for the challenging behaviour that were not necessarily related to a specific condition e.g. 'communication difficulties' or 'frustration'.

Discussion

The present study's results did not support the hypothesis that staff would provide different intended cognitive, emotional and behavioural responses to vignettes of the aggressive behaviour of a pupil with learning disabilities with and without additional diagnoses. In the most part, these findings conflict with that of Markham & Trower (2003) and Forsyth's (2007) studies, who suggested that staff respond differently to clients depending on their diagnosis. Perhaps these differences in staff reactions are specific to nursing staff working with clients with psychiatric diagnoses such as borderline personality disorder and depression, and do not apply to behavioural and medical diagnoses, such as ASD or Epilepsy, seen in special education schools. In keeping with this proposition, the secondary analysis indicated that most staff did not consider factors relating to the pupil's diagnosis to be main explanatory factors for their challenging behaviour and instead, tended to attribute the behaviour to a variety of generic causes, such as communication difficulties or frustration.

Alternatively, possible flaws in the vignettes used in this study may explain the limited variability in staff responses. While the use of written vignettes provided a higher level of

control, they may not have sufficient personal significance to staff to elicit cognitive and emotional responses that would occur in real life (Wanless & Jahoda, 2002). Furthermore, it should be considered that the vignettes may not have made the issue of diagnosis sufficiently salient to the reader. Although the pilot study suggested that the reader was aware of the child's additional diagnosis (if present), piloting was not conducted with special educational teachers in the same conditions used in this study. Therefore, more comprehensive piloting may have allowed more sensitive vignettes to be developed, allowing any differences in staff responses, such as attributions of internality, to be highlighted.

Overall, it appears that Weiner's model (1980; 1985) cannot account for the findings of this study since only two of the correlations predicted by the model were significant. Furthermore, the study did not find that the mediated relationship between controllability and helping behaviour by anger was stronger than the unmediated relationship between controllability and helping behaviour. It also did not show that the mediated relationship between anger and helping behaviour by optimism was stronger than the unmediated relationship between anger and helping behaviour. For Weiner's model (1980; 1985) to be supported, it is likely a stronger pattern of results would be required.

However, perhaps this study would have had greater sensitivity if it had measured additional components of Weiner's model. More recent developments to the model (1993, 1995) have emphasised the importance of the judgement of responsibility in determining emotional and behavioural responses to events. It is thought that responsibility is a judgement regarding the degree to which a person can be justifiably held to account or blamed for their actions (Dagnan & Cairns, 2005). Weiner's model (1985; 1993; 1995)

suggests that when a person is deciding whether to help another they will search for mitigating circumstances and make a judgement of responsibility. If after this search it is perceived that the person is in control and is responsible for their actions, it is predicted that the observer will feel more anger and less sympathy and will provide less help. For example, in the context of pupils in special education, it may be expected that the fact that a child has an ASD would be regarded as a mitigating factor when considering the cause of their challenging behaviour. Thus, the child with an ASD may be perceived to be less in control and be less responsible for their behaviour, leading the staff member to feel less anger and more sympathy and thus help more than if the child did not have this additional diagnosis. Therefore, future studies in this area could consider staff perceptions of the child's level of responsibility when using Weiner's model to understand special education staff behaviour.

Also of note, Willner & Smith's (2008) recent review of studies examining carers' willingness to help individuals displaying challenging behaviour suggested that there was inconsistent support for Weiner's model. However, Stanley & Standen (2000) proposed that the accuracy of Weiner's model (1980; 1985) in predicting staff responses to challenging behaviour is increased by including a broad range of challenging behaviours and levels of dependency. Thus, the limited support for Weiner's model (1980; 1985) provided by this study's findings may be explained by its examination of staff responses to pupils only with a moderate level of learning disability (i.e. similar level of dependency) displaying aggression (i.e. one type of challenging behaviour). Furthermore, it seems as though participants did not perceive pupils with and without additional diagnoses differently, thus further reducing the range and variation of clients to which the staff were

responding. Future research may benefit from asking clients to respond to clients with different levels of a presentation, for example Asperger syndrome and Autism.

In terms of staff characteristics, this study suggested that self-efficacy and reported helping behaviour were not related to the age or cumulative experience of special educational staff. However, staff with training in learning disabilities and challenging behaviour were found to be more confident in their ability to manage challenging behaviour than those with less training. Similarly, staff with higher levels of perceived knowledge were shown to experience higher levels of self-efficacy than those with less perceived knowledge. Nevertheless, none of these staff characteristics were significantly related to helping behaviour. It should be noted that a number of staff background characteristics were not statistically significantly related to self-efficacy or helping behaviour but results did suggest possible trends. These could be explored further in future research whose main focus is the impact of staff background factors on responses to challenging behaviour.

The absence of findings regarding a relationship between age, cumulative experience and helping behaviour supports a number of studies in the area (Wanless & Jahoda, 2002; Dagnan et al, 1998). Also, the results suggesting staff with higher levels of training were more confident in their ability to manage challenging behaviour supported Melville et al's (2006) recent findings. This study showed that staff training programmes can improve nurses' self-efficacy in their ability to meet the needs of clients with learning disabilities and help them to change their clinical practice.

Overall, the results suggest that knowledge and training are more important in helping staff to feel able to manage challenging behaviour than simply being older and having worked

longer in the field. It would be expected that staff with more knowledge and training would feel more confident in their ability to manage challenging behaviour. However, in this study this knowledge and training did not appear to impact on their willingness to help clients displaying challenging behaviour. This may be explained by the participants' ratings of willingness to help in this study being skewed towards positive answers. It is possible that this is due to paid staff having little choice over whether they intervene with challenging behaviour or not (Dagnan et al, 1998). Therefore, perhaps all special education staff will help pupils when they display challenging behaviour but those with greater perceived knowledge and training will feel more confident in doing so.

Limitations of the current study

There are a number of methodological limitations of the current study that should be considered when interpreting the results. The study uses crude measures of experience, knowledge and training, which are all based on self-report and are rather simplistic (Hastings et al, 1997). A future study, with the main aim of investigating these staff characteristics, could use more detailed, objective measures such as records of the frequency, intensity, severity and type of challenging behaviour to which the staff member is exposed, the quality of training received and a comparison of subjective and objective knowledge. In addition, this study measured knowledge, experience and training in learning disabilities and challenging behaviour but did not ask about these factors in relation to ASD or Epilepsy, which could be measured in future research.

In terms of analysis, as mentioned, this study did not conduct separate analyses for participants from each school as this was not the focus of the research. However, as noted above, these participants did differ in terms of their ratings of anger in response to

vignettes of challenging behaviour. Therefore, future research could investigate the impact of school culture and ethos on staff responses to challenging behaviour. Moreover, the secondary analysis in this study only examined the factors participants thought were most likely to have caused the challenging behaviour. As mentioned previously, some staff generated more than one potential cause for the difficult behaviour. Therefore, it is possible staff did believe that the pupil's condition was in part responsible for the challenging behaviour but did not consider it to be the main cause.

It is important to recognise that this study, like most in this area (e.g. Mitchell & Hastings, 2001; Hastings & Brown, 2002a; Rose et al, 2004; Noone et al, 2006), used a cross-sectional design and any significant results cannot be used to determine causation. Therefore, this area of research would benefit from future longitudinal investigations. Finally, qualitative studies exploring staff's reactions over time may access more subtle changes in their responses over time, thus allowing more sensitive quantitative measures and vignettes to be developed in the future.

Implications for clinical practice

Despite this study's limitations, the findings may have implications for clinical practice with individuals with learning disabilities. Although it has been acknowledged that the vignettes may not have been sufficiently salient to elicit valid staff responses, nevertheless the causes for challenging behaviour generated by participants responding to pupils with ASD were not distinctly different from the other groups. Therefore, it may be the case that the importance of such a diagnosis in terms of staff perceptions has been overestimated.

A more positive interpretation is that staff are trained to use an individualised, person-centred approach so that they do not respond to a child simply based on their diagnosis. However, the wide variety of reasons provided for the pupil's aggression may indicate very varied viewpoints and a possible lack of common understanding of challenging behaviour and its related factors. Perhaps staff require more training on the links between specific diagnoses and challenging behaviour and appropriate management strategies. For instance, individuals with a diagnosis of Autism are more likely to display aggression, self-injury and destructive behaviour than other individuals with learning disabilities (McClintock et al, 2003). Lack of awareness of this relationship, may lead staff to use identical strategies to prevent and manage all challenging behaviour and not use techniques specific to the condition with which the pupil presents. For example, the program of Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) (Schopler, 1994) is a recognised technique that can increase structure and predictability and has been shown to reduce challenging behaviour in young people with ASD (Norgate, 1998).

Conclusions

The present study did not find the expected differences in attributions, emotions, optimism and reported helping behaviour between staff responding to aggressive behaviour displayed by pupils with learning disabilities with and without additional diagnoses. This may have been due to methodological issues and as this appears to be the first study to explore this relationship, further research is required. However, the study suggests that staff may require additional training on the link between particular diagnoses and

challenging behaviour. Future research in this area may help to ensure that school staff receive appropriate and sensitive training to assist them to respond in ways that will prevent or reduce challenging behaviour in children with learning disabilities with more specific needs.

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Table 1: Demographic Characteristics of Staff*Included staff:*

Staff Variables	Descriptives
Age (mean)	44.8 years (SD= 10.0 years; Range: 21-65 years)
Gender	Female = 96 (94.1%) Male = 6 (5.9%)
Length of service at the school (mean)	82.2 months (SD=65.5 months; Range: 1-315 months)
Length of service in the field of learning disabilities (mean)	111.6 months (SD=85.1 months; Range: 6-360 months)
Position	Qualified teachers = 57 (55.9%) Classroom assistants = 45 (44.1%)

Excluded staff:

Staff Variables	Descriptives
Age (mean)	38.8 years (SD= 8.1 years; Range: 24-41 years) 3 not specified
Gender	Female = 7 (87.5%) Male = 0 (0%) Not specified = 1 (12.5%)
Length of service at the school (mean)	33.4 months (SD=37.6 months; Range: 2-96 months)
Length of service in the field of learning disabilities (mean)	40.8 months (SD=50.3 months, Range: 2-132 months)
Position	Qualified teachers = 2 (25.0%) Classroom assistants = 3 (37.5%) Not specified = 3 (37.5%)

Table 2: Mean scores of Adapted Questionnaire Pack Items

	Learning Disability (37)		ASD (36)		Epilepsy (29)	
	Mean	SD	Mean	SD	Mean	SD
Internality	3.9459	0.99850	4.0278	1.29804	3.3448	1.20344
Stability	3.6216	1.45967	3.4722	1.13354	3.5862	1.21059
Controllability	3.5946	1.27931	3.8056	1.28329	3.1379	1.43238
Anger	2.2703	1.14622	2.1944	1.03701	1.9655	1.17967
Sympathy	5.2703	1.21675	5.4167	1.62788	5.6552	1.36998
Optimism	18.1892	3.37341	17.7222	3.11321	17.6552	3.99353
Helping behaviour	6.5405	1.16892	6.4444	1.42316	6.2759	1.16179

Table 3: Kruskal Wallis Test Results

	X²	N	df	p
Internality	7.668	102	2	0.022
Stability	0.162	102	2	0.922
Controllability	4.278	102	2	0.118
Anger	1.841	102	2	0.398
Sympathy	2.214	102	2	0.331
Optimism	0.789	102	2	0.674
Helping Behaviour	1.993	102	2	0.369

Table 4: Spearman Correlations between Key Variables

	Internality	Stability	Controllability	Anger	Sympathy	Optimism	Helping Behaviour	Age	Experience school	Experience LD	Perceived knowledge	Self-efficacy
Internality	1.00	-.061	.384**	.185	-.117	-.075	.063	-.100	-.087	-.042	.034	.006
Stability		1.00	.133	.139	-.108	-.097	.017	.133	.049	-.015	.009	-.027
Controllability			1.00	.185	-.339**	-.129	-.035	.132	-.060	-.029	-.012	-.176
Anger				1.00	-.484**	-.170	-.175	.075	.128	.147	.075	-.115
Sympathy					1.00	.189	.181	-.098	-.004	-.009	.055	.256**
Optimism						1.00	.444**	-.179	.079	.103	.267**	.490**
Helping Behaviour							1.00	-.149	.053	-.028	.207*	.288**
Age								1.00	.410**	.479**	.037	-.087
Experience school									1.00	.808**	.378**	.207*
Experience LD										1.00	.399**	.218*
Perceived knowledge											1.00	.435**
Self-efficacy												1.00

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

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

Table 5: Causes of the Challenging Behaviour generated by Participants

	Environmental Factors	Communication Difficulties	Frustration	Avoiding or Refusing Others' Demands	Other Emotional States	Direct Aspect of Condition	Home
Learning Disabilities	<ul style="list-style-type: none"> • Other people • Environment • Change of routine 	<ul style="list-style-type: none"> • Communication x2 • Communication/speech problem • Communication difficulties • Unable to articulate thoughts/feelings • Unable to express needs • Poor communication skills 	<ul style="list-style-type: none"> • Frustration x4 • Frustrated x2 	<ul style="list-style-type: none"> • Just to get his/her own way • Not getting what they would like • Wanting to follow own agenda • Not wanting to do activity • Not getting his/her own way • Isn't being allowed to do their own thing 	<ul style="list-style-type: none"> • Confusion • Lack of understanding of situation • Anxiety • Pupil may be feeling insecure 		<ul style="list-style-type: none"> • Problems at home
Autism Spectrum Disorder	<ul style="list-style-type: none"> • Teacher does not understand autism • Changes in pupil's routine • Change in rota or routine • Unfamiliar situation • Noise levels • Need to control his/her own environment • Lack of teacher's knowledge • Reactions from staff 	<ul style="list-style-type: none"> • Lack of communication • Unable to communicate feelings • Difficulty in communicating • Lack of ability to communicate own needs 	<ul style="list-style-type: none"> • Frustration x5 	<ul style="list-style-type: none"> • Not being able to do what they want to do • Being asked to do something they don't want to • Not wanting to an activity or lesson 	<ul style="list-style-type: none"> • Confusion • Afraid 		
Epilepsy	<ul style="list-style-type: none"> • Seeking attention • Environment • Noise • Environmental issue • Environmental changes 	<ul style="list-style-type: none"> • Inability to communicate wants/needs • Communication difficulty • Communication difficulties • Lack of communication 	<ul style="list-style-type: none"> • Frustration • Frustrated 	<ul style="list-style-type: none"> • Does not want to take part in task/activity • Finding work too difficult 	<ul style="list-style-type: none"> • Anxious • Getting too excited • Very tired • Feelings 	<ul style="list-style-type: none"> • Anticipating a seizure • Impending seizure • Feeling unwell prior to a seizure • Epilepsy not well managed 	<ul style="list-style-type: none"> • Home

Chapter 3

Advanced Clinical Practice I: Reflective Critical Account Abstract

Self-Disclosure in a Child and Family Setting.

Jill Ogston*

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Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

Reflective practice is a process that allows clinicians to examine their individual thoughts, emotions and behaviours in daily practice. Recently, reflective models have been utilised in Clinical Psychology training. This article describes my reflections, using Gibbs' Model of Reflection (1988), on my experience of self-disclosure with a client's mother on my child and family placement. This event led to strong feelings of anger and worry that I had behaved in a way that would damage our therapeutic relationship. Gibb's model allowed me to consider the importance of these emotions and the positive and negative factors related to the situation. My reflections encouraged me to develop my own views about self-disclosure in therapy by considering the opinions of peers, my supervisor and current literature. I concluded that in the future, instead of avoiding all forms of self-disclosure, I would make a decision about the disclosure on a case-by-case basis. In all, this reflective process has helped me to develop as an autonomous clinician.

Chapter 4

Advanced Clinical Practice II: Reflective Critical Account Abstract

A Trainee Clinical Psychologist's Reflections on Service Redesign and Referral Allocation.

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Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

Health clinicians are encouraged to use reflective practice to examine their personal thoughts, emotions and behaviours in their daily work (Somerville & Keeling, 2004) and to learn from interpretation of their experiences (Johns, 1995). This paper details my reflections on my involvement in service development for clients with Asperger syndrome and my experience of how this impacted on an individual client. While writing this account, I was aware of powerful feelings of frustration at the long decision-making processes involved in service redesign and became conscious of my lack of empathy for the manager's position at the time. Gibbs' model of reflection (1988) and Schön's (1983; 1987) descriptions of 'reflection in action' and 'reflection on action' provided a framework for my reflections. The reflective process allowed me to consider the reasons for the strong emotions that were elicited and how my abilities to contribute at a strategic level and appreciate the difficulties of managing a service have developed throughout my training.

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Appendix 1: Author's Notes

Journal of Applied Research in Intellectual Disabilities

[Journal of the British Institute of Learning Disabilities](#)

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The *Journal of Applied Research in Intellectual Disabilities* is an international, peer-reviewed journal which draws together findings derived from original applied research in intellectual disabilities. The journal is an important forum for the dissemination of ideas to promote valued lifestyles for people with intellectual disabilities. It reports on research from the UK and overseas by authors from all relevant professional disciplines. It is aimed at an international, multi-disciplinary readership.

The topics it covers include community living, quality of life, challenging behaviour, communication, sexuality, medication, ageing, supported employment, family issues, mental health, physical health, autism, economic issues, social networks, staff stress, staff training, epidemiology and service provision. Theoretical papers are also considered provided the implications for therapeutic action or enhancing quality of life are clear. Both quantitative and qualitative methodologies are welcomed. All original and review articles continue to undergo a rigorous, peer-refereeing process.

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- 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

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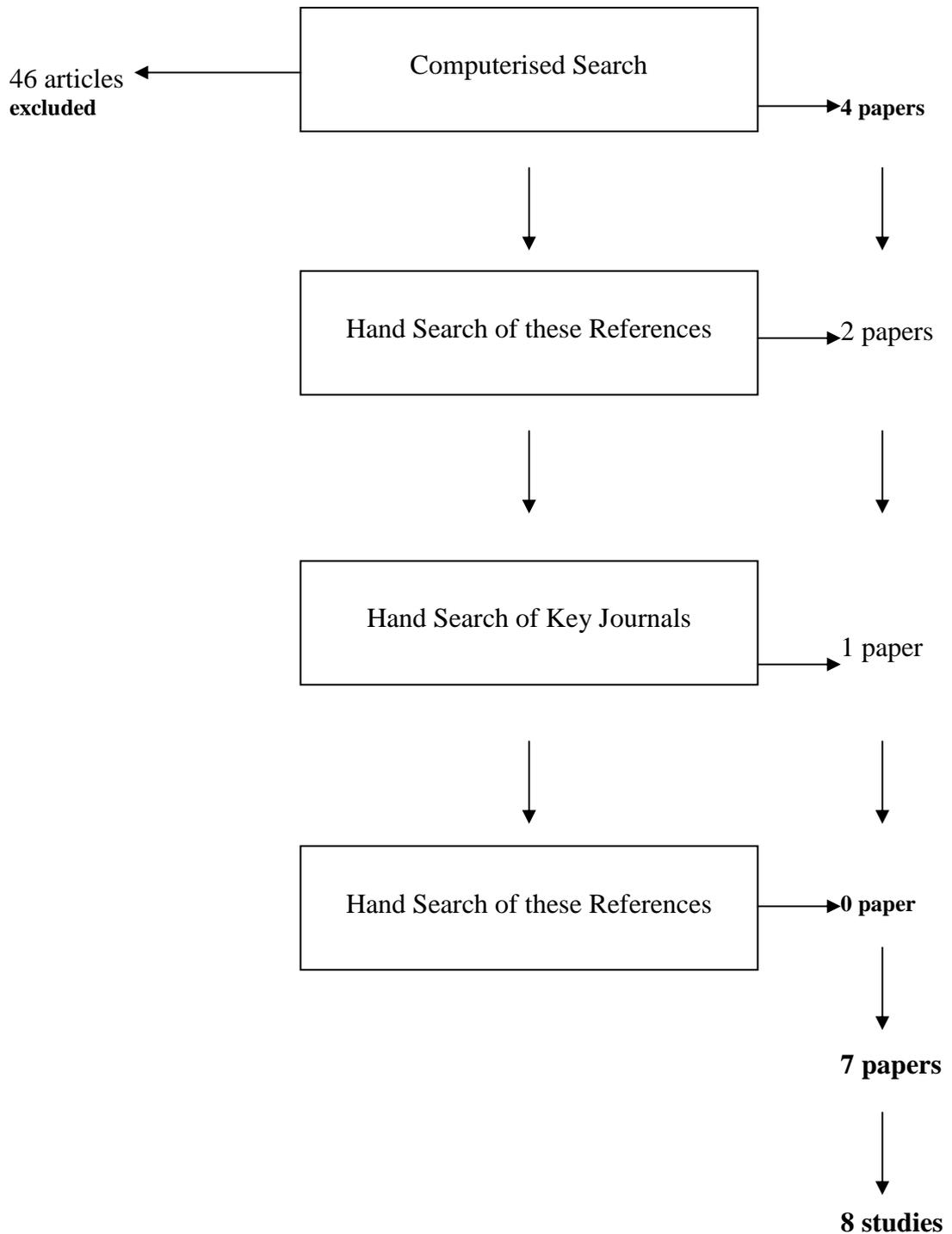
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Appendix 2.1: Search Strategy



Appendix 2.2: Quality Criteria

Papers were assigned points according to the following aspects of methodology:

Focus of Study:

1. Study objectives
 - The study has clearly focused objectives (3 points)
 - The study has poorly focused objectives (2 points)
 - The study does not report objectives (1 point)

Study Design:

2. Study design
 - Longitudinal (3 points)
 - Cross sectional (2 points)
 - Opportunistic sample in 1 unit/ward/school only (1 point)

Participants:

3. Staff Demographics
 - Age, gender and job title of participating staff specified (4 points)
 - Only two of the above specified (3 points)
 - Only one of the above specified (2 points)
 - None of the above specified (1 point)

4. Client Demographics (with whom the staff work)
 - Age range (e.g. adult/child), level of learning disability and type of facility (e.g. challenging behaviour unit) specified (4 points)
 - Only two of the above specified (3 points)
 - Only one of the above specified (2 points)
 - None of the above specified (1 point)

5. Response rate
 - The study clearly indicates the participant response rate (3 points)
 - The study poorly indicates the participant response rate (2 points)
 - The study does not indicate the participant response rate (1 point)

Measures:

6. Description of challenging behaviour to elicit emotional response
 - Clear description of challenging behaviour e.g. *client punching self on forehead* (3 points)
 - Vague description of challenging behaviour e.g. *self-injurious behaviour* (2 points)
 - No description of challenging behaviour e.g. *challenging behaviour* (1 point)

7. Measures
 - All measures are clearly defined and reliable (3 points)
 - Some measure are clearly defined are reliable OR reliability is not stated (2 points)
 - No measures are clearly defined and are reliable OR reliability is not stated (1 point)

Analysis:

8. Data analysis of relationships between emotions and qualifications/experience
 - Statistical analysis used (3 points)
 - Combination of statistical and descriptive analysis (2 points)
 - Descriptive analysis only (1 point)

The total points for each paper were calculated. Each paper was then allocated one of the following quality categories:

Excellent: Total score of 27

Very Good: Total score greater than 20 and less than 27

Good: Total score greater than 15 and less than 21

Adequate: Total score greater than 10 and less than 16

Inadequate: Total score 10 or less

Appendix 2.3: Methodological quality of papers

	Study Objective	Study Design	Staff Demographics	Client Demographics	Response Rate	Challenging behaviour description	Measures	Data analysis	Total score	Quality criteria
1. Hastings & Remington (1995)	3	2	4	2	3	3	2	3	22	Very Good
2. Hastings & Brown (2002a)	3	2	4	4	3	1	3	3	23	Very Good
3. Mossman et al (2002)	2	2	4	3	1	3	2	3	20	Good
4. Wanless & Jahoda (2002)	2	2	4	4	2	2	2	3	21	Very Good
5. Hastings et al (2003)	2	2	3	3	1	3	3	3	20	Good
6. Rose et al (2004)- Study 1	3	2	4	3	1	1	3	3	20	Good
7. Rose et al (2004)- Study 2	3	2	4	3	1	1	2	3	19	Good
8. Rose & Rose (2005)	3	2	3	3	3	1	2	3	20	Good

Appendix 3.1: Approval letter from Research and Development Management

Primary Care Division

Miss Jill Ogston,
Trainee Clinical Psychologist,
University of Glasgow,
Section of Psychological Medicine,
Division of Community Based Sciences,
Gartnavel Royal Hospital,
1055 Great Western Road,
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The Tennent Institute
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Glasgow
G11 6NT



Direct Line 0141 232 9524
Fax 0141 232 9516
Email mary.fraser@ggc.scot.nhs.uk

Date 28 September 2007

Dear Jill Ogston,

Project Title: Educational staff's response to challenging behaviour of children with learning disabilities: the impact of diagnosis

I am pleased to inform you that R&D management approval has been granted by NHS Greater Glasgow & Clyde Community and Mental Health Partnership, subject to the following requirements:

- You should notify me of any changes to the original submission, including copies of notification to ethics committee(s) and send regular, brief interim reports including recruitment numbers where applicable. You must also notify me of any changes to the original research staff and send CVs of any new researchers.
- Researchers covered in this approval are:- **yourself and Professor Andrew Jahoda (as your supervisor)**
- Your research must be conducted in accordance with the Scottish Executive Health Department, *Research Governance Framework for Health and Community Care* (Second Edition, 2006) see Chief Scientist Website <http://www.sehd.scot.nhs.uk/cso> Local research governance monitoring requirements are presently being developed. This may involve audit of your research at some time in the future.
- You must comply with any requirements regarding data handling (Data Protection Act). Advice may be obtained from the Scottish Executive Confidentiality and Security Advisory Group for Scotland website <http://www.csags.scot.nhs.uk/>
- A final report, with an abstract which can be disseminated widely within the NHS, should be submitted when the project has been completed.

Do not hesitate to contact the R&D Office if we can be of any assistance.



We wish you every success with your project.

Yours sincerely

A handwritten signature in cursive script that reads "Mary Fraser". The signature is written in black ink and is positioned above the printed name.

Dr Mary Fraser

Appendix 3.2 Approval letter from Research Ethics Committee

Primary Care Division			
		Research Ethics R&D Directorate Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH www.nhsggc.org.uk	
Miss Jill Ogston Trainee Clinical Psychologist University of Glasgow Section of Psychological Medicine Division of Community Based Sciences University of Glasgow, Gartnavel Royal Hospital 1055 Great Western Road Glasgow G12 0XH		Date	08 October 2007
		Your Ref	
		Our Ref	
		Direct line	0141 211 3824
		Fax	0141 211 3814
		E-mail	Liz.Jamieson@ggc.scot.nhs.uk
Dear Miss Ogston			
Full title of study:	Educational Staff's Responses to Challenging Behaviour of Children with Learning Disabilities: the Impact of Diagnosis		
REC reference number:	07/S0701/86		
Thank you for your letter of 18 September 2007, responding to the Committee's request for further information on the above research and submitting revised documentation.			
The further information was considered at the meeting of the Committee held on 04 October 2007. A list of the members who were present at the meeting is attached.			
Confirmation of ethical opinion			
On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.			
Ethical review of research sites			
The favourable opinion applies to the research sites listed on the attached form.			
Conditions of approval			
The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.			
Approved documents			
The final list of documents reviewed and approved by the Committee is as follows:			
<i>Document</i>	<i>Version</i>	<i>Date</i>	
Application	Version 2	18 September 2007	
Application		02 August 2007	

Protocol	Version 2	18 September 2007
Covering Letter		14 August 2007
Questionnaire	Version 1	
Questionnaire	Version 2	18 September 2007
Participant Information Sheet	Version 2	18 September 2007
Participant Information Sheet	Version 1	14 August 2007
Participant Consent Form	Version 1	
Participant Consent Form	Version 2	18 September 2007
Response to Request for Further Information		18 September 2007
Health and Safety Form		
Letter re Health and Safety from Glasgow University	Alison Jackson	05 June 2007
Letter of Consent from Glasgow University	Prof Tom McMillan	13 July 2007
Letter of Consent from Renfrewshire Council Education and Leisure Services	Mr Gordon Morton	08 August 2007
Supervisor's CV	Prof A Jahoda	

R&D approval

All researchers and research collaborators who will be participating in the research at NHS sites should apply for R&D approval from the relevant care organisation, if they have not yet done so. R&D approval is required, whether or not the study is exempt from SSA. You should advise researchers and local collaborators accordingly. Guidance on applying for R&D approval is available from <http://www.rdforum.nhs.uk/rdform.htm>.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

Feedback on the application process

Now that you have completed the application process you are invited to give your view of the service you received from the National Research Ethics Service. If you wish to make your views known please use the feedback form available on the NRES website at:

<https://www.nresform.org.uk/AppForm/Modules/Feedback/EthicalReview.aspx>

We value your views and comments and will use them to inform the operational process and further improve our service.

07/S0701/86

Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely



Liz Jamieson

Research Ethics Committee Co-ordinator on behalf of Dr Paul Fleming, Chair

Enclosures: List of names and professions of members who were present at the meeting
Standard approval conditions
Site approval form

Copy to: Mr Brian Rae

Appendix 3.3 Approval letter from Renfrewshire Council

Tel: 0141-842 5882 Fax: 0141-842 5699

My Ref: GMMM/AG

Your Ref:

Date: 8 August 2007

Contact: Gordon Morton



**Renfrewshire
Council**

Education and Leisure Services

Miss Jill Ogston
Trainee Clinical Psychologist
Section of Psychological Medicine
Division of Community Based Sciences
University of Glasgow
Gartnavel Royal Hospital
1055 Great Western Road
Glasgow
G12 0XH

Dear Miss Ogston

**RESEARCH : Educational Staff's Responses to Challenging Behaviour of Children
with Learning Disabilities: The Impact of Diagnosis.**

I refer to your recent request seeking permission to carry out research within Clippens and Kersland schools in Renfrewshire. I am pleased to inform you that this request has been granted.

I should be grateful to learn of any findings or issues that might emerge to allow me to disseminate to our Educational Psychologists.

Our Psychological Service department have expressed that they would also be very pleased to invite you to contribute to one of their Continuing Professional Development days, please advise if you would be interested in participating.

If further information is requested please do not hesitate to contact me.

Yours sincerely

Gordon Morton
Senior Adviser (Performance Management)

Appendix 3.4 Approval email from Inverclyde Council

From: Colin.Laird@inverclydeschools.org.uk
To: j.ogston.1@research.gla.ac.uk
Cc: Eileen.McGeer@inverclydeschools.org.uk Eileen.Stewart@inverclydeschools.org.uk
Date: 12/06/07 12:31 pm
Subject: Research in Inverclyde special school
Attachments:

Good morning, Jill.

Ian Fraser, Corporate Director, has passed me your request relating to research in challenging behaviour in the 2 Inverclyde special schools.

As the area falls within my remit, I have been asked to respond. I am pleased to agree to your request on the basis that the work can be completed without disruption to the life and other commitments of the schools. I am optimistic that this would be the case. I will copy to my 2 colleagues your research proposal.

I am copying this message to the two head teachers whose contact details are as follows:

Glenburn School
Inverkip Road
Greenock PA16 0QG
tel 01475 715400
HT: Eileen McGeer

Lilybank School
Birkmyre Avenue
Port Glasgow PA14 5AN
tel 01475 715703
HT: Eileen Stewart

Every success in your work

Colin Laird
Head of Lifelong learning and Educational Support

Appendix 3.5 Participant Information Sheet



Title of Project: Educational staff's responses to challenging behaviour of children with learning disabilities: the impact of diagnosis

Information for Participants

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask Jill if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

As you will know, working with children with learning disabilities can be stressful, especially when they display challenging behaviour. Previous studies have found that the beliefs and emotions of care staff working in residential homes with adults with learning disabilities can impact on how they respond to the person who displays challenging behaviour. However, there has been little research conducted with school staff who work with children with learning disabilities and display challenging behaviour.

The aim of this study is to find out about school staff's thoughts and feelings about challenging behaviour and how this impacts of their responses to children who display challenging behaviour. It also aims to examine how school staff's knowledge, experience and training affect their responses to challenging behaviour.

It is hoped that this study will lead to a greater understanding of the needs of school staff providing support for children with learning disabilities who display challenging behaviour. It may also help to inform future staff training.

Why have I been given this information?

You are being asked to consider participating in this research as your Head Teacher,felt that it may be beneficial for the school and staff. This information is to help you decide if you wish to take part or not.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide to take part you will be given this information sheet to keep and asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without a reason. A decision to withdraw at anytime, or a decision not to take part, will not have any further implications. No one else would be informed as to whether you participated or not.

What will I have to do?

If you have decided to take part in this study you will be required to complete a questionnaire that takes approximately 30 minutes. This questionnaire involves provision of information, such as the length of time

you have worked at the school, and responding to questions about a description of a child displaying challenging behaviour.

Will my taking part in this study be kept confidential?

All information that is collected about you during the course of the research will be kept strictly confidential. Your responses will be anonymous in that your name will only be on the consent form and demographic details and will be stored separately from your responses to the questionnaire. This confidentiality would only be broken if there is evidence that you or the children you care for are at an immediate risk of significant harm, in which the researcher would try to obtain appropriate help, after discussion with yourself.

What will happen after the questionnaire?

It is hoped that the study will provide useful information about supporting children who display challenging behaviour in educational settings. When the study is complete, the researcher will write to your school summarising the findings of the study. In addition, the researcher would be happy to present the findings at the school if this would be considered helpful. You will not be identified in the results. It is intended that the results of the study will be published in a journal. The results will also form part of the main researcher's Doctorate in Clinical Psychology.

Further Information

If there is anything else you wish to know or anything you wish to clarify please do not hesitate to contact the main researcher, Jill Ogston, or the other researcher Andrew Jahoda at the following address:

Department of Psychological Medicine
Academic Centre
Gartnavel Royal Hospital
1055 Great Western Road
Glasgow
G12 0XH
0141 211 0607

Jill Ogston: 9903365o@student.gla.ac.uk
Andrew Jahoda: aj26r@clinmed.gla.ac.uk

Thank you for your time and considering this study.

October 2007

Appendix 3.6 Participant Consent Sheet



Title of Project: Educational staff's responses to challenging behaviour of children with learning disabilities: the impact of diagnosis

Researcher: Jill Ogston

Please initial the boxes:

I confirm that I have read and understand the information sheet dated October 2007 for the above study and have had the opportunity to ask questions.

I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason, and without my legal rights or employment being affected.

I understand that my responses will be anonymous and confidential unless some issue has been raised that gives cause for concern.

I agree to take part in the above study

Please print name

Date

Signature

Researcher

Date

Signature

Appendix 3.7 Questionnaire

PART ONE

A pupil with a moderate learning disability (and an Autism Spectrum Disorder/Epilepsy) is aggressive by hitting out at you.

Thinking of your experiences of this type of behaviour please complete the following questions:

1. Please write down the possible causes of the pupil's behaviour and **UNDERLINE** which you think is the **most likely** reason for the behaviour.

2. Thinking of this reason, please answer the following questions by circling one number:

a) Is this due to other people/circumstances or due to the pupil?

It is totally due to others/ circumstances 1 2 3 4 5 6 7 It is totally due to the pupil

b) Is the reason for the behaviour the same each time it occurs?

Never for the same 1 2 3 4 5 6 7 Always for the same reason

c) Is the reason under the pupil's control?

Not at all under their control 1 2 3 4 5 6 7 Totally under their control

3. How would this behaviour make you feel?

Not angry at all 1 2 3 4 5 6 7 Extremely angry

Not sympathetic at all 1 2 3 4 5 6 7 Extremely sympathetic

4. Given your experience with this type of behaviour, how much do you agree with the following statements?

a) All one can do for a child with this behaviour is look after their basic physical needs:

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

b) A child will always have this behaviour once they have developed it:

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

c) This type of behaviour is usually so well established that it will not respond to treatment programmes:

Strongly agree 1 2 3 4 5 6 7 Strongly disagree

5. Given your experience with this type of behaviour, how much extra effort would you be prepared to put in to help the pupil?

No extra effort at all 1 2 3 4 5 6 7 As much extra effort as possible

PART TWO

1. **Training and Experience**

a) How long have you worked at?

..... yearsmonths

b) How long have you worked in the field of learning disabilities?

..... yearsmonth

c) Please tick if you have received specialist training in the following areas:

Learning Disabilities

Challenging Behaviour

2. **Knowledge**

Please rate your level of knowledge of working with people with learning disabilities:

No knowledge 1 2 3 4 5 6 7 Expert knowledge

3. **Self-Efficacy**

a) Please rate how confident you feel in managing the challenging behaviour you experience in your job:

No confidence 1 2 3 4 5 6 7 Complete confidence

b) Please rate the level of satisfaction you feel from managing challenging behaviour:

No satisfaction 1 2 3 4 5 6 7 Complete satisfaction

c) Please rate how much of a positive impact you think you can make on challenging behaviour:

No impact at all 1 2 3 4 5 6 7 Significant impact

d) Please rate how difficult you find it to work with children who display challenging behaviour:

Not difficult at all 1 2 3 4 5 6 7 Extremely difficult

Thank you for your participation.

Appendix 3.9 Major Research Project Proposal and Addendum

Educational staff's responses to challenging behaviour of children with learning disabilities: the impact of diagnosis

Major Research Project Proposal and Addendum

* Address for correspondence
c/o Section of Psychological Medicine
Division of Community Based Sciences
University of Glasgow
Gartnavel Royal Hospital
1055 Great Western Road
Glasgow G12 0XH

Email: 9903365o@student.gla.ac.uk
Telephone: 0141 211 3920

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (D. Clin Psy)

Abstract

Background

Weiner's (1980) model of helping behaviour has been used to aid understanding of the responses of carers to challenging behaviour displayed by adults with learning disabilities. However, relatively few studies have examined these reactions in staff working in schools for children with learning disabilities who display challenging behaviour.

Aims

This study aims to determine whether Weiner's model can be used to explain staff's cognitive, emotional and behavioural reactions to the challenging behaviour of children with learning disabilities with and without specific diagnoses in the educational context. In addition, it aims to consider the impact of knowledge, training and experience on self-efficacy and helping behaviour.

Methods

The vignette-based method developed by Dagnan and colleagues (1998) will be adapted to measure school staff's attributions, emotional reactions, optimism for change and reported helping behaviour in response to challenging behaviour. In addition, Likert scales and 'yes/no' responses will be used to measure staff background characteristics, including knowledge, training and experience.

Applications

It is expected that the results will highlight areas to be included in staff training and have implications for the kind of support required for school staff working with children who present with challenging behaviour.

Introduction

Weiner's (1980) model of helping behaviour suggests that a person's attributions about the cause of an event have a role in determining their emotions, which in turn determine the likelihood that they will demonstrate helping behaviour. This model has been used to aid understanding of the responses of staff to challenging behaviour displayed by individuals with learning disabilities (e.g. Stanley & Standen, 2000). It suggests that staff attributions of high internality (whether the cause of the challenging behaviour is seen as external or internal to the person being observed), high stability (whether the cause of the behaviour is viewed as being the same each time) and high controllability (whether the cause of the behaviour is seen as under the control of the person being observed) lead to feelings of anger and thus, less helping behaviour. Dagnan and colleagues (1998) added to this model by suggesting that carers' negative emotional responses (e.g. anger) predict their optimism for change of the challenging behaviour, which in turn determines helping behaviour.

This is an important area of study as it has been suggested that the emotional reactions of staff can make them more likely to respond to clients in ways that contribute to an increase or reduction in challenging behaviour (Hall & Oliver, 1992; Hastings & Remington, 1994). For example, staff often rate challenging behaviour as one of the most significant sources of stress in the workplace (Corrigan, 1993), which in turn can lead to poor staff performance (Rose et al, 1994). However, while many studies have investigated care staff's perceptions of adults who display challenging behaviour, relatively few have examined teachers' beliefs about children with learning disabilities' challenging behaviour.

Harris and colleagues (1996) reported that the most challenging behaviours experienced by teachers of children with learning disabilities were physical aggression, self-injury and destruction of property. They also noted that there were many social and emotional consequences for the children displaying such challenging behaviour; these included isolation from peers, reduced access to the curriculum and reduced opportunities for participation in extracurricular activities. In addition, Porter and Lacey (1999) indicated that teachers believed children were missing out on leisure and social activities and contact with their peers due to their challenging behaviour. Teachers in Kiernan and Kiernan's (1994) study gave the following explanations for challenging behaviour: attention seeking, demand avoidance, communication problems, stress, interference with routines and provocation. Male (2003) acknowledged the dearth of knowledge about teachers' emotional responses and found teachers reported feeling frustrated, angry and at a loss in response to challenging behaviour. Interestingly, Male (2003) also indicated that teachers with additional qualifications were more concerned about challenging behaviour than those without additional qualifications. It was suggested that the teachers' additional training raised their awareness of challenging behaviour.

Hastings and Brown (2002) found that educational staff in special education schools who believed behavioural factors (i.e. positive and negative reinforcement) were the main causes of challenging behaviour reported more fear and anxiety. They also found that staff who reported low self-efficacy and less knowledge about behavioural approaches were more vulnerable to experiencing negative emotional reactions, such as fear, anger and depression, to challenging behaviour.

The proposed study aims to contribute to this small body of research by investigating whether educational staff's attributions influence their willingness to work with children who display challenging behaviour. In particular, it will consider whether the presence of a specific diagnosis, such as Autism Spectrum Disorder (ASD) or epilepsy, impacts on staff responses to challenging behaviour. In the last few decades, there has been an increase in diagnosis of childhood disorders, including Attention Deficit Hyperactivity Disorder (ADHD) and ASD. There is debate as to whether this increase has occurred due to growing public awareness or more frequent screening for the disorders (Mandell et al, 2005; US Department of Education, 2005). Currently, parents and schools may seek diagnoses for children in an attempt to gain understanding of their difficulties and obtain access to specialist schools, resources and financial assistance. While there may be several advantages to a child receiving a diagnosis, it is important to consider how this diagnosis may effect how others perceive their behaviour within the educational context.

The study aims to address how the presence of such a diagnosis impacts on the attributions staff make about the child and the predictions made by Weiner's model. The model suggests that the links between attributions, emotions and behaviour are linear. Specifically, it proposes that attributions about controllability, internality and stability impact on emotional responses which in turn, effect behavioural responses. However, it is possible that this model may be too simplistic to understand school staff's perceptions of children with learning disabilities both with and without specific diagnoses. For example, a teacher may believe that if a child has a specific diagnosis, such as ASD, he or she is less in control of their behaviour because it is 'not their fault'. According to Weiner's model, the teacher will feel less anger and therefore, help more. Yet, the same teacher may also believe that because the child has a disorder that cannot be cured, the cause of their

challenging behaviour is very stable. According to Weiner's model, the teacher will feel more anger and therefore, help less. It appears as though controllability and stability attributions may contradict each other in this context.

In addition to the components of Weiner's model, it has been suggested that staff's background characteristics (specifically knowledge, experience and training) may effect their willingness to help those displaying challenging behaviour (e.g. Hastings & Brown, 2002). It is recognised that special educational school staff require specialist knowledge and skills (DfEE, 1997). This may be particularly important for staff working with children with specific complex needs, for example, those with ASD or epilepsy. If the teacher has received specialist training and is knowledgeable about the diagnosis, they may feel more able to intervene constructively. This will be addressed in the proposed study by asking staff about their experience, training, knowledge and their confidence in dealing with an incident of challenging behaviour.

Research into school staff's perceptions and background characteristics has important practical implications. Findings that staff's attributions, emotional responses and behaviour towards pupils who display challenging behaviour are effected by particular knowledge of and experience with a specific diagnosis, such as ASD or epilepsy, could have important implications for staff training. In addition, findings regarding self-efficacy may inform more general training on managing challenging behaviour. McGill and colleagues (2007) investigated the effect of staff training on knowledge, causal attributions and emotional responses and found that training can successfully increase knowledge, reduce the likelihood of attributing challenging behaviour to emotional causes and reduce negative emotional responses, such as depression or anger.

As detailed above, Dagnan and colleagues' (1998) study has contributed to cognitive-affective-behavioural models of helping behaviour. Their vignette method has been replicated in a number of studies (e.g. Stanley & Standen, 2000; Rose & Rose, 2005). The process involves staff responding to questions about a vignette describing an individual presenting with challenging behaviour and allows collection of a large amount of data in a controlled way. It has been questioned whether this method produces the same cognitive and emotional reactions in staff as real incidents of challenging behaviour (Wanless & Jahoda, 2002). However, gaining information about real life situations is more time consuming and has many ethical considerations. Therefore, it is considered that obtaining preliminary vignette-based data for large numbers of staff is an appropriate approach to take in this study.

The proposed study would use the method developed by Dagnan and colleagues' (1998) and aims to address school staff's cognitive, emotional and behavioural reactions to the challenging behaviour of children with learning disabilities, with and without specific diagnoses (namely, ASD or epilepsy). In addition, it aims to contribute to the understanding of the impact of teachers' background on their responses to challenging behaviour of children.

Aims and Hypotheses

Demographics

In terms of staff characteristics, it is hypothesised that staff with:

- a) more training,
 - b) more experience, and
 - c) more perceived knowledge about learning disabilities and challenging behaviour,
- will report greater confidence in being able to manage the challenging behaviour and more helping behaviour.

Weiner's Model

It is hypothesised that school staff will:

- a) attribute less control, less stability and less internality,
 - b) report less anger and more sympathy, and
 - c) report greater optimism for change and more helping behaviour,
- for children with a learning disability and ASD or epilepsy displaying challenging behaviour compared to those without a specific diagnosis.

Plan of Investigation

This study will involve a three group experimental design to examine the nature of predictors of helping behaviour and background factors in school staff working with children who display challenging behaviour with a learning disability alone, a learning

disability and ASD, and a learning disability and epilepsy. The design and method are summarised in Appendix 3.10.

Participants and Recruitment:

The participants used in this study will be teachers and classroom assistants in schools for children with mild-severe learning disabilities, with and without ASD in the Clyde area. The schools will be recruited by contacting Head Teachers. Informed consent will be gained from each teacher and classroom assistant.

Preliminary discussions with the Head Teachers of these schools have resulted in a favourable response.

Inclusion and Exclusion Criterion:

Both male and female school staff (classroom assistants and qualified teachers) will be included in the study. Those who have worked in a special educational setting for less than six months will be excluded.

Justification of sample size:

Power analysis was conducted to determine the sample size required to be statistically meaningful for MANOVA analysis. Power analysis calculated with a medium effect size of 0.5, alpha at 0.05, and power at 0.95, yielded a sample size of 66.

Therefore, it is hoped that a minimum of 66 participants will be recruited.

Research Procedures:

Ethical approval will be sought from Renfrewshire Council and NHS Greater Glasgow Primary Care Division Research Ethics Committee.

Design:

This is an experimental between-subjects design involving three conditions. Participants will be randomly assigned to one of three groups. Participant Group One will be exposed to Condition One which involves completing the measures described below based on a vignette describing a child with moderate learning disabilities displaying challenging behaviour. Participant Group Two will be exposed to Condition Two which involves completing the measures based on a vignette describing a child with moderate learning disabilities and ASD displaying challenging behaviour. Participant Group Three will be exposed to Condition Three which involves completing the measures based on a vignette describing a child with moderate learning disabilities and epilepsy displaying challenging behaviour.

A pilot stage will be conducted with another group (e.g. trainee clinical psychologists, residential care staff) in order to ensure the vignettes are accessible to the reader.

Measures:*Demographics*

Participants will be asked to indicate background information on their age, gender, and occupation.

Experience and Training

Participants will be asked to provide information on the length of time they have worked at the school, how long they have worked in the field of learning disabilities and indicate whether they have received training on a number of areas, including challenging behaviour, ASD (if it is indicated in their vignette) and epilepsy (if it is included in their vignette). Participants will also be asked if they think they have any training needs.

Perceived Knowledge

They will also be asked to rate their own level of knowledge of working with children/adults with learning disabilities and ASD or epilepsy (if it is included in their vignette).

Self-Efficacy

Participants will be asked to rate their self-efficacy in relation to managing the challenging behaviour using a scale of four self-efficacy items: feelings of (1) confidence, (2) satisfaction in dealing with behaviours (3) a perception that they have a positive impact on the challenging behaviour (4) a rating of how difficult they find it to work with challenging behaviour. Each item is rated on a seven-point scale. This scale was developed by Hastings and Brown (2002) with an added measure of control and is reported to have an excellent level of internal consistency (Cronbach's $\alpha=0.94$). The control item will be removed in this study as it is addressed in the Attributional Style Questionnaire discussed below.

Weiner's model

Following the method used by Dagnan and colleagues (1998), participants will be asked questions in relation to three vignette conditions based on previous vignette studies (e.g. Wanless & Jahoda, 2002; Tynan & Allen, 2002; Dagnan et al, 1998). The vignettes will be identical in their description of the aggressive behaviour of X-year-old male with a moderate learning disability in the school context. Age X has been chosen because this is the mode age of the pupils at the schools. A male child will be described because males are considered to be more aggressive than females in both learning disability and general populations (Maccoby & Jacklin, 1974; Tyrer et al, 2006). Finally, it was thought best to describe the child as having a moderate learning disability because Tynan and Allen (2002) found that carers' attributions about challenging behaviour are affected by description of learning disabilities from the extreme ends of the spectrum. Specifically, they found that clients with mild learning disabilities are perceived to have greater control over factors causing aggressive behaviour than those who have severe learning disabilities.

The vignettes will only differ in their description of the child having ASD, epilepsy or no additional diagnosis. These diagnoses were chosen as they are common in children who attend special educational schools. Scott and colleagues (2002) found that 12.5% of pupils aged 5 to 11 years at special education schools in Cambridgeshire had a diagnosis of ASD. Also, Epilepsy is one of the most common neuroimpairments in childhood, with a prevalence of 5 - 7% in the general population (Wallace et al, 2001).

The proposed vignettes, based on those used by Tynan and Allen (2002), are shown in Appendix 3.11.

Attributions

The participants will be asked to complete the Attributional Style Questionnaire modified according to Peterson et al (1982). This involves:

- a) Participants providing possible causes for the challenging behaviour in the vignette.
- b) Then selecting the most likely cause and rating their attributions of this cause on seven-point bipolar scales of internality, stability and controllability.

Emotional response

They will be asked to rate their emotional reaction to the scenario by rating anger and sympathy on seven-point bipolar scales from 'not at all' to 'extremely'. Higher scores will indicate greater levels of emotion.

Level of optimism

They will be asked to rate their level of optimism for change of the behaviour by rating their agreement or disagreement with three statements about the potential for change on seven-point bipolar scales. Higher scores will indicate greater optimism. These scales were developed by Dagnan and colleagues (1998) using the optimism-pessimism scale used by Sharrock et al (1990), which had been derived from work by Garety & Morris (1984), Moores and Grant (1976) and Allen, Gillespie and Hall (1989).

Helping behaviour

In order to measure helping behaviour, participants will be asked to rate how much extra effort they would put in to help the child on a seven-point bipolar scale. Higher scores will indicate a greater willingness to put extra effort into helping.

It is recognised that while these measures developed by Dagnan and colleagues (1998) are not standardised, they have been replicated by a number of studies since (e.g. Wanless & Jahoda, 2002, Stanley & Standen, 2000).

Finally, participants will be asked to explain the decision making process behind their ratings.

Procedure:

Participants will be gathered together in schools on in-service days to allow them to complete the questionnaires simultaneously. Questionnaires will be completed in the researcher's presence so as to control for conferring and participants providing socially desirable responses. Therefore, each school will only be visited on one occasion for data collection.

After providing consent, each participant will be randomly allocated to one group and given the appropriate vignette and questionnaire. Completion of the questionnaire will take approximately 30 minutes.

Settings and Equipment:

The data collection will be conducted in the schools stated above. Paper and access to a photocopier will be required for producing the questionnaires.

Data analysis:

Analysis by site

A preliminary analysis by site will be conducted using MANOVA to determine whether the culture of the school impacts on responses.

Predictors of Helping Behaviour

If the data are normally distributed, Pearson correlations will be used to determine whether the predicted associations between attributions, emotional responses, optimism for change and helping behaviour exist. If the data are found to be non-normal, suitable non-parametric analyses will be conducted.

If these associations are found, path analysis, as used by Sharrock and colleagues (1990) and Dagnan and colleagues (1998), will be conducted. This will determine whether the predicted relationships between attributions, emotions, optimism for change and helping behaviour exist. Optimism is seen as mediating between emotional responses and helping behaviour (Dagnan et al, 1998).

Comparison of responses to challenging behaviour of child with and without diagnoses

If the findings are normally distributed, a MANOVA will then be used to compare the specific components of the model across the three conditions. The dependent variable will be the staff ratings of the helping behaviour model, namely attributions, emotional responses, level of optimism and helping behaviour (see Appendix 3.10). The between groups independent variable will be whether the responses were made with respect to the vignette describing the child with no additional diagnosis, the child with a diagnosis of

ASD or that of the child with a diagnosis of epilepsy. If the data is found not to be normally distributed, the data will be transformed.

Impact of Knowledge, Training, Experience and Self-Efficacy

If the findings are normally distributed, Pearson correlations will be used to analyse the relationship between training, experience, perceived knowledge, self-efficacy and helping behaviour. If the data is found to be non-normal, suitable non-parametric analyses will be conducted.

Health and Safety Issues

No health and safety issues of note are anticipated.

Ethical Issues

The research is being conducted with school staff and only hypothetical situations will be used which limits ethical issues. In addition, informed consent will be sought from all participants.

Financial Issues

The study will have photocopying and travelling costs reaching approximately £20.

Timetable

The anticipated timetable is shown in Appendix 3.12.

Practical Applications

The findings will be fed back directly to the school staff involved in the study. It is expected that the results will not only highlight areas to be included in staff training but will also have implications for the kind of support that would be beneficial for school staff working with children presenting with challenging behaviour. If it is found that a diagnosis makes a significant difference in terms of school staff's understanding and sense of efficacy in relation to managing challenging behaviour, this is an indication that important work can be done with staff. For example, training could focus on effective ways of dealing with challenging behaviour displayed by children without a specific diagnosis.

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Addendum

Measures:

Experience and Training

On advice from the Ethics Committee, participants were asked if they had any training needs. As only three participants responded to this question, these responses were not reported in the major research project.

Weiner's model

It was considered that skeleton vignettes, as used by Dagnan et al (1998) and Wanless & Jahoda (2002), were more appropriate than vignettes adapted from Tynan and Allen's (2002) as they allowed participants to apply their own experiences to their responses.

The question asking participants to explain the decision-making process behind their ratings was considered to be too vague so was not included in the research project.

Data analysis:

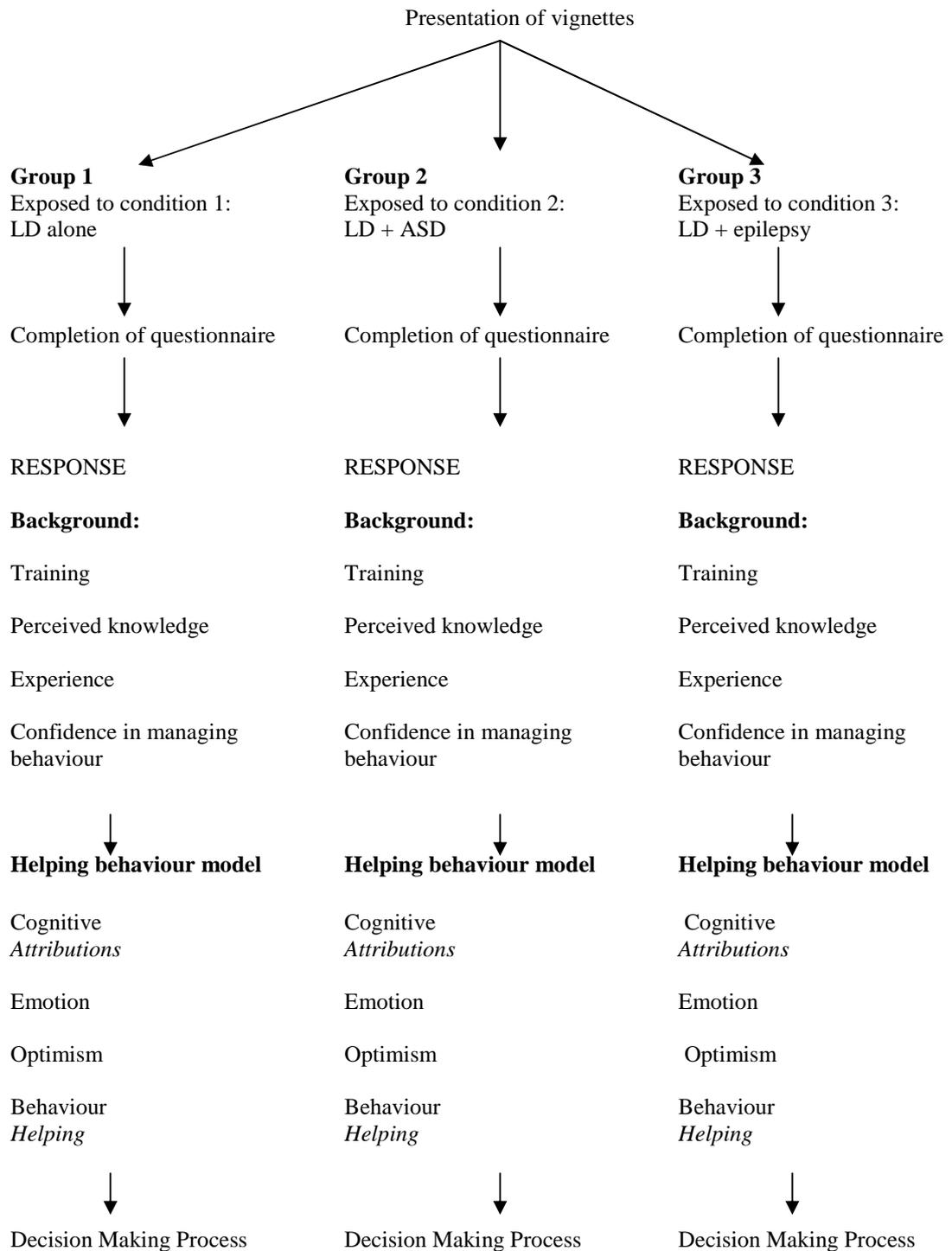
MANOVAs and Pearson correlations were not used as the data were not found to be normally distributed.

The data was not transformed on advice from the Ethics Committee.

The Sobel test was used as an alternative to path analysis to compare the strength of any relationships.

Data regarding perceived knowledge of and training on ASD and Epilepsy was not analysed, as participants responding to the 'learning disabilities alone' vignette were not asked to provide this information.

Appendix 3.10 Design and Method



Appendix 3.11 Vignettes

Vignette 1:

Jamie is an X year old boy who has moderate learning disabilities. He attends a school for children with additional support needs. Sometimes Jamie is aggressive towards school staff and other pupils. He will kick and punch people, pull their hair and physically push them.

Vignette 2:

Jamie is an X year old boy who has moderate learning disabilities. He also has a diagnosis of an Autism Spectrum Disorder. He attends a school for children with additional support needs. Sometimes Jamie is aggressive towards school staff and other pupils. He will kick and punch people, pull their hair and physically push them.

Vignette 3:

Jamie is an X year old boy who has moderate learning disabilities. He also has a diagnosis of Epilepsy. He attends a school for children with additional support needs. Sometimes Jamie is aggressive towards school staff and other pupils. He will kick and punch people, pull their hair and physically push them.

Appendix 3.12 Timeline

