Workforce development and people whose behaviour challenges

A review of the evidence

Written by the Institute of Public Care, Oxford Brookes University
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Foreword

The workforce is our greatest asset when delivering care and support. Making sure that our workforce has the skills, knowledge, expertise and appropriate behaviours to deliver to a high standard at all times requires continuous investment.

Also required is continuous reflection on the way in which we commission that workforce, and, provide learning and development opportunities that challenge and inspire people to deliver better care and support now and in future.

This evidence review was commissioned by Skills for Care as part of a wider piece of work focused on workforce commissioning and people whose behaviour challenges.

By improving employer's workforce development decision making it is anticipated that employers will have the confidence to commission learning and development for the workforce supporting people whose behaviour challenges that can adapt and flex as the needs of people who are supported change.

Providing people with the wrong learning and development opportunities can lead to poor quality care and support. If employers know how to commission workforce development properly the outcomes for people who are supported and those who support them can be empowering and enabling for all.

This evidence review and close engagement with the sector will help shape the workforce commissioning guidance and resources that we will publish in the spring 2013.

Sharon Allen
CEO
Skills for Care
November 2012

For more information on Skills for Care's work related to workforce development and people whose behaviour challenges please contact Jim Thomas, Programme Head. jim.thomas@skillsforcare.org.uk

Executive Summary

Introduction

This review was commissioned by Skills for Care's Workforce Innovation Programme which explores how people's care and support needs change and how the workforce has to adapt to meet, the challenges that change can present.

The key questions that the evidence review aimed to address with reference to people whose behaviour challenges and the social care workforce were:

- What are current reported practices to support workforce intelligence, planning and development?
- What works, and what does not work, in current practice to support workforce intelligence, planning and development?
- What are the key characteristics of effective practice in workforce intelligence, planning and development?
- Is there any relevant international evidence?
- What are the gaps in the evidence base?

People whose behaviour challenges was defined as including: "*people whose behaviour presents a significant challenge to services, whatever the presumed cause of the problem*"[1].

The full review is available from Skills for Care (www.skillsforcare.org.uk).

Methodology

The review followed the Civil Service rapid evidence assessment methodology[2]. Having formulated the questions to be addressed by the review and developed a conceptual framework, inclusions and exclusion criteria were agreed. Articles published in 2002 or later, relevant to the review questions were included. Studies were excluded if they were not relevant, for example: health focused; related to training for people with intellectual disabilities and challenging behaviour; concerned with children rather than adults.

A wide range of databases, web-sites and grey literature were searched and screened, using search terms related to people who challenge, challenging behaviour, restraint, violence and workforce, staff and training. Experts in the field were also asked to identify relevant studies. After screening of abstracts and assessment of full texts, 77 full texts were included in the synthesis for the review.

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[1] Department of Health (2007) Services for people with learning disabilities and challenging behaviour or mental health needs.
[2] http://www.civilservice.gov.uk/networks/gsr/resources-and-guidance/rapid-evidence-assessment/what-is

Results

Overall, the amount and the quality of the evidence on workforce and people whose behaviour challenges is disappointing. Much of the work reviewed was not primarily concerned with workforce development. Studies tended to use either small samples or large samples gathered from a diverse range of staff or settings. In a number of cases, the sampling techniques and assessment measures make strong conclusions difficult. Control groups were rarely used for comparison. Studies also differ in terms of definitions of challenging behaviour and the diverse roles of staff in different settings and service models. Most of the evidence came from the UK, although some overseas studies were included where relevant.

Seven broad themes were identified:

Prevalence and persistence
In terms of prevalence and persistence, the review found wide variations in the estimates of the prevalence of challenging behaviour, reflecting differences in definition, both for people with intellectual disabilities and people with dementia.

Staff attitudes and attribution
A number of studies focused on cognitive variables such as staff understanding (or attribution and beliefs about what causes cognitive behaviour, mostly in relation to people with intellectual disabilities.

There was limited evidence that:
- Feelings of sympathy towards clients are good predictors of helping behaviour by staff.
- Staff reporting of challenging behaviour in clients with intellectual disabilities may be explained by differences between staff; and differences according to the type of challenging behaviour.
- Older staff have a more tolerant response to aggressive behaviour.

There was insufficient evidence to support or reject that:
- Staff attributions of responsibility for challenging behaviour to an individual with intellectual disabilities affects their willingness to help them.

Effect of working with people whose behaviour challenges on the social care workforce
Much of the existing research is concerned with how staff's emotional and cognitive reactions affect their behavioural responses to the behaviour of people whose behaviour challenges. There are some direct effects, for example: fear of physical assault, stress and burnout have all been explored as possible consequences for staff of working with people whose behaviour challenges.

There was limited evidence that:
- Most care staff have experience of challenging behaviour.
- Working with people with challenging behaviour increases staff stress.

- Staff attributions, emotions, coping, self-efficacy, personality and organisational issues are associated with staff stress.

There was insufficient evidence to support or reject that:
- Staff fear of assault is greater when exposed to more challenging behaviour.
- Levels of challenging behaviour in people with intellectual disabilities are predictive of burn-out in support staff.
- Staff well-being is affected by the level of challenging behaviour in those they care for.

Organisational factors and challenging behaviour
Authors of the recent CQC inspection programme of learning disability services commented that challenging behaviour is complex, and poorly organised services can pose risks to individuals and the staff providing services. A number of discussion articles emphasise the contextual and organisational issues around workforce and people whose behaviour challenges.

There was good evidence that:
- Higher costs are associated with higher levels of intellectual disability and more severe challenging behaviour.

There was limited evidence that:
- Placements for people with intellectual disabilities and challenging behaviour are more likely to be maintained where there is good management support; better written guidance; and a written intervention programme that involves positive programming, proactive and reactive management strategies.
- Placements for people with intellectual disabilities and challenging behaviour are more likely to be maintained where there is more external support for staff.
- Placements are more likely to break down where there are poorer quality services in terms of: staff resources and energy levels, the physical environment, and administrative systems.

Service models
Given the range of people whose behaviour challenges and level and type of behaviour, it is unlikely that one service model will meet the needs of all people whose behaviour challenges.

There was limited evidence that:
- People with severe challenging behaviour receive less good care in grouped settings (where 75% or more of residents had severe challenging behaviour) in terms of staff teamwork and assistance from staff.
- There is greater use of physical restraint and medication on people with severe challenging behaviour in grouped settings.

- People with intellectual disabilities and challenging behaviour reduce their challenging behaviour when moving from long-stay institutions to community settings.
- Access to peripatetic and specialist teams and community approaches have a range of positive outcomes.

Care practices

Most of the evidence reviewed on care practices in the review was concerned with positive behaviour support, also described as active support, or some variation on this practice model.

There was limited evidence that:
- Organisational factors, such as team involvement and staff training are associated with implementation of guidelines and good practice.
- Positive behaviour support /active support increase staff understanding and client engagement and reduce some aspects of challenging behaviour in the short-term.
- Managers and staff associate periodic service review with positive outcomes.
- There is greater use of physical restraint and medication in grouped settings.
- A significant proportion of services use physical intervention without a physical intervention policy in place.

There was insufficient evidence to support or reject that:
- Positive behaviour support /active support training and practice are associated with long-term positive outcomes for staff and clients

Training

The evidence base is weak on the impact of staff training in terms of long-term changes in staff attitudes and behaviour and improved outcomes for clients. Few studies have measured observed staff behaviour after training related to preventing, treating, managing or coping with people whose behaviour challenges.

There is good evidence that:
- Careful selection of training goals such as the training format and the techniques being used to improve treatment skills of staff are important.
- A combination of in-service training and coaching on the job appears to be the most effective training strategy.

There is limited evidence that:
- Person Focused Training is an effective model for equipping staff to design effective behaviour support plans.
- A structured and sustained staff training programme may reduce behavioural disturbances and the use of restraints towards people with dementia in nursing homes.

There is insufficient evidence to support or reject that:

- Training alone improves staff performance.
- Staff qualifications or other training is linked to the quality of outcome for people with learning disabilities.

Conclusions

The evidence review identified a wide range of research studies both quantitative and qualitative but struggled to find many high quality studies. However, it was possible to identify a range of evidence about current practice, what works and what are the key characteristics of effective practice, and where the gaps in the evidence base exist. The findings have implications for future service development and improvements particularly in terms of management support and organisational factors, and indicate the need for more research into the impact and effectiveness of training for staff and clients.

1   Introduction

This paper presents the results of an evidence review of studies of workforce and people whose behaviour challenges, and forms one of four evidence reviews commissioned by Skills for Care. These reviews are intended to facilitate the Skills for Care Workforce Innovation Unit in taking its work forward, based on a sound knowledge base with a clear understanding of what workers need to know and what the key issues are for the workforce. Each evidence review will be followed by a resource mapping and assessment exercise which enables Skills for Care to identify where there are gaps in materials and resources, and where there are good quality relevant materials already in existence.

The review is focused on people whose behaviour challenges, particularly in relation to people with intellectual disabilities and people with dementia. However, it also recognises other groups such as people with severe mental health problems, and acquired brain injury. Most of the studies included have been carried out in residential settings. Few have been focused on workforce issues.

The key questions that the evidence review seeks to address with reference to people whose behaviour challenges and the social care workforce are:

- What are current reported practices to support workforce intelligence, planning and development?
- What works, and what does not work, in current practice?
- What are the key characteristics of effective practice?
- Is there any relevant international evidence?
- What are the gaps in the evidence base?

2   Definition

Professor Jim Mansell in his report for the Department of Health used the phrase "challenging behaviour" to include "*people whose behaviour presents a significant challenge to services, whatever the presumed cause of the problem*"[3]. This included behaviour which is attributable to mental health problems.

Mansell used Emerson et al's working definition: "*Severely challenging behaviour refers to behaviour of such an 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 ordinary community facilities.*"[4]

People whose behaviour challenges has tended to refer to people with learning or intellectual disabilities, including those people who have autism, who display challenging

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[3] Department of Health (2007) Services for people with learning disabilities and challenging behaviour or mental health needs
[4] Emerson E, Barrett S, Bell C, Cummings R, McCool C, Toogood A, et al. (1987) *Developing services for people with severe learning difficulties and challenging behaviours*.
Canterbury: Institute of Social and Applied Psychology.

behaviour. However, from the initial search for this review, there are a number of other groups of people that may also be described as people whose behaviour challenges. People with dementia, and people with severe mental health problems are the two other main groups to whom Mansell and Emerson's definitions are most likely to apply, and for which research evidence exists. For the purposes of the evidence review these groups were also included in searches.

"Learning disability" is often used in policy documents and service descriptions. "Intellectual disability" is used more widely in academic and international settings. The review uses both terms, reflecting the language used in specific articles and reports included in the review.

3 Policy context and guidance

There is no single policy document relating to workforce and people whose behaviour challenges. However, Valuing People Now: a new three-year strategy for people with learning disabilities -'Making it happen for everyone' set a clear direction for services and workforce in relation to people with learning or intellectual disabilities:

'do not assume that behaviours that seem challenging are simply part of a person's disability; we know that these behaviours serve a function for the individual and it is essential to identify what that function is.'

Valuing People Now promoted:

- the development and delivery of new knowledge sets and learning disability-focused qualifications and career pathways for workers supporting people with learning disabilities;
- work with the General Social Care Council (GSCC), Social Care Institute for Excellence (SCIE) and Skills for Care, on how national organisations can best support the workforce to deliver Valuing People Now;
- the development of training materials where required for a range of different audiences to promote a greater understanding of human rights and a human rights approach.

This was accompanied by good practice guidance written by Jim Mansell on *Services for People with Learning Disability and Challenging Behaviour or Mental Health Needs* (Department of Health, 2007), which explained how to develop individualised service responses for people whose behaviour challenges, and *Commissioning Specialist Adult Learning Disability Health Services* (Department of Health, 2007b). Mansell highlighted the need for effective services to: be based on a thorough knowledge of the individual; facilitate strong staff/service user relationships; give high priority to staff training and staff support mechanisms; involve service users and have a strong management structure which promotes service collaboration and cooperation.

Joint guidelines from Royal College of Psychiatrists on challenging behaviour in 2007 emphasised the need for long-term person-centred care. Practice guidelines have emphasised the importance of staff skills and knowledge in creating '*capable*

environments' for those who challenge (Royal College of Psychiatrists, British Psychological Society and Royal College of Speech and Language Therapists, 2007). The Learning Disability Professional Senate (a group including the Royal College of Psychiatrists, the Royal College of Nursing, and other professional bodies) are carrying out a refresh of the 2007 joint guidelines which should be completed by December 2012 following the Department of Health Review of Winterbourne View.

More recently, the new workforce development strategy (Skills for Care, 2011) and new workforce development framework in the UK set out to produce a competent and confident workforce. The introduction of a Qualifications and Credit Framework in England has seen parallel developments in Scotland.

However, staff working in social care often lack qualifications and are relatively low-skilled and low-paid. This creates a challenge for those tasked with implementing policy objectives.

The paper is presented in three sections:

Section A: Methodology (including search strategy).
Section B: Synthesis of evidence review
Section C: References.

A: Methodology

1   Search Strategy

Searches were undertaken of the Web of Knowledge, Cinahl, SCIE Social Care Online, ASSIA, Social Services Abstracts, Campbell Collaboration, Google Scholar, Department for Health, Skills for Care, Centre for Workforce Intelligence, Joseph Rowntree Foundation, NDTI, RIPFA, IRISS, and King's College Workforce Unit websites.

A variety of search terms were used appropriate to the different databases For Web of Knowledge the following words were used:

Search words	Number of results
"Challenging behaviour" work* adult	50
"Challenging behaviour" staff* adult	85
"Challenging behaviour" train* adult	40
"People who challenge" work*	4
"People who challenge" staff*	3
"People who challenge" train*	2

In other databases, where fewer studies are located, the search was widened by using less restrictive terms in order to generate a good range of studies. Additional terms: "restraint" and "violence" were also used.

In addition, a number of experts in the area were contacted for their suggestions of relevant papers. We are very grateful to Peter McGill, Martin Campbell, and John Larsen for their suggestions of relevant articles and journals. Members of a Skills for Care working group on people whose behaviour challenges also contributed suggestions of papers and other material. This contributed to a wider search of the grey literature related to this topic.

2   Extent

The initial search of databases using the search words set out in the conceptual framework paper (ie, published in 2002 or later, relevant to the adult social care workforce and the key questions etc) resulted in 175 separate documents. In some cases, more than one paper related to the same study. From the initial screening, some papers were excluded as not relevant on the grounds that they were: health focused; related to training for people with learning disabilities and challenging behaviour; concerned with children rather than adults; or relate to medication. These were not included for further screening.

After screening of abstracts, this number was reduced to 118 separate papers. The search of websites and discussions with experts produced another 15 further separate papers after initial screening.

The screening of the full texts reduced the number of documents for synthesis to 77.

In terms of the exclusions:

- There are a large number of papers which look at children and young people often in the context of family services.
- Papers with a policy focus have been excluded unless they include workforce issues.
- International studies except where they had a workforce focus which appeared relevant to the UK.
- Studies concerned with the development of questionnaires for the measurement of challenging behaviour unless they had some workforce related element.

The great majority of papers are related to workforce and people with learning disabilities whose behaviour challenges. Most studies have been carried out in residential settings. A much smaller number of papers are concerned with workforce and people with dementia whose behaviour challenges, with dementia and Down's syndrome, and with acquired brain injury. Very few papers were identified relating to workforce and people with severe mental health problems whose behaviour challenges. This appears to be because most of the material on severe mental health and workforce is concerned with the health workforce.

3 Quality assessment

For those abstracts meeting the basic screening requirements, we assessed the full text in terms of overall quality, key findings and key recommendations. This was recorded on a standard template.

For all research, we used a similar approach to grading material as recommended in Think Research[5] (which we advised on). This grades research evidence on a five point scale where: 1 = personal testimony or practice experience, 2 = client opinion study or single case design, 3 = quasi-experimental study or cross-sectional study or cohort study, 4 = randomised controlled trial, and 5 = systematic review or meta-analysis.

In terms of qualitative research, there has been considerable debate over what criteria should be used to assess quality[6] and concern to avoid a rigidly procedural and over-prescriptive approach. We therefore adopted the four key principles which Spencer et al [7] advise should underpin any framework:

- Contributory – advancing wider knowledge or understanding
- Defensible in design – an appropriate research strategy for the question posed

[5] Cabinet Office Social Exclusion Task Force (2008) Think Research: Using research evidence to inform service development for vulnerable groups
[6] Long A & Godfrey M (2004) An evaluation tool to assess the quality of qualitative research studies, International Journal of Social Research Methodology, 2004, vol 7, 2, pp 181-196
[7] Spencer L, Ritchie J, Lewis J & Dillon L (2003) Quality in Qualitative Evaluation: a framework for assessing research evidence: a quality framework, Cabinet Office Strategy Unit.

- Rigorous in conduct – systematic and transparent data collection and analysis
- Credible in claim – well-founded and plausible arguments about the significance of the evidence generated.

Thus we scored qualitative research in terms of these four principles with a maximum of four points where all four principles were satisfied.

4   Range

In the research evidence, the nature of challenging behaviour was explored and identified as the product of staff, clients, situational factors organisational culture, working practices and the physical environment.

The range of studies covered a number of evaluations of intervention models including:

- Active support (including interactive training)
- Person focused training in positive behaviour support
- Assertive outreach teams
- Specialist community behaviour teams
- Special projects team
- Specialist liaison worker
- Periodic service review
- Use of restraint

These models were mainly concerned with the client but have implications for workforce development and training.

A further group of studies evaluated specific training programmes and interventions such as: brief workshop interventions, in-service on the job coaching, four-week communication training programme, dementia care training, emotional intelligence and use of restraint training.

There were several papers on the characteristics of care staff and their understanding of challenging behaviour and how this affects their response to people whose behaviour challenges. These include variables such as causal attribution of challenging behaviour, emotional intelligence, well-being, knowledge of, and attitude to, evidence.

One group of papers looked at the effects of challenging behaviour on staff and what factors may moderate the impact, or have a protective effect. In particular, staff anxiety and fear of assault, stress, burn-out and intended job turnover are discussed. Moderating factors include clear procedural guidance, staff support and supervision, external professional support, greater resources, and better pay.

There were a cluster of studies concerned with the development and validation of questionnaires and inventories to measure challenging behaviour and staff attitudes and interaction (which were excluded from the review), for example:

- Challenging Behaviour Perception Questionnaire
- Staff Client Interactive Behaviour Inventory
- Behaviour Problems Inventory.

These added to the wide range of scales used to measure challenging behaviour with large variation in what was classified as challenging behaviour in the studies covered by the review.

A small number of studies compare different settings – for example, grouped settings and mixed settings for people whose behaviour challenges. There was limited comparison of the costs of different models of care for people whose behaviour challenges, and little exploration of the relationship between workforce issues and outcomes in terms of challenging behaviour.

5 Nature of evidence identified

Overall, the amount and the quality of the evidence on workforce and people whose behaviour challenges is best described as disappointing. Studies tended to use either small samples or large samples gathered from a diverse range of staff or settings. In a number of cases, the sampling techniques and assessment measures make strong conclusions difficult. Control groups were rarely used for comparison.

It should be borne in mind that the review covers a ten year period during which time there have been considerable changes in service provision. This means that the earliest studies will have been undertaken in a very different context from the most recent ones. Studies also differ in terms of the diverse roles of staff in different settings and service models.

The evidence reviewed for this study can be broken down as follows:

Nature of evidence	Number of documents
Personal testimony or practice experience	3
Client opinion study of single case design	10
Quasi-experimental study or cross-sectional study or cohort study	46
Randomised controlled trial	2
Systematic review or meta-analysis	2

In addition, five literature reviews, three editorial/discussion articles and six qualitative studies were included in the review.

Many of the studies involved staff questionnaires and interviews in one or more residential settings. Some involved before and after questionnaires of specific interventions to measure the effect on staff. There are a small number of literature reviews although these all have a wider focus than workforce. In relation to training, there are a number of case studies and articles drawing out learning from pilot programmes.

There are few observational studies, few longitudinal studies and as mentioned earlier limited evidence on the relationship between workforce and outcomes for clients.

Most of the evidence is from the UK. However, studies from the US, Eire, the Netherlands, Belgium, Australia and Norway were identified in the initial search. Some of these were discarded at the screening stage on the grounds that they were not relevant to UK services or culturally specific. Where a reviewed study is from outside the UK, this is noted in the text.

6   Limitations of the review

Much of the work in this review was not primarily concerned with workforce development and connections between workforce approaches and the impact and outcomes for service users were not always addressed. The reviewers have sought to identify what is relevant and addresses the key questions in the review, but may have overlooked some studies where the relevance was not immediately clear.

Within the research, a range of behaviours were identified as challenging: self-injury, physical and verbal aggression, sexually inappropriate behaviour and stereotypy. Few studies explored differences between different types of challenging behaviours. The variation in definition applied in each study means that comparison between studies is rarely like for like.

The review was undertaken over a three month period. It is possible that further time would have allowed the identification of additional relevant evidence and more detailed examination and presentation of studies.

B: Synthesis of Evidence

1   Introduction

Although research evidence does not necessarily fall into discrete themes, we have organised the evidence under six broad themes to reflect those areas of relevance to workforce planning and development:

- Prevalence and persistence
- Staff attitudes and attribution
- Effect of working with people whose behaviour challenges on the social care workforce
- Organisational factors and challenging behaviour
- Service models and care practices
- Training

2   Prevalence and persistence

Good evidence to support
- There are wide variations in the estimates of the prevalence of challenging behaviour, reflecting differences in definition.

2.1   Learning disabilities

Many of the articles in the review reference previous research on the prevalence of challenging behaviour among people with learning disabilities. Totsika et al (2008) cites prevalence rates of challenging behaviour among people with intellectual disabilities as between 10-15% while Campbell (2010) gives a range between 5.7% and 20%. It is clear that there are wide variations in the estimates of the prevalence of challenging behaviour which probably reflects differences in definition and perceptions.

This is illustrated in a study by Hayden and Stevens (2004) who conducted a census over a one month period of 1,390 service users in 21 social services run units for adults with learning disabilities (mainly day centres). Using staff ratings, the study found that 85% of service users displayed some form of at least low level '*problematic'* behaviour, while less than 2% of service users displayed '*extremely problematic'* behaviour. Non-compliance was identified as the most common problematic behaviour, while the most common aggressive behaviour was verbal abuse, followed by hitting others. The most common self-injurious behaviour was hitting the head with another part of the body, biting self, and scratching self.

Differences between the scores for different types of behaviour between residential and day services indicated how identical behaviours may be seen as more or less challenging according to the context in which they occur. Hayden and Stevens' concluded that there is a need for more individualistic assessment of a person's behaviour. Their study is consistent with studies from the previous decade (eg Lowe and Felce, 1995) which

indicated that challenging behaviour is a social construct - a product of both individual and environmental circumstances.

In a small cohort study of 58 adults with intellectual disabilities in long-term residential care over a period of 11 years, Totsika et al (2008) conducted a rare longitudinal study that followed people with challenging behaviour over time. Measuring challenging behaviour at two points, Totsika et al found that 79% of the sample still presented serious/controlled challenging behaviour 11 years after the first measurement. The authors concluded that if challenging behaviours are '*fairly persistent*' over time, but the role of personal characteristics is limited, then other factors such as carer behaviour, and interaction between staff and client need to be looked at as risk factors for persistent challenging behaviour.

2.2 Dementia

Information on the prevalence of people with dementia whose behaviour challenges is based on two small studies, one from the UK and one from Norway. Prevalence rates of challenging behaviour among people with dementia are reported to range between 30% and 60% in work cited by Rutledge and James (2007). Although based on self-reported questionnaires from a convenience sample of staff, the study indicates that nearly three-quarters of care staff taking part had experienced a fearful event during their work as a carer in a care home: most commonly reported were physical assaults including some extreme examples.

Almvik et al's Norwegian study (2006) was a cross-sectional study of 82 older people across two nursing homes and two geriatric wards in Norway over a three month period. Staff recorded all violent incidents on a Staff Observation Aggression scale. Thirty-two patients were reported to be violent at some point over the three months, however, the majority of incidents were generated by a minority of older people: one person was responsible for 68 of the total 210 recorded incidents. Physical aggression was more common among people with severe dementia, while verbal aggression was more prevalent among those with moderate dementia. Verbal aggression was the most frequent type of challenging behaviour.

The study highlights the contextual nature of challenging behaviour for people with dementia: 38% of incidents occurred when a client was denied something; 20% involved bath/shower situations; and 17% involved verbal communication. In 79% of incidents, staff were the target of the behaviour. 16% of cases involved spitting which staff accorded the second highest severity score – ie, above being kicked or hit.

No studies were identified that looked at the prevalence of challenging behaviour among people with severe mental health problems in care settings.

3   Staff attitudes and attribution

Limited evidence to support
- Feelings of sympathy towards clients are good predictors of helping behaviour by staff.
- Staff reporting of challenging behaviour in clients with learning disabilities may be explained by differences between staff; and differences according to the type of challenging behaviour.
- Older staff have a more tolerant response to aggressive behaviour.

Insufficient evidence to support or reject
- Staff attributions of responsibility for challenging behaviour to an individual with learning disabilities affects their willingness to help them.

Nine relevant studies were identified in the last 10 years that have focused on cognitive variables such as staff understanding (or attribution) and beliefs about what causes challenging behaviour, mostly in relation to people with learning disabilities. Researchers have looked also at the interaction between beliefs with other variables such as reactions to challenging behaviour, stress and burn-out.

Campbell (August 2007) in a discussion article cited evidence from the 1990s that direct care staff understanding of challenging behaviour, or lack of understanding, is an important variable in the establishment and maintenance of a range of serious challenging behaviours. He observed:

"Staff understanding of challenging behaviour and their attitude to it affects the kinds of therapeutic intervention that staff use, the effectiveness of those interventions and ultimately whether the behaviour is behaviourally maintained."

Much of the research in this area has been inspired by Weiner. According to Weiner's (1980) model of helping behaviour, if staff perceive challenging behaviour to be under the personal control of an individual, then this is more likely to provoke negative emotions, such as anger, and to result in them offering less help. Where staff believe challenging behaviour is outside a person's control, the model predicts that care staff will be more willing to help and be more sympathetic to people whose behaviour challenges.

3.1   Learning disabilities

The evidence on the value of the model for both learning disabilities and for dementia is mixed. While Dagnan and Cairns (2005) and Philips and Rose (2010) found supporting evidence, other studies (Wilcox et al, 2006; Jones and Hastings, 2003; Willner and Smith, 2008; Lambrechts et al, 2009) were more equivocal in their conclusions; and Bailey et al (2006) and Wanless and Jahoda (2002) found evidence to reject the model.

The study by Dagnan and Cairns (2005) examined the importance of staff judgements of responsibility for challenging behaviour in predicting their emotional and intended helping responses. They found significant correlations between the attribution of controllability and

the judgement of responsibility for the development of challenging behaviour; and positive correlations between both responsibility for change and sympathy with intention to offer help, (ie, broadly consistent with Weiner's model). Dagnan and Cairns found the single best predictor of helping behaviour was the emotion of sympathy. Emotional reactions (and negative emotions in particular) appear to have a mediating role between attribution and action in staff working with patients with learning disabilities and challenging behaviour.

Phillips and Rose (2010) incorporated Weiner's model in a small study of placement breakdown. Taking two groups of staff working with adults with intellectual disabilities and challenging behaviour: a breakdown group and a maintained placement group, across five areas in the West Midlands, they found no significant difference between the overall level of challenging behaviour in the breakdown and maintained groups. However, a combination of the following factors were predictive of membership of the breakdown group to a very high degree of accuracy: individuals were judged to be more in control of their challenging behaviour by the most senior staff participant and received less help from, and had fewer interactions with, staff. The authors consider that this implied a role for staff attributions in placement breakdown.

A small qualitative study by Wilcox et al (2006) used discourse analysis on 10 interviews with care staff to investigate constructions of aggressive behaviour among care staff supporting people with learning disabilities with a history of behaviour which caused direct physical harm to other people. Wilcox et al found staff mixed two attributions of challenging behaviour: one where client's behaviour was seen in terms of internal factors, for example, biological difference or syndrome; and a second which constructed clients as sometimes disempowered by their context, giving staff the ability to make a positive difference. The researchers also found that staff understanding of a client's behaviour was affected by gender sterotypes where women's challenging behaviour was linked to PMT and character flaws.

Another study which provided little evidence of the predicted association between causal attribution and negative or positive affect was one by Jones and Hastings (2003) which explored an amended version of Weiner's helping behaviour model, potentially more specific to the context of care staff working with people with learning disabilities and challenging behaviours. The authors used a video of self-injurious behaviour and self-reported questionnaires with 123 care staff to obtain staff views.

Willner and Smith (2008) in a study of carer's propensity to help men with intellectual disabilities who displayed inappropriate sexual behaviour found mixed support for attribution theory (ie that helping behaviour is determined by emotional responses, which in turn are determined by causal attributions about whether or not someone can control their behaviour). However, using vignettes with 65 care managers and 56 direct care staff, they found high levels of sympathy were also associated with increased helping behaviour, which was mediated by feelings of optimism. They found that less than 20% of participants had received training in this area of challenging behaviour. The researchers concluded that working with care staff to encourage them to consider that a client's behaviour might be susceptible to change could be effective.

Two articles based on a Belgian study (Lambrechts and Maes, 2009; Lambrechts, Kuppens and Maes, 2009) provide limited evidence that variations of staff reporting of challenging behaviour in clients with intellectual disabilities may be explained by differences between staff; and differences according to the type of challenging behaviour. Lambrechts and Maes (2009) found that internal attribution (where the cause of the challenging behaviour was attributed to the individual's characteristics such as ability, personality, mood, efforts, attitudes, or disposition) along with working hours, gender, and experience of working with the client group, influenced reporting of challenging behaviour. Education, qualifications and age did not emerge as important influencing variables.

In the second article, Lambrechts, Kuppens and Maes (2009) found that staff feelings of fear and anxiety were connected with the severity of self-injurious and aggressive/destructive behaviour. However, the finding that the perception of staff that the cause of challenging behaviour was permanent was associated with feeling confident or relaxed appeared to contradict Weiner's attribution theory. The authors found no clear relationship between emotional reactions and attributions on the one hand, and staff behaviour on the other.

A rare observational study by Bailey et al (2006) involving 16 care staff interacting with service users also did not support Weiner's attributional model of helping behaviour. However, they concluded that there was a need to look further at whether care staff emotions mediated between their attributions and their actual responses to challenging behaviour. Wanless and Jahoda (2002) likewise found little evidence to support Weiner's model, although they did find that staff perceptions of aggressive clients were linked to their cognitive and emotional responses to the aggression. In a study of 38 staff working in day centres for people with intellectual disabilities, using vignettes and interviews about real incidents, the authors concluded that Weiner's model failed to capture the dynamic element of the interaction between staff and clients. They also noted a relationship between age and staff response, indicating that older staff appeared to have a more tolerant response to aggressive behaviour.

Another article based on this study (Jahoda and Wanless, 2005) showed the strength of staff member's emotional reactions to specific incidents. The majority described clients' in negative terms and said that their first impulse had been to confront them. The authors observed that the interpersonal dimension has important implications for planning and maintaining staff support for aggressive individuals, especially where they may be working with people in their own homes without informal mechanisms of peer support.

A number of studies which aimed to develop questionnaires to measure staff attributions towards incidents of challenging behaviour were not included in the review as they were more focused on the tools for research in this area, rather than the analysis and interpretation of the findings.

3.2　Dementia

Studies of staff attribution in relation to people with dementia who challenge are few. A literature review of mainly health-based research by Pulsford and Duxbury (2006) found no clear link between the ways that professionals attribute aggressive behaviour and their

willingness to help aggressive people with dementia. Among other research, they cited a study by Todd and Watts (2005) of nurses and psychologists which found that professionals who believed that people with dementia were being deliberately aggressive were no less likely to express positive views towards helping those people than professionals who believed that aggression was unintentional.

A qualitative study by a team from the Joseph Rowntree Foundation (JRF, 2006) identified staff attitudes towards and previous experience of 'behaviour that challenges', beliefs about pain thresholds, and the use of agency/bank staff contributed to low levels of pain recognition among older people with learning disabilities and dementia. The researchers concluded that there was inadequate training of staff at all levels in all professions about dementia and learning disability and the pain management needs of this group of people with little use of pain assessment tools.

4 Effect of working with people whose behaviour challenges on the social care workforce

Limited evidence to support

- Most care staff have experience of challenging behaviour.
- Working with people with challenging behaviour increases staff stress.
- Staff attributions, emotions coping, self-efficacy, personality and organisational issues are associated with staff stress.

Insufficient evidence to support or reject

- Staff fear of assault is greater when exposed to more challenging behaviour.
- Levels of challenging behaviour in people with learning disabilities are predictive of burn-out in support staff.
- Staff well-being is affected by the level of challenging behaviour in those they care for.

A number of studies have looked at the effect on staff of working with people whose behaviour challenges – mainly in relation to people with learning disabilities. Much of the existing research is concerned with how staff's emotional and cognitive reactions affect their behavioural responses to the behaviour of people whose behaviour challenges. There are some direct effects, for example, fear of physical assault, stress and burnout have all been explored as possible consequences for staff of working with people whose behaviour challenges.

4.1 Aggression and assault

Sharp et al's (2002) study of 76 social care staff across a range of learning disability services found that three-quarters had experience of aggression, self-injury, disruptive and/or stereotyped behaviour. A more recent study by Rutledge and James (2007) of staff working with people with dementia found that nearly three-quarters of care staff taking part had experienced a fearful event during their work as a carer in a care home: most commonly reported were physical assaults including some extreme examples. A fifth of those reporting a specific event said they had been injured. Fear-provoking events tended to happen during staff /resident interaction. About half the respondents said they had adopted a more person-centred style, while the others learnt to be more vigilant or wary of residents. Although the study is methodologically weak, it gives some indication of the level and nature of challenging behaviour experienced by staff in care homes for people with dementia.

In a more recent quantitative study of the perceptions of challenging behaviour and fear of assault among 87care staff in a secure unit and a community based setting, Rose and Cleary (2007) investigated whether the reported level of fear of assault was greater when staff were exposed to more challenging behaviour. The researchers found equivocal evidence for a relationship between the amount of challenging behaviour and the level of fear of assault.

In contrast, Howard et al (2009) in survey of care staff in a medium secure setting with high incidence of violence, and staff in two community settings with a low incidence of violence for people with intellectual disabilities found that medium-secure staff reported significantly lower fear of violence and higher self-efficacy compared with community staff. Self-efficacy was defined as the individuals' perception of their ability to manage violent behaviour. The authors inferred that this may be because people who are more susceptible to fear self-select to work with less challenging people.

McBrien and colleagues (2003) looked at the extent of risky behaviours that might be construed as offences in one local authority area. They found that almost half (48%) of the settings and 93% of the care manager group in their study had cared for clients with a history of contact with the criminal justice service. They also found some notable differences between private and voluntary sector providers of residential care. Private sector homes had more experience of clients being arrested by the police and of clients having been sectioned under the Mental Health Act, and yet had significantly less provision for security than did the voluntary sector homes. The authors were struck by the lack of knowledge among carers concerning the offending backgrounds of those they were caring for, which they considered indicated a need for information sharing to guard against risk and vulnerability for offenders and potential victims, and for training.

4.2   Stress

Rose and Rose (2004) define stress as "*the result of a transactional process between environmental context and the individual. This is explained in terms of the demands placed on a person and how these demands are balanced between their perceptions of them as a threat and their perceived ability to cope*". Staff stress and burnout have been identified as an important area that can affect staff well-being and their interactions with clients.

An evidence review by Mills (2010) as part of an unpublished doctoral thesis evaluated the evidence of a relationship between challenging behaviour and stress and burnout in staff working with people with intellectual disabilities. Reviewing 29 articles focused on health settings, appearing between 2000 and 2010, Mills found evidence of an association between challenging behaviour and staff stress and burnout. Several variables appeared to influence this relationship: attributions, emotions, coping, self-efficacy, organisational issues and personality.

Both the qualitative and quantitative studies in Mills review generally had similar results: that challenging behaviour is stressful for staff. The fact that both methodologies identified similar constructs appears to confirm the importance of these variables.

Rose and Rose (2005) examined the impact of stress on attributions of challenging behaviour among 107 staff working in community homes for people with intellectual disabilities. Although staff reported high stress levels and moderate burnout, this did not appear to relate to their reporting of thoughts and feelings regarding challenging behaviour. The authors concluded that there was little evidence to suggest that stress has a primary role in determining staff responses in terms of attribution.

4.3   Burnout and well-being

Burnout has been conceptualized in terms of three distinct components: feelings of emotional exhaustion, a tendency to depersonalize others (to distance oneself emotionally and cognitively from service users), and diminished feelings of personal accomplishment (Maslach et al. 2001).

A previously mentioned evidence review by Mills (2010) found evidence of an association between challenging behaviour and staff burnout. A companion survey by Mills (2010) of 77 staff from six residential homes across two areas found that the higher the level of challenging behaviour reported by staff, the higher the burnout ; and higher levels of challenging behaviour were correlated with higher levels of fear of assault. However, the response rate was low and there was no consideration of organisational variables. Howard et al (2009) also found that increased burnout was significantly correlated with increased perceived exposure to physical violence and reduced staff support. In their study, self-efficacy had a significant moderating relationship with levels of violence and burnout.

Another study by Chung and Harding (2009) provides evidence of a relationship between staff burnout and people with intellectual disabilities and challenging behaviour. Chung and Harding investigated the impact that five personality traits have on burnout and psychological well-being among care staff working with people with intellectual disabilities and challenging behaviour. Their survey of 103 staff in 13 residential community homes for people with intellectual disabilities and challenging behaviour indicated that the more the staff found their clients' behaviour challenging, the more they experienced emotional exhaustion and the less they felt a sense of personal accomplishment; but there was no significant relationship between the psychological well-being of staff and challenging behaviour. Extraversion appeared to be a protective trait.

Rose et al (2004) found significant positive correlations between negative emotional reactions to challenging behaviour and burnout in terms of emotional exhaustion and depersonalisation (the development of negative and cynical attitudes to service users) in 200 social care staff. However, Rose and colleagues emphasise that their work did not establish a causal relationship between emotional reactions to challenging behaviour and staff well-being. A weaker study of care staff in five day centres across one city (Donaldson, 2002) found a significant correlation between self-reported well-being and staff rating of challenging behaviour in both those who cared for people with Down's syndrome and dementia and those who cared for other non-specified learning disabilities. Well-being declined as perceived challenging behaviour increased; however, there was no correlation with anxiety scores.

Although outside the time limits of this review, Rose et al (2004) cited earlier studies which found stress and burnout to be associated with an intention to leave organisations, actual staff turnover, and absenteeism.

In contrast, a systematic review of 15 research studies by Skirrow and Hatton in 2007 concluded that the research covered by the review did not support the view that the presence of challenging behaviour amongst individuals with intellectual disabilities is predictive of burnout amongst their support staff, however the evidence is far from

conclusive. Levels of burnout were no greater than that found in other populations. However, the reported studies were not of a sufficiently high quality to conclude that there is no relationship between these variables.

According to Skirrow and Hatton (2007) organizational variables were often the most reliable predictors of burnout which is experienced by a significant minority of direct care workers. Their review indicated that burnout is linked to issues of service delivery and worker support, rather than the presence of challenging behaviour in people with learning disabilities.

4.4 Coping strategies

Although focused on health settings, Mills' (2010) review cited evidence which indicates that staff coping resources are important in relation to working with people whose behaviour challenges, along with personality and self-efficacy.

Sharp et al's (2002) small survey of social care staff working with people with learning disabilities whose behaviour challenges and their coping strategies found the most widely mentioned were: support from others for example, through staff meetings and supervision; and to a lesser degree training and time-off.

5   Organisational factors and challenging behaviour

> **Good evidence to support**
>
> - Higher costs are associated with higher levels of learning disability and more severe challenging behaviour
>
> **Limited evidence to support**
>
> - Placements for people with learning disabilities and challenging behaviour are more likely to be maintained where there is good management support; better written guidance; and a written intervention programme that involves positive programming, proactive and reactive management strategies.
>
> - Placements for people with learning disabilities and challenging behaviour are more likely to be maintained where there is more external support for staff.
>
> - Placements are more likely to break down where there are poorer quality services in terms of: staff resources and energy levels, the physical environment, and administrative systems.

The recent CQC inspection programme of learning disability services (CQC, 2012) in 150 locations found that there was still a need to make sure that care planning and care delivery are highly individualised with clear objectives that help people manage their complex needs over time. The authors of the report commented that challenging behaviour is complex, and poorly organised services can pose risks to individuals and the staff providing services.

An editorial article by Grey et al in 2007 and a discussion piece by Campbell in 2010 help to emphasise the contextual and organisational issues around workforce and people whose behaviour challenges. Both articles provided useful reviews of current research and thinking on workforce, training and challenging behaviour. Campbell and Grey et al noted a number of barriers to implementing effective behavioural interventions, including:

- Organisational structure
- Absence of performance management systems
- Poor competency-based staff training
- Lack of basic knowledge
- Negative staff perceptions of behaviour interventions
- Poor understanding of such interventions.

Grey et al identified a need for organisational systems to support staff to maintain behaviour change.

5.1   Placement breakdown

Two studies have looked at factors predictive of placement breakdown for people with intellectual disabilities and challenging behaviour. Both have indicated a range of organisational and workforce factors are associated with placement breakdown. Broadhurst and Mansell (2007) in a comparative study of placement breakdown found that placement characteristics may be an important determinant of community placement success for people with intellectual disabilities and challenging behaviour.

Comparing settings where placements broke down and those that did not in a small but influential study, Broadhurst and Mansell found no significant difference in how much in-service training had been received by staff, in staff:client ratio, hours worked or how quickly staff were replaced when they left employment. However, the placement maintained group had significantly better support provided by management in terms of frequency of supervision and team meetings, and provision of training and coaching. The placement maintained group had better written guidance. They were more likely to have a written intervention programme that involved positive programming, proactive and reactive management strategies. The strategies were more likely to be reviewed regularly and used at all times by the staff team. Incidents were more likely to be fully documented; senior staff and outside agencies were more likely to be informed; and staff were more likely to be debriefed after incidents.

The placement maintained group also reported more external support (range of professional disciplines providing advice and support in respect of the individual resident identified, whether staff found the advice easy or difficult to follow and whether respite facilities were available during crises). Resident characteristics were also significant.

Homes in the placement breakdown group had significantly less professional support, in the form of psychology, psychiatry, speech and language therapy, nursing, etc. Extra or experienced staff were less likely to be available to offer support. It was less likely that extra resources in terms of staff or respite facilities would be available indefinitely. Given the small size of the sample (39 care home managers) and the use of previously untried measures, Broadhurst and Mansell advise caution.

Phillips and Rose (2010) also compared maintained and broken down placements in a small study. They found that factors predictive of placement breakdown included: poorer quality services in terms of staff resources and energy levels, the physical environment, and administrative systems (as well staff attributions of control).

5.2   Costs

There has been very little research into the costs of caring for people whose behaviour challenges and different models of service. However, Knapp et al (2005) provided evidence that one consequence of challenging behaviour for organisations are increased costs.

In a survey covering 1,128 people with intellectual disabilities, Knapp et al (2005) found strong links between the degree of intellectual disability, challenging behaviour, service

use and costs. Higher costs were associated with more severe intellectual disability and more challenging behaviour. Average costs were higher in NHS settings, compared with the costs of voluntary and private providers.

Hassiotis et al (2008) conducted a study of the individual characteristics and service expenditure on challenging behaviour for adults with intellectual disabilities in five north London boroughs. The study covered 205 people in high cost accommodation (£70k per annum and above). Although the quality of financial data was variable, the study found a positive correlation between higher costs and higher needs; and that those with the highest challenging behaviour scores were more likely to be placed out of borough. McKenzie (2011) in a review of the literature on services for people with learning disability and challenging behaviour cited an earlier study by Allen et al which found that specialist in-patient units when located out of area, were often more expensive than local services and provided little evidence of higher quality.

An earlier study by Hallam et al (2002) looked at the comparative costs of supporting people in village community settings, NHS residential campus and dispersed community based housing schemes . This study also indicated that higher costs were associated with higher levels of intellectual disability and more severe challenging behaviour. The researchers identified quality of life benefits in dispersed housing and village community settings. Hallam et al's study is particularly robust with a random sample of 500 people with intellectual disabilities across the three types of setting, using a wide range of research instruments to produce a large quantitative dataset.

6   Service models and care practices

6.1   Service models

> **Limited evidence to support**
> - People with severe challenging behaviour receive less good care in grouped settings (where 75% or more of residents had severe challenging behaviour) in terms of staff teamwork and assistance from staff.
> - There is greater use of physical restraint and medication on people with severe challenging behaviour in grouped settings.
> - People with learning disabilities and challenging behaviour reduce their challenging behaviour when moving from long-stay institutions to community settings.
> - Access to peripatetic and specialist teams and community approaches have a range of positive outcomes.

Given the range of people whose behaviour challenges and level and type of behaviour, it is unlikely that one service model will meet the needs of all people whose behaviour challenges. However, there is evidence to indicate that people with learning disabilities with challenging behaviour receive better care practices in mixed settings rather than congregate ones where they are grouped together.

6.1.1   Grouped or mixed settings

A good study of 303 people with intellectual disabilities living in 68 small homes across England Mansell et al (2003) looked at whether people with intellectual disabilities with particular needs were treated differently by staff if they lived in grouped rather than mixed settings. The researchers found that residents with severe challenging behaviour were rated as receiving less good care practices in grouped settings (where 75% or more of residents had severe challenging behaviour) in terms of staff teamwork and assistance from staff. There was no evidence that any greater staff expertise in grouped settings was able to influence the detrimental effects on care practice of living in a grouped setting.

Robertson and colleagues (2005) compared two types of supported accommodation for people with intellectual disabilities (ID) and severe challenging behaviour: 25 people in non-congregate settings where the minority of residents had challenging behaviour, and 25 people in congregate settings where the majority of residents had challenging behaviour. The authors found greater use of physical restraint as a management strategy, and greater use of medication to prevent or reduce challenging behaviour in specialist congregate settings for people with severe challenging behaviour. The combination of questionnaire and observation in a longitudinal study adds to the quality of this study.

6.1.2   Community-based settings

Two studies since 2002 have looked at the outcomes of resettlement in community-based settings for people with intellectual disabilities (following a number of studies on this topic in previous decades) and found significant reductions in challenging behaviour. Bhaumik

et al (2009) conducted a small study of a person-centred approach to the resettlement of 49 former residents of a long-stay institution with challenging behaviour. The team found a significant reduction in the levels of aggressive challenging behaviour after 6 months of resettlement. No further change was identified a year after resettlement. The study provides plausible evidence of the role of the service setting in either exacerbating or reducing aggressive challenging behaviour.

A second study by Golding et al (2005) evaluated specialised community-based residential supports for people with intellectual disabilities and challenging behaviour by comparing six adult men who moved from a long-stay institution to a community-based residential setting with six already in a community-based setting. The researchers reported a reduction of 98% in observed problem behaviours in the group moving to the community, compared with no observed change in those already in a community setting. The authors concluded that relocation to community-based settings was associated with increased quality of life and staff contact and a decrease in the observed occurrence of some problem behaviours.

6.1.3   Other models

In a literature review, McKenzie (2011) identified three service models in relation to people with intellectual disabilities whose behaviour challenges: specialist in-patient units; community provision by specialist peripatetic teams; and community provision by local services.

Specialist in-patient units can be sub-divided into NHS settings and residential care homes. McKenzie cited evidence that specialist in-patient units can provide a solution to community placement breakdown and other acute situations, but found limited evidence of the benefits of putting people with challenging behaviour together over the long-term.

There have been several studies which have evaluated a range of specialist peripatetic teams with varying design and composition, mostly provided by the NHS and therefore outside the scope of this review, for example, a small study of an assertive outreach team (McKenzie & Paterson, 2010) reported a range of positive outcomes.

McKenzie and Paterson's evaluation of an assertive outreach team composed of nursing staff in rural Scotland, which aimed to help support people with learning disabilities who displayed challenging behaviour, found that both staff and referrers considered the service effective at reducing or eliminating challenging behaviour. A need for greater clarity about roles and remit was identified along with wider communication with learning disability services in the area. Other professionals became involved in the team over time, but there is little detail on the model of care practised.

Community services, which offer support to the individual and carers in the persons' home, have potential advantages in terms of promoting the skills of both staff and carers, and minimising the disruption to relationships that an out of area placement would bring. McKenzie et al (2009) evaluated a small pilot project which employed psychology graduates in the dual role of support workers and psychology assistants to support people with challenging behaviour. The staff evaluations of the project were positive, including the benefit of having a direct link with psychologists and the opportunity to develop their own

skills and knowledge in relation to challenging behaviour. However the time required for increased staff meetings and supervision was seen as a limitation.

A small randomised controlled trial of a specialist liaison worker for young people from South Asian communities with intellectual disabilities with challenging behaviour and mental health needs in Bradford reported significantly greater access to, and contact with appropriate services – both psychiatric and wider community services such as benefits advice (Raghavan et al, 2009). However, there were only 26 young people across the trial and control groups, of whom seven displayed challenging behaviour. This study also highlighted the limited amount of research into effective service models for people from minority ethnic groups.

Another approach is described by Allen and colleagues (2006) involving the setting up of a Special Projects Team in Wales designed to focus on the development of new services and to enhance local knowledge through training and research. The initial work included the development of a series of accredited training courses, and the establishment of formal links with other organizations, including the formation of the Unit for Development in Intellectual Disabilities.

In reviewing the literature on different service models, McKenzie (2011) concluded that the research evidence indicates that successful approaches to challenging behaviour use sophisticated psychological and applied behavioural analysis approaches. She argued that this suggests that all services for people with challenging behaviour will require input from a professional who is skilled in these approaches, and therefore this expertise needs to be widely available and disseminated to carers.

6.2 Care practices

Limited evidence to support
- Organisational factors, such as team involvement and staff training are associated with implementation of guidelines and good practice.
- Positive behaviour support /active support increase staff understanding and client engagement and reduce some aspects of challenging behaviour in the short-term.
- Managers and staff associate periodic service review with positive outcomes.
- There is greater use of physical restraint and medication in grouped settings.
- A significant proportion of services use physical intervention without a physical intervention policy in place.

Insufficient evidence to support or reject
- Positive behaviour support /active support training and practice are associated with long-term positive outcomes for staff and clients

A recently completed scoping review for the NIHR School for Social Care Research looked for evidence on good practice in social care for disabled and older people with severe and

complex needs and examples of potential good practice (Gridley et al, 2012), and two other exemplar groups: young adults with complex or life-limiting conditions; and adults with brain or spinal injuries and complex needs. Thirty-five papers advocated person-centred support for people with complex needs covering a diverse range of approaches. Strikingly, the authors found no robust evidence to support any of these approaches, and those considered to provide promising practice evidence were not relevant to this review. However, the report underlined the paucity of robust evidence about the outcomes and costs of different service models and identified four different models of organising services as promising for people with complex needs: multi-disciplinary specialist teams; intensive case management; specialist social work; and inter-professional training.

Most of the evidence reviewed on care practices in this report is concerned with positive behaviour support, also described as active support, or some variation on this practice model.

6.2.1   *Guidelines*

The National Development Team for Inclusion issued a guide in 2010 for commissioners of services for people with learning disabilities who challenge services (NDTI, 2010). Although it is not a research study, it aims to turn the evidence-based expectations of the Mansell Report (Department of Health, 2007) into practical actions, drawing on five local authority areas that are considered by the authors to have made good progress in supporting people whose behaviour challenges in ways aligned with the Mansell Report. This includes a service model which:

- Starts with person-centred planning and individualised services
- Designs services as a shared responsibility including providers
- Uses positive behaviour support and non-aversive techniques by staff
- Has readily available clinical leadership
- Contracts housing and support separately
- Does not impose arbitrary maximum cost limits on services.

In addition, the guide recommends:

- Strong provider organisational cultures that are outward looking and committed to long-term relationships
- Active senior management involvement in service delivery and working relationships
- Staff being recruited on the basis of their attitude, in particular towards positive risk taking at least as much as their formal skill base
- Not using agency staff
- Investment in training that is tailored to the needs of the individual being supported
- Upfront investment to ensure that skilled resources are in place.

Guidance from the National Care Standards Commission in England on best practice in registered homes for people whose behaviour challenges specifies that services must have in place a behaviour plan for their users. It is stated that this must include a functional

analysis report, baseline data on behavioural frequency and duration, and both proactive and reactive behavioural support plans.

The Challenging Behaviour Foundation has produced a pamphlet for commissioners of services for adults with learning disabilities who display challenging behaviour (Baker, undated). It states that best practice guidance emphasises the need to have a multi-disciplinary approach to the assessment and treatment of challenging behaviour to meet the individual needs of each person. It sets out the author's view of what a commissioner should look for from a service; what skills are required by the workforce; and how service provision can be monitored.

Skills for Care published guidance notes in 2009 on supporting people positively with their behaviour. This provides a set of key learning outcomes for employers to use to develop in-house learning, and for training providers, publishers and awarding bodies to produce learning programmes, resources and potentially qualifications. The knowledge set covers a range of topics: describing people now and in the past; law and policy; understanding of types of behaviour and what they might mean; understanding the causes of behaviour which challenges other people; how to support people positively with their behaviour; reporting, recording and reviewing; and getting support for people affected by behaviour which challenges people. One learning outcome for supporting people positively is developing an understanding of a range of interventions:

- Active person-centred support
- Positive behaviour support
- Behaviour management
- Total communication approaches
- Communication passport
- Person-centred planning
- Behaviour support plan
- Behaviour 'trigger'
- Behavioural risk assessment.

However, it is not enough for organisations to have guidelines on good practice, staff must understand them and implement them. This is illustrated by McKenzie et al's (2006) small study of the difficulties faced by 23 social care staff across one organisation when managing challenging behaviour of adults with learning disabilities. The researchers found that although over half the services in the study had formal guidelines for managing challenging behaviours, they were not being implemented either consistently or appropriately. The authors suggested that this may be because only three of all the services had a staff team who had all received (or were shortly scheduled to receive) training in understanding and managing challenging behaviour.

McKenzie and colleagues concluded that their research indicates that even when staff report no difficulty in implementing guidelines, the ability to implement them in practice is low. Other elements, such as organisational commitment, staff training and involving the whole service team in a collaborative approach, appear to be needed.

A study by Mansell et al (2008) also illustrates the relevance of the workforce and management context to the implementation of guidance and good practice. Mansell and colleagues looked at the effect of service structure and organisation on the provision of person-centred active support (PCAS) in small community homes for people with intellectual disabilities (with a non-random comparison group). The research team concluded that professional qualifications, knowledge and experience appeared to be important along with staff attitudes to challenging behaviour (as a learned behaviour or caused by lack stimulation), clear management guidance, more frequent supervision, team meetings, training and support for staff to help residents engage in meaningful activity.

6.2.2 *Positive behaviour support or active support*

Ten studies identified in the evidence review were concerned with positive behaviour support or active support. Positive behaviour support (PBS) is a highly person-centred intervention, developed mainly for use for people with learning disabilities in residential settings. Allen et al (2005) identified the key tools as:

- altering known conditions that increase the probability of challenging behaviour occurring (for example, environmental factors such as space and light, social factors such as the number of people in a setting, programmatic factors such as activity levels, and intra-personal factors such as mental health needs or drug regimes)
- changing specific triggers for behaviour (for example modifying instructional methods, interpersonal style, reducing demands or increasing choice)
- teaching new competencies (such as general skills and coping skills)
- use of differential and non-contingent reinforcement
- specifying changes in carer behaviour and in systems of service delivery
- reactive strategies (for example distraction, evasion, minimal restraint).

PBS focuses on training support workers to plan domestic activities and to interact with people with learning disabilities in a structured manner through activities. It aims to enhance interactions between support workers and people with disabilities. Allen (2008) noted that few people with challenging behaviour access effective behavioural support.

There are a number of slightly different approaches, however it can broadly be characterised in terms of: a paper-based system for ensuring opportunities for resident participation in activities and skill development; and training of support staff on PBS or active support through group workshops and in-house interactive training.

In a discussion of staff training and challenging behaviour, Campbell (June 2007) observed that for direct care staff '*active support training*', also known as '*positive behaviour support*' when applied to people with challenging behaviours, has been shown to increase the likelihood that staff will support resident activities in community housing for all but those with the most severe challenging behaviour (Adaptive Behaviour Scale scores over 180).

However, although the evidence base mostly indicates that training in PBS improves staff knowledge, performance and behaviour, some research is more equivocal, particularly

over the longer-term. In addition, the evidence on the outcomes for clients of training staff in PBS is fairly mixed. Campbell (2007) suggested that proven, effective training such as '*active support training*' needs to be carefully evaluated and backed up with other proven strategies, such as positive monitoring of staff practice, good leadership and a clear supervision process. The implication being that active support will not be effective without other supporting activities.

A study by McGill, Bradshaw and Hughes (2007) sought to gather information about the impact of extended training in PBS on staff knowledge, causal attributions and emotional responses. Seventy-nine students from three cohorts completed questionnaires at the beginning, middle and end of a two-year part-time University Diploma course to measure changes in their knowledge of challenging behaviour, their causal attributions and their emotional responses. Over two years, students' knowledge significantly increased and they became less likely to attribute challenging behaviour to emotional causes. Negative emotional responses reduced especially those related to depression/anger. The authors concluded that these changes are likely to be associated with better staff performance and better outcomes for people with intellectual disabilities, although there was no firm evidence of this.

Totsika and colleagues (2008) reported a study of active support (AS) which looked at the views of 37 staff across 10 homes for adults with learning disabilities in terms of staff experience of interactive training in AS, and their experience of implementing the AS model which they had been using over the previous two years. The study found that 73% of staff were using at least one new skill in their everyday work. However, implementation across the ten homes was inconsistent, and the lack of management input was the most frequently reported reason given by staff for incomplete implementation of AS (24%). Residents' challenging behaviour was also perceived as a serious obstacle to participation in activities (19%), as well as insufficient staff working in the setting to allow for more activities to take place (19%).

A second study by Totsika et al (2010) evaluated the effectiveness of interactive training in AS of 58 staff working with adults with intellectual disabilities in 10 community homes. After the initial training, follow up observation and questionnaires were completed six months later. Totsika et al found a short-lived improvement in the quality of staff support but, in general, there was an overall lack of change in staff behaviours, resident engagement and – observed and rated – challenging behaviours. However, there was a significant improvement in engagement immediately after interactive training among those who had significantly higher aggressive behaviour ratings at the beginning of the study. The authors concluded that interactive training might be an effective intervention for residents with the most difficult behaviours.

Another study which reported favourable outcomes is Stancliffe et al's (2010) which looked at the medium-term (6 months) effect of implementation of AS on 41 adults with intellectual disabilities in 9 community group homes in Australia. Staff training was delivered in two main components: classroom training – the entire staff of the group home participated as a group in a 3-day training workshop off site (away from the group home); and interactive training – during an individual 2-hour session at the group home, each group-home staff

member worked with group-home resident(s) and was observed, coached, and given feedback in techniques for supporting residents to participate in activities.

Stancliffe et al reported a significant reduction in challenging behaviour for internalized challenging behaviour (such as self-injury, stereotyped behaviour and withdrawal). However, there were no significant changes in the other domains of challenging behaviour, although overall (general) challenging behaviour did fall significantly. In addition, there were other significant improvements in client outcomes: increased domestic participation, increased adaptive behaviour, and decreased depression.

Some positive outcomes in terms of increased staff knowledge were reported in Lowe et al's (2007) evaluation of the impact of an introductory level, newly accredited training programme in PBS on 102 direct care staff (qualified nurses and unqualified nursing assistants), working in specialist services for people with learning disabilities and challenging behaviours. This study involved a follow-up one year after the original ten day intensive course.

Although there were significant initial increases in attributions of challenging behaviour to a range of factors, this generally declined to baseline levels over the 12 months after the training. There was only some indication of lasting change for non-registered staff in attributing challenging behaviour to learned negative and emotional factors. The clearest impact appeared to be some increase in perceived confidence in dealing with challenging behaviour and in coping with aggression, with both groups showing slightly enhanced scores immediately after the taught course, that were largely sustained over time.

Two small further studies provide mixed evidence on the outcomes for clients of AS training. Toogood et al (2009) evaluated the impact of AS training for staff with regard to observable changes in staff behaviour and measureable changes in relation to the outcomes for a single client. Measurements were taken pre-training, post-training, 22 months later, and after a refresher course. The researchers concluded that AS can make challenging behaviour less likely, but that without sustained staff training or coaching their implementation of AS is likely to decline. A study by Koritsas et al (2008) evaluated AS training in three group homes in Australia involving 12 residents and 11 staff. Using support worker assessments at three points, the researchers found a significant increase in engagement in domestic tasks and reductions in challenging behaviour and perceived support needs over the six months after the initial training.

Two further evaluations of AS provide evidence that active support is ineffective. A small study by Bradshaw et al (2004) evaluated the effect of AS training on 38 staff in three community houses with a control group in three other houses for people with severe or profound learning disabilities. Trainers observed staff five months before the training and four weeks after. AS was associated with a significant *increase* in (mainly minor) challenging behaviour.

A paper by Smith et al (2002) evaluated the impact of individual characteristics of clients (including challenging behaviour) on the effectiveness of full and partial AS training for staff working with a total of 188 adults with intellectual disabilities in 74 community houses. The researchers concluded within five to six weeks after training, the effectiveness of

support to people with challenging behaviour did not significantly increase, indicating that AS is not effective for this group.

Few of these studies look at the long-term impact of training in PBS or AS on either staff behaviour or in terms of client outcomes. Both Campbell (2007) and Grey et al (2007) note this lack of evaluation of the long-term impact of staff training.

6.2.3   Periodic service review (PSR)

The key elements of periodic service review (PSR) are: organising staff to deliver support when and how service users need and want it; coaching staff to deliver better support by spending time with them; and reviewing the quality of support provided. There are four key stages: involving staff in setting performance standards; monitoring performance; management feedback; and staff training.

In a small study covering 23 staff, McKenzie et al (2006) found that PSR helped to create a positive working environment and improved staff performance, but suggested that organisational commitment and leadership were key factors, and stressed the need for a whole-organisation approach to PBS implementation. Another evaluation of PSR in a Welsh Health Board area found that managers were emphatic that the approach helped them to develop and lead their staff to implement PBS across 8 long-stay residences, 3 acute admissions units and 2 specialist behaviour teams (Lowe et al, 2010). The study covering 89 nurses and assistants and a group of managers collected data 12 months after the introduction of PSR. The researchers concluded that PSR was received positively by staff and viewed as a valuable practice leadership tool by managers. However, neither study included outcome data about the impact on clients and their behaviour or other workforce outcomes such as staff stress and turnover.

6.2.4   Restraint

The UK Royal College of Nursing (2004) stated that 'in broad terms' restraint means 'restricting someone's liberty or preventing them from doing something they want to do' (p. 3). According to Allen (2002), it is acknowledged that physical restraint may be necessary in some situations as a last resort to manage challenging behaviour, but that this should be part of an overall behaviour management strategy. The British Institute of Learning Disabilities published a Code of Practice for the Use of Physical Interventions: a Guide for Trainers and Commissioners of Training in 2006.

The recent CQC inspection programme of learning disability services (CQC, 2012) in 150 locations found poor staff understanding of restraint, and a lack of monitoring of the usage of restraint leading to increased risk of restraint being used inappropriately.

In practice, it appears that restraint can take the form of physical restraint and/or medication. Allen (2008) in a review of current theories and evidence about the relationship between challenging behaviour and mental ill-health in people with intellectual disabilities reported that despite the absence of any diagnosed functional psychiatric disorder, many individuals with challenging behaviour are exposed to high volumes of psychotropic medications. This is despite the lack of any evidence base to support such interventions for behaviours of environmental origin and other general concerns about their use. Robertson et al (2005) cite a Cochrane collaboration review which failed to find any

evidence to support the use of typical antipsychotics in the treatment of challenging behaviour.

6.2.4.1. Learning disabilities

A number of studies have looked at the prevalence of the use of restraint and medication for people whose behaviour challenges. Most recently, a study by Deveau and McGill (2009) aimed to establish: the prevalence of use of physical intervention in a whole area sample of services for adults with intellectual disabilities; the extent to which this sample of services reported having physical intervention policies and providing physical intervention training to their staff; the extent to which services monitored the frequency and restrictiveness of physical intervention; and to explore service attitudes towards monitoring and reduction of the use of physical intervention.

Out of 137 organisations in three local authority areas, 38% used some form of non-restrictive physical intervention and 30% used at least one form or restrictive intervention. Services using physical intervention, especially restrictive physical intervention, were more likely to have a physical intervention policy and to provide dedicated physical intervention training to staff. However, a significant proportion of services using restrictive physical intervention reported doing so without a policy (18%) or without dedicated staff training (16%). Monitoring of the frequency and restrictiveness of physical intervention use was significantly related to having a policy. Extrapolating these results nationally, Deveau and McGill concluded that nearly 400 services using restrictive physical interventions have not developed a policy to support / manage its use.

Another recent large-scale study by Allen et al (2009) explored predictor variables for restraint, seclusion and emergency medication use in a sample of 901 children and adults with intellectual disabilities in South Wales. The authors found those most at risk of reactive strategies were those who were subject to formal detention under the Mental Health Act (restraint and sedation), had more challenging behaviour (seclusion), showed destructive behaviour (restraint and seclusion), were placed out of area (seclusion) and had behavioural plans in place for aggression/self injury/destruction/other challenging behaviour/ (restraint and seclusion). In addition, restraint was more likely to be used with those who were younger in age, less able, and who were rated as having more severe challenging behaviour.

Robertson and colleagues (2005) found high proportions of participants received anti-psychotic medication in both non-congregate (56%) and congregate (80%) settings. Congregate settings were also associated with
greater use of physical restraint as a management strategy (with over half of participants being physically restrained by two or more members of staff), and greater use of medication to prevent or reduce challenging behaviour.
increased use of physical restraint as a reactive management strategy,

In a rare study of informal carers, Elford and colleagues (2010) conducted a qualitative study of seven parents' experiences of using restraint with adult sons or daughters with intellectual disabilities, and what the implications of these are for professionals working in this area. The sample included those who used, or had used, restraint in a variety of forms including direct physical contact (such as holding), using barriers (for example, locking

doors), using equipment (for example, bed rails), or using medication. The researchers concluded that decisions about restraint presented carers with complex dilemmas. They recommended that pro-active professional support for parents in the form of training and advice on challenging behaviour and the safe use of restraint, and sufficient support in the caring role should be prioritised.

The personal impact of receiving and implementing physical interventions, and how service users with learning disabilities and staff felt the use of such procedures impacted on them was explored in a qualitative study by Hawkins et al (2005). Inclusion criteria for the eight service users included that they had been written up for manual restraint and second, they were sufficiently verbal for interviewing purposes. The study highlighted the interactional nature of physical interventions, and that experiences of physical intervention were dependent on far more than the application of techniques alone. The research team found that many staff did not realize in what ways and how greatly physical interventions affected service users, and experienced considerable levels of arousal throughout the physical intervention process indicating a potential role for anger or stress management training.

6.2.4.2. *Dementia*

Little evidence was identified from the searches on practice models for staff working with people with dementia who challenge, apart from a review by Pulsford and Duxbury (2006). They reviewed different approaches to the management of aggressive behaviour by people with dementia:

- the pharmacological/physical involves the use of tranquillizers and physical restraints;
- environment management for example minimising stress-provoking background noise and highlighting home-like features;
- behaviour modification, for example, positive reinforcement of non-aggressive behaviour; and
- person-centred approaches which focus on attempting to understand the poorly communicated need being expressed by the aggressive person, and finding individualized ways of meeting that need.

Pulsford and Duxbury noted that these approaches can be used in conjunction with each other, but they tend to derive from different philosophical bases. They concluded that the research evidence on the effectiveness of all these approaches in reducing aggressive behaviour among people with dementia is sparse or weak.

However, Pulsford and Duxbury (2006) identified a small number of evaluative studies of training programmes that have reduction of aggressive behaviour as a direct independent variable. They observed that these studies were compromised by small sample sizes, non-experimental designs, short follow-up periods and non-control of extraneous variables, such as medication management. Few of them directly examined which approaches to the management of aggressive behaviour are most commonly used in practice.

They tentatively suggested that interventions which may be useful include:

- getting to know the person well and treating residents with respect and appreciation;
- appropriate communication techniques, including validation of the person's utterances;
- behavioural analysis of aggressive incidents;
- avoidance or modification of individual precipitating factors; and
- distraction, including use of music during care-giving activities.

The Joseph Rowntree Foundation funded a descriptive qualitative study of people with learning disabilities who develop dementia in six residential settings. Staff highlighted that pain was a factor that could lead to people exhibiting challenging behaviour. The authors concluded that the employment of waking night staff as significant as they were '*essential for dealing with night-time disturbances and reducing the stress caused to fellow residents by the night-time behaviour of the person with dementia*' (JRF, 2004).

Almvik et al's (2006) Norwegian study of challenging behaviour among older people in nursing homes and geriatric wards found that talking to the patient was the most widely used (40% of incidents) approach to stop aggression. However, seclusion and holding with force were also considered necessary in a substantial proportion of cases.

6.2.4.3.   Other approaches

A case study on work related violence published by the Health and Safety Executive (HSE, undated) outlines a number of steps taken by West Lothian Council to reduce and prevent work-related violence among social workers, personal care staff and environmental health officers. Training courses are provided by the police or Suzy Lamplugh Trust with the aim of avoiding violent situations, encouraging confidence and the use of care and common sense, developing coping methods and minimising risk. Other measures include a 'Personal Safety at Work' policy and guidance notes, incident reporting, flagging of potentially violent people, using alternative staff. There is no information about how the initiative has been evaluated but it is reported that staff has reduced, staff retention has increased, and the local authority is perceived as a good employer.

7   Training

Good evidence to support

- Careful selection of training goals such as the training format and the techniques being used to improve treatment skills of staff are important.
- A combination of in-service training and coaching on the job appears to be the most effective training strategy.

Limited evidence to support

- Person Focused Training is an effective model for equipping staff to design effective behaviour support plans.
- A structured and sustained staff training programme may reduce behavioural disturbances and the use of restraints towards people with dementia in nursing homes.

Insufficient evidence to support or reject

- Training alone improves staff performance.
- Staff qualifications or other training is linked to the quality of outcome for people with learning disabilities.

A robust meta-analysis to establish the right ingredients (i.e., goals, format, and techniques) for staff training that are related to improvements of staff behaviour was conducted by Van Oorsouw et al. (2009). It showed the importance of a careful selection of training goals such as the training format and the techniques being used to improve treatment skills of staff. A combination of in-service training and coaching on the job appeared to be the most effective strategy. With in-service formats, research indicated that one should use multiple techniques, and verbal feedback was particularly effective; while when coaching on the job, verbal feedback should be part of the program, as well as praise and correction. The literature search concentrated on studies that were published in a period of 20 years. Fifty-five studies met the criteria.

The meta-analysis indicated that although direct-care-staff training is generally well evaluated by the staff involved, there is limited evidence that training alone improves staff performance, because training has not been linked to quality of outcomes for service users or maintenance of behavioural gains after treatment. Studies in the meta-analysis mainly focussed on short-term changes in staff performance (e.g., knowledge and behaviour in the workshop classroom), rather than on client outcome variables and/or maintenance of staff performance in the long-term. Because most intervention studies used training packages, it was not possible to determine which aspect of the training was essential and which was potentially superfluous. The ambiguity of some of the descriptions of the feedback procedures meant it was not always clear how to interpret the effectiveness of feedback. The authors noted that factors such as the way staff view and respond to a client's behaviour also depends on a range of influences, for example, personal (e.g., staff motivation, staff learning capacity) and contextual (e.g., support, quality of organisational management) variables.

Campbell has also repeatedly drawn attention to the weakness of the evidence base on the impact of staff training in terms of long-term changes in staff attitudes and behaviour and improved outcomes for clients. Few studies have measured observed staff behaviour after training related to preventing, treating, managing or coping with people whose behaviour challenges. In a discussion article (June 2007) Campbell noted that there is little evidence that links staff qualifications or other training to quality of outcome for people with learning disabilities, and little evidence that more experienced staff and more qualified staff distinguish between challenging behaviours especially in terms of their causes.

Citing evidence from the previous decades, Campbell observed that:

"the success of training interventions to improve the quality of staff interactions and attitude in this area has generally been equivocal." He continues*: "Some of this is due to the lack of precision in defining 'success', or indeed failure of staff training. Outcome measures used have included the subjective (what staff report), the cognitive (knowledge gain), service-users centred (effects on behaviour) and organizational (e.g. reduced turnover or burnout of staff). Evaluating training on the basis of how any learning is applied has been rare, perhaps in recognition or fear that money invested in training brings comparatively little direct return. Attempts to improve understanding, change specific staff behaviours and increase job satisfaction have had mixed, and predominantly short term results".*

According to Campbell and Hogg (2008) while staff training about challenging behaviour is generally well evaluated by care staff and may improve feelings of self efficacy, there is debate about whether and how it changes staff performance and the way they think about challenging behaviours. They observed that evaluative data on behavioural changes in staff following training are equivocal; and that there is evidence that other factors such as an individual's own beliefs about what challenging behaviour is, what causes it, and how it can best be treated, affect staff performance.

In a subsequent article, Campbell (2010) again noted the gap between the evidence base and current practice, and questioned whether *treating* challenging behaviour is within the purview of front-line staff, or whether it is more relevant to *enable them to cope* on a day to day basis, while providing the best quality of life to clients. He raised questions about whether some staff have the capacity to learn and implement what they have learnt about good practice for working with people with learning disabilities and challenging behaviour.

Not only is the evidence on the success of training interventions in improving staff performance and client outcomes equivocal, a review of health services for people with learning disabilities by Quality Improvement Scotland (NHS QIS, 2006) (cited by Campbell, 2007) found that in only one out of 16 NHS boards were the training needs of staff 'substantially' developed; in five out of the 16 these needs were 'scarcely' developed. Staff in these services were working with people with learning disabilities and challenging behaviour, including adults in long term learning disability hospitals. According to Campbell, this lack of training was consistent with previous findings about the proportion of staff with inadequate training for the job.

7.1 Understanding challenging behaviour

Dowey and colleagues (2007) explored whether a one-day training workshop for 54 front line staff working with adults with intellectual disabilities affected staff causal explanations of challenging behaviour. Staff were trained by members of a peripatetic challenging behaviour service in an effort to change the way that they thought about challenging behaviours and the causal models that they applied. The workshops comprised lectures, handouts, small group exercises, and some role play and staff completed a questionnaire immediately after the training. The researchers concluded that it is possible to affect a significant shift in the models used by staff to explain challenging behaviours after brief training. However, there was no longer term measurement of staff attitudes and no examination of the effect on practice.

Another case study evaluation by Tierney et al (2007) looked at the impact of a three day training course on challenging behaviour on the cognitive and emotional responses of 48 staff working with people with intellectual disability who present with challenging behaviour: Understanding and Responding to Challenging Behaviour'. The course involved theoretical presentation, group work, role play, practical skills, teaching and discussion. Perceived self-efficacy in dealing with challenging behaviours had increased significantly at three months after training. However, there were no significant changes in either emotional reactions to challenging behaviours or causal beliefs. The authors were equivocal about the value of general introductory training to challenging behaviour for staff, concluding that: staff training focused on understanding challenging behaviour and dealing with stress can improve staff confidence, but is unlikely to affect negative emotional reactions or change causal beliefs.

7.2 Person-focused training

McClean and colleagues (2005) defined Person Focused Training as training staff who work with service users displaying challenging behaviour to conduct a functional assessment, to design and to implement a multi-element behaviour support plan for a particular individual. Assessment included a comprehensive psychosocial assessment, incident analysis, functional assessment and hypothesis testing. Intervention involved environmental accommodation, skills teaching, direct interventions and reactive strategies. Implementation involved Periodic Service Review and quarterly progress reports.

A study by Grey and McCLean (2007) looked at the effect of training staff in the assessment of challenging behaviour and the development of behaviour support plans found reductions in challenging behaviour. Fifteen qualified nurses, seven residential care-staff, four day service providers, two intensive support workers and two clinical psychologists took part in a course comprised of nine full days over a 6-month period. Using a control group of 30 individuals with challenging behaviours matched against the 30 selected for Person-Focused training (PFT) over a 6-month period, the researchers found significant reductions in the frequency, management difficulty and severity of challenging behaviour for service users in the target group, but not in the control group after 6 months. For two-thirds of the target group, the frequency of challenging behaviour dropped to below 30% of baseline rates after 3 months of implementation of behaviour support plans. For the remainder, the majority had a rate reduction to between 70% and

30% of baseline. However, it was unclear which ingredients of the behaviour support plans were most effective.

An earlier study by McClean et al (2005) also reported reduced challenging behaviour in people with intellectual disabilities as a result of person-focused training. The study found evidence of a substantial reduction in the frequency of challenging behaviours in 77% of cases at an average of 22.5 months after implementation of PBS. Challenging behaviours reduced by an average of 65% in the large residential settings included in the sample. Behaviour support plans designed by direct caregivers were at least as effective as those designed by psychologists, and the authors concluded that Person Focused Training is an effective model for equipping staff to design effective behaviour support plans.

7.3   Restraint

Murphy et al (2003) noted that "*in intellectual disability services, a number of other methods of management of violence have been developed since the advent of control and restraint (C&R), including: Strategies for Crisis Intervention and Prevention (SCIP), Non-Aversive Psychological and Physical Interventions (NAPPI), Protection of Rights in Care Environments (PRICE) and Studio III, as well as newer versions of C&R (British Institute of Learning Disabilities 2002)*". They observed that all of these methods have linked training courses, which have been marketed to the day and residential services that might employ them.

Although now somewhat dated, Murphy et al (2003) looked at the extent to which staff in intellectual disability services were trained in the use of physical interventions or restraint. The research team identified at least 12 different types of training recorded, including a number of types of control and restraint. They found that the degree of training varied across the sample, for example, not all senior staff in intellectual disability services were trained in the simple physical interventions of breakaway and de-escalation skills. Nor did all staff have any specific training in a particular method or 'brand' of physical intervention, even when they worked in a specialist assessment and treatment service, where physical interventions are likely to be commonly employed because of the frequency of challenging behaviour. About one-third of organizations (across all the three groups in the study) did not have written policies for the use of physical interventions. Deveau and McGill's (2009) study, mentioned earlier, found 18% of services using restrictive physical intervention did not have a policy on it in place. A number of respondents in Murphy et al's study voiced concerns about the plethora of methods of physical interventions available and the lack of information and research into their relative efficacy.

In a study by Testad et al (2005) in Norway conducted a small randomised controlled trial to explore whether a structured and sustained staff training program could reduce behavioural disturbances and the use of restraints towards demented patients in nursing homes. While most studies have used staff evaluation of effectiveness of training programmes, this study also looked at the effect in terms of behaviour. Staff in the intervention group received a six-hour seminar focusing on dementia, aggression, problem behaviour, decision making process and alternatives towards use of restraint was presented to the entire staff. The topics covered in the seminars were based on recent research and literature. A manual for the seminar was developed to ensure that the same

topics were covered in all staff care groups. Then, each group was given guidance for one hour every month, for six months. The researchers found that their educational programme improved the quality of care of dementia by reducing the use of restraint by 54%, despite a similar or even higher level of agitation scores.

7.4   Emotional intelligence

Emotional intelligence is defined by Bar-On et al's (2000) as '*. . . an array of emotional, personal and social abilities and skills that influence an individual's ability to cope effectively with environmental demands and pressures*'. A study by Zijlmans et al (2011) in two residential settings in the Netherlands assessed whether four-months of emotional intelligence training in combination with a video-feedback training programme improved the emotional intelligence of staff working with people with intellectual disabilities and challenging behaviour. The emotional intelligence of the experimental group of 34 staff changed significantly more than that of the control group of 26 staff. The authors concluded that the positive effect of the training programme on emotional intelligence suggested that the emotional intelligence of staff working with clients with intellectual disabilities and challenging behaviour can be influenced by training.

7.5   Dementia

There has been little robust evaluation of training for staff working for people with dementia who challenge. Fairhurst and Toone (2006) provide a description and limited evaluation of a two day workshop for formal carers of people with dementia and challenging behaviour. The two day training sessions covered: assessment and understanding of dementia and challenging behaviour; and interventions including alternative therapies, activities and communication, medication and reactive strategies. The 92 participants (mainly from residential and nursing homes) completed feedback forms which indicated the events were successful in introducing person centred ideas and providing some practical advice and strategies. However, there was no evaluation of the longer term effectiveness or impact on actual practice.

A study by Kalsy et al (2007) examined the effects of care staff training in ageing, dementia and people with intellectual disabilities in terms of attributional style (specifically controllability) and optimism for change in behavioural deficits and excesses. Providing a one-day training event resulted in a significant increase in participants' knowledge of ageing and dementia; and also lowered the controllability rating of participants. Again there was no evaluation of the long-term impact of the training on either staff or clients.

7.6   Other training

A number of other training programmes have been evaluated and are included in the review although the quality of evidence is limited and several are from outside the UK (although some were excluded as too specific to their national context). They illustrate the range of training available.

Van Oorsouw and colleagues (2010) developed an in-service training programme in the Netherlands covering the theory of challenging behaviour and physical intervention training

for 35 staff working with clients with challenging behaviour and intellectual disabilities. Compared with a control group of 35 staff, the researchers found significantly higher levels of knowledge and skills after training, but both eroded over time. They concluded that this indicated the need for further short courses to maintain the gains of the initial training.

Campbell and Hogg (2008) used pre and post-training questionnaires with a controlled group trial to evaluate the impact of two training courses for a range of staff working with adults with intellectual disabilities and challenging behaviour in a variety of service settings, including education, day services, community services and hospitals. Two open-learning, university-accredited courses were used in the study: one group undertook the course 'Approaches to People with Challenging Behaviour' and a second group undertook the course 'Approaches to Sexual Abuse of Adults with Learning Disabilities' with a third group that did not undertake any accredited training course during the period of the study. The researchers concluded that cognitive representation of challenging behaviour in staff can be measured and changed in a positive way by training *to some extent*. However, the authors warned that although staff could identify recommended approaches post-training, the evaluation did not provide evidence that they were implemented.

A small pilot Australian study by Smidt et el (2007) evaluated the impact of a four week communication training programme on 18 members of staff working in three residential services for adults with challenging behaviour. Although the training programme was successful in changing staff communication and practice and there was some reduction in levels of challenging behaviour in the short-term, the results in terms of challenging behaviour were not sustained in the long-term.

In the US, Macurik et al (2008) compared the use of videos versus live training as components of a programme for training support staff in individual intervention plans for people with severe disabilities and challenging behaviour. The study provided some evidence that video can be an advantageous component of programmes for training support staff in individualized intervention plans for challenging behaviour.

Campbell (June 2007) noted that studies of 'belief in self' and belief in others are also emerging as promising areas of future research and training. He noted studies that indicated that boosting staff self-confidence through training; and providing management support to help convince staff of the value of proven treatment strategies, have led to improvements in staff satisfaction in the work that they do.

Although research relating to informal carers was screened out in the review, it is noteworthy that there appears to be very little research on training and support for informal carers of people with challenging behaviour apart from a small case study by Shinnick and McDonnell (2003).

8   What are the gaps in the evidence base?

A number of gaps in the research evidence were identified in the review, some of which relate to the topic of study, while others are gaps in types of research. Overall, the general quality of studies is disappointing with only a handful of high quality studies. The main gaps are:

- A limited number longitudinal and observational studies
- Little research around people whose behaviour challenges with dementia and social care workforce.
- Little research around people with severe mental health whose behaviour challenges and social care workforce.
- Extent of aggression and injury experienced by care staff working with different client groups and in different settings.
- Research into the actual aggression management strategies adopted in care facilities for people with dementia and challenging behaviour.
- Little evidence related to black and minority ethnic groups – either staff or clients.
- Evidence on long-term impact of PBS and AS on staff behaviour and client outcomes.
- Lack of evidence on the relationship between staff training and challenging behaviour and understanding of how staff training works.
- Little research into management and leadership issues.
- A lack of good evaluation studies of service models for people whose behaviour challenges.
- Little evidence on training and support for informal carers.

9 Conclusion

In reviewing the evidence on the social care workforce and people whose behaviour challenges, it is important to bear in mind the fluidity of the term 'people whose behaviour challenges'. Research demonstrates that it is a social construct: a descriptive rather than a diagnostic category which is defined not just by an individual's characteristics or condition, but also the context of where they live and how they spend their time, and their interaction with staff and the wider environment.

The evidence identified in this review has been limited, reflecting a recognised paucity of good quality studies concerned with people whose behaviour challenges and social care workforce practice and development. In terms of how many people whose behaviour challenges there are, and how many of them are receiving social care – there is considerable variation in the estimates. However, it is important for them and their carers, and the people they live with, that they receive good quality care in line with best practice and national guidelines.

It is not clear that staff attributions of responsibility for challenging behaviour to an individual affect their willingness to help them; however, it does appear that there are differences worth exploring between staff which mean that some provide better care than others: for example, staff who feel sympathetic appear more willing to help and older staff appear to be more tolerant of aggression. MacIntyre are currently exploring the use of psychometric tests to select staff to work with people with learning disabilities in terms of personal characteristics such as empathy.

The evidence review indicates that most staff have direct experience of challenging behaviour. However there is little evidence of the extent of assaults and injury. A range of factors are associated with staff stress including working with people whose behaviour challenges. Some of these factors are ones which can be addressed by managers, others may be outside their influence. Supporting staff who work with people whose behaviour challenges may help them to reduce or avoid burnout.

Good management support appears not only to help staff, but also reduces the likelihood of placement breakdown among people with learning disabilities who challenge. Staff access to external support – for example, expert advice – is also associated with maintained placements. However, other factors such as staffing levels, physical environment and administrative systems also appear to play a part in the likelihood of placement breakdown.

Service settings appear to be linked to the quality of care for people whose behaviour challenges. The research evidence raises concerns about the greater use of physical restraint and medication in care settings where people with learning disabilities who challenge are grouped together. The evidence supports community settings, but it appears that front-line staff need access to access to peripatetic and specialist services to deliver positive service outcomes.

The relationship between organisational factors and good practice surfaced throughout the review. Although much of the evidence lacked any kind of control group, there was

evidence that positive behaviour support or active support, and periodic service review, provided positive outcomes, at least over the short-term. However, it seems that it is not enough for guidelines on good practice to be in place: organisational commitment, team involvement and staff training are associated with implementation of good practice.

A final section of this review covered training and highlighted the need for better evidence about the long-term impact of training on staff understanding, behaviour, performance and client outcomes. There was a striking lack of research exploring how effective staff training is in relation to these different outcomes, although it would seem of critical importance, particularly for those organisations paying for training. However, there is good evidence to support the use of combined approaches to in-service training and on-the-job coaching, along with careful selection of training goals, formats and techniques. Much of the evidence was concerned with evaluating the training of staff who work with people whose behaviour challenges with learning disabilities. There appeared to be little evaluation of training programmes for staff working with people with dementia who challenge and this may be an area which requires development.

In conclusion, this evidence review has identified a wide range of research studies both quantitative and qualitative but has struggled to find many high quality studies. However, it has been possible to identify a range of evidence about current practice, what works and what are the key characteristics of effective practice, and where the gaps in the evidence base exist.

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