

VOLUME I

RESEARCH COMPONENT

**LITERATURE REVIEW AND
EMPIRICAL PAPER**

**BURNOUT IN DIRECT CARE STAFF WORKING IN
ADULT INTELLECTUAL DISABILITIES SERVICES**

by

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**A Thesis Submitted to the University of Birmingham in Partial Fulfilment for the Degree
of DOCTOR OF CLINICAL PSYCHOLOGY (CLIN. PSY. D.)**

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University of Birmingham
June 2014**

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This thesis is dedicated to the late Kevin Burris

Overview

This thesis is submitted in partial fulfilment of the degree of Doctor of Clinical Psychology (Clin.Psy.D.) at the University of Birmingham. It comprises two volumes, which include a research and clinical component.

Volume I includes a literature review and an empirical paper. The literature review examines the available research on factors that contribute to the development of burnout in direct care staff working with adults with intellectual disabilities in community services. The empirical paper seeks to extend the literature by first providing support for the relationship between work demands and burnout and then examining whether this relationship is mediated by other variables, specifically, role-identity or self-determination. Volume I concludes with a public domain briefing paper, which provides a summary of the findings of the literature review and research study.

Volume II comprises five clinical practice reports, which describe clinical work completed on child, adult, learning disability, older adult and forensic placements. The reports describe the case of a 15 year old girl presenting with social anxiety formulated from both cognitive and psychodynamic perspectives, a case study of a 55 year old man presenting with Obsessive Compulsive Disorder using a cognitive-behavioural intervention, a single-case experimental design study of a 45 year old woman with an autistic spectrum disorder and challenging behaviour using a behavioural intervention, a small-scale service related research project undertaken in a physical health setting exploring the utility of a stroke pathway, and an abstract providing a summary of an oral presentation of a 24 year old man in a medium secure forensic setting who received an extended assessment and cognitive-behavioural intervention. In order to protect client's anonymity all identifying information has been altered or removed.

Acknowledgements

I would like to thank the service managers and organisations who have helped to facilitate the research. I would also like to extend my thanks to the staff who took the time to complete the questionnaires for this study.

I would like to thank Professor John Rose who has helped me to develop my research skills over the past three years, and who has been patient and encouraging throughout this process.

I would like to extend my thanks to my supervisors whilst on placement who have helped me to develop as a clinician by sharing their skills and experience. I would also like to thank the course team and my fellow trainees for their support, encouragement and friendship throughout clinical training.

Lastly, I would like to thank my family and friends who have supported me throughout this training. I would especially like to thank my late partner Kevin Burris who supported me endlessly throughout the long process of pursuing clinical training and who would have been exceptionally proud to see me reach this point.

Contents

Volume I

Literature Review: What factors affect burnout in direct care staff working in adult community intellectual disability services? A systematic review of the literature

Abstract.....	2
Introduction.....	3
Why is burnout and stress an staff an important area of research?.....	.3
What is burnout?.....	4
Sources of stress and burnout in intellectual disabilities services.....	4
Aims of the review.....	6
Method.....	8
Quality Assessment Tool.....	11
Review of the Literature.....	12
Reciprocity and Burnout.....	12
Client factors and Burnout.....	14
Staff factors and Burnout.....	16
Organisational factors and Burnout.....	18
Summary and Discussion.....	24
Methodological Limitations.....	30
Clinical Implications.....	31
Further research.....	32
References.....	34

Empirical Paper: Is there a relationship between role-identity, work demands and burnout in direct care staff working with individuals with intellectual disabilities?

Abstract.....	48
Introduction.....	49
Rationale for the Research.....	49
Burnout in staff who work with people with intellectual disabilities.....	49
Work Demands and the Association with Burnout.....	50
Role-identity and the Association with Burnout.....	52
Self-determination.....	53
Aims and Hypotheses.....	55
Method.....	58
Measures.....	59
Results	62
Descriptive statistics.....	62
Reliability of measures.....	63
Correlational analysis.....	66
Mediational analysis.....	73
Discussion.....	78
Methodological Limitations.....	81
Clinical Implications.....	82
Future research.....	83
References.....	84
Public Domain Briefing paper.....	91
Appendices.....	95
Appendix 1: Summary of studies included in the review.....	95
Appendix 2: Quality Index Scores.....	110
Appendix 3: Quality Index Scoring Criteria.....	111
Appendix 4: Ethical Approval Letter.....	112
Appendix 5: Participant information sheet.....	113
Appendix 6: Questionnaire.....	117

Tables and Figures –Literature review

Table: Search terms used.....	8
Table 2: Results of literature search.....	9
Table 3: Papers obtained excluding search criteria.....	10
Figure 1: Proposed model of factors that influence burnout.....	29

Tables and Figures – Empirical paper

Table 1: Demographic information.....	62
Table 2 Demographic information.....	63
Table 3: Cronbach’s Alpha scores for measures used in study.....	64
Table 4: Correlations between burnout and work demands.....	66
Table 5: Correlations between role-identity and burnout.....	68
Table 6: Correlations between work demands role-identity.....	69
Table 7: Correlations between work demands and self-determination.....	70
Table 8: Correlations between burnout and self-determination.....	71
Table 9: Correlations between role-identity and self-determination.....	72
Figure 1: Illustration of a direct effect and mediation design.....	73
Figure 2: Correlations between the variables in the proposed mediation model for role-identity.....	74
Table 10: Mediation effect of role-identity on work demands and burnout.....	75
Figure 3: Correlations between the variables in the proposed mediation model for self-determination.....	76
Table 11: Mediation effect of self-determination on work demands and burnout.....	77

Contents

Volume II

Clinical Practice Report 1: Psychological Models

The case of a 16 year old female presenting with social anxiety

Abstract.....	2
Section one: Background Information.....	3
Referral information.....	3
Assessment.....	3
Presentation.....	4
Family Background.....	5
Educational Background.....	8
Presenting Difficulties.....	9
Section two: Cognitive Formulation.....	10
Overview of the Cognitive Model.....	10
Cognitive formulation of Rebecca's social anxiety.....	10
Section three: Psychodynamic Formulation.....	17
Overview of Psychodynamic Model.....	17
Section four: Critique.....	25
Reflections.....	26
References.....	27

Clinical Practice Report 2: Case Study

A 54 year old man presenting with obsessive-compulsive disorder

Abstract.....	30
Referral Information	31
Presenting Difficulties	31
Family background.....	33
Further assessment.....	36
Formulation	40
Intervention.....	45
Evaluation.....	50
Personal Reflections	53
References	55

Clinical Practice Report 3: Single Case Experimental Design

The case of a 45 year old woman with Asperger Syndrome presenting with challenging behaviour

Abstract.....	59
Case Summary.....	60
Referral information.....	60
Capacity to Consent.....	60
Initial assessment.....	60
Presenting problem.....	60
Background Information.....	61
Presentation in sessions.....	63
Further Assessment.....	63
Formulation.....	67
Intervention.....	71
Experimental Design.....	75
Overview of the Single-Case Experimental Design.....	75
Data Collection.....	76
Results.....	78
Analysis.....	80

Discussion.....	83
Reflections.....	85
References.....	87

Clinical Practice Report 4: Small Scale Service Related Research

A service evaluation to consider how well current practice meets the standards of the local mood assessment pathway?

Abstract.....	91
Introduction.....	92
Mood assessment in stroke services.....	95
Service outline and structure.....	97
Local mood assessment pathway.....	98
Aims of the service evaluation.....	101
Method.....	102
Results	104
Semi-structured interviews.....	106
Discussion.....	109
Limitations of the service evaluation.....	112
Conclusions.....	114
Recommendations.....	115
Reflections.....	117
References.....	118

Clinical Practice Report 5: An Oral Presentation of a Case Study

An extended assessment and intervention for a 24-year old man in a medium secure service.

Abstract.....	122
References.....	123

Appendices

Clinical Practice Report 1

No appendices

Clinical Practice Report 2

No appendices

Clinical Practice Report 3

Appendix 1: Frequency monitoring form..... 124

Clinical Practice Report 4

Appendix 2: Data collection tool..... 125

Appendix 3: Mood screen interview..... 126

Tables and Figures

Clinical Practice Report 1

Table 1: Scores from BAI, BDI and HADS.....4

Figure 1: Genogram depicting Rebecca's family.....7

Figure 2: Longitudinal formulation (Beck, 1985).....15

Figure 3: Model of social phobia (Clark & Wells, 1997).....16

Figure 4: Triangle of Conflict..... 18

Figure 5: Triangle of Person.....20

Clinical Practice Report 2

Figure 1: Genogram depicting Martin's family.....	35
Table 1: YBOCS pre-intervention scores.....	37
Table 2: Thought-Action Fusion pre intervention scores.....	38
Table 3: Responsibility Attitude Scale Pre-Intervention Scores.....	38
Table 4: Common psychiatric measures Pre-Intervention Scores.....	39
Figure 2: Integrated schematic representation of Salkovskis et al's (1998a) cognitive-behavioural model of OCD.....	42
Graph 1: YBOCS scores.....	50

Clinical Practice Report 3

Figure 1: Genogram of Charlotte's Family.....	62
Table 1: Summary of Scores for the MAS.....	66
Figure 2. Schematic representation of the operant model of challenging behaviour (Emerson, 2001).....	68
Figure 3: Model of Mutual Reinforcement (Oliver, 1995).....	70
Figure 4: Formulation of Charlotte's Behaviours Based on the Principles of Reinforcement and Extinction (Skinner, 1974).....	74
Graph 1: Frequency monitoring data collecting during the baseline and intervention phase.....	79
Table 2: Summary of autocorrelations at Lag 1.....	81
Table 3: Summary of the Time-series Analyses.....	82

Clinical Practice Report 4

Figure 1 - Mood screening pathway procedure..... 100

Table 1 – Common themes from interviewees responses.....108

LITERATURE REVIEW

**What factors affect burnout in direct care staff working in
adult community intellectual disability services? A
systematic review of the literature**

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ABSTRACT

Background

The review investigates the factors that affect burnout in direct care staff who work with adults with intellectual disabilities in community services. Burnout is associated with reduced productivity and effectiveness at work, and reduced quality of service for clients.

Method

A systematic literature search was conducted on 10th May 2013 using the databases PsychINFO, PROQUEST, CINAHL and WEB OF SCIENCE. The search terms “burnout”, “care staff” and “intellectual disabilities” were combined to search for studies between 2004-2013. The Down’s and Black (1998) quality assessment tool was used to assess the methodological quality of the studies.

Results

The search identified 15 papers, which broadly focussed on research across three areas; client, staff and organisational factors and their relationship to burnout. Each category will be discussed in turn with each paper being critically reviewed and summarised.

Conclusions

Several variables influence the burnout relationship across the broad categories of client, staff and organisational factors. Challenging behaviour, personality, coping, organisational processes, work demands, perceived control and support were related to burnout.

Keywords: burnout, stress, challenging behaviour, intellectual disabilities, care-staff

INTRODUCTION

Why is burnout and stress in staff an important area of research?

An important area of research within the field of intellectual disabilities concerns staff well-being; specifically staff stress (Hastings and Horne, 2004). Stress is said to occur when the demands of a situation exceed an individual's resources to cope with it (Lazarus and Folkman, 1984). The concept of burnout has become widely associated with psychological work-stress and the two terms are often used interchangeably. Burnout is defined in the literature as a psychological syndrome that occurs in response to prolonged and overwhelming work-stress and is defined by emotional exhaustion, depersonalisation and diminished feelings of personal accomplishment (Maslach, Schaufeli and Leiter, 2001). Previous research suggests that staff who work with individuals with intellectual disabilities are at increased risk of experiencing burnout (see Skirrow and Hatton, 2007), with up to one-third of staff reporting stress levels that are indicative of a mental health problem (Hatton et al., 1999). Burnout has detrimental consequences for clients, service providers and staff. Long-term exposure to work related stress has been linked to absenteeism, sickness, increased staff turnover, reduced commitment to the role and higher rates of intention to leave the job (Hasselhorn, Tackenberg and Müller, 2003; Hatton and Emerson, 1998; Hatton et al., 1999; Robertson et al., 2005). Previous research has shown that staff experiencing burnout often report less job satisfaction and may also perform their work duties to a lower standard than non-affected staff (Shanafelt, Bradle, Wipf, and Back, 2002). Staff with increased stress levels interact less with clients and the quality of that interaction is diminished, which can have a detrimental impact on the delivery of services (Rose, Jones and Fletcher, 1998). Direct care staff spend a significant amount of time supporting people with intellectual disabilities and are often the most important people in the daily lives of the people they support. It is important that staff well-being is promoted and maintained to ensure

that direct care staff deliver high quality services. Furthermore, employers are morally and legally obliged to provide high quality care for their clients and safeguard the well-being of their staff (Hastings, 2002).

What is burnout?

Burnout is a psychological syndrome that occurs as a result of prolonged exposure to emotionally challenging situations. Burnout is characterised by emotional exhaustion, depersonalisation and reduced feelings of personal accomplishment (Maslach et al., 1996). Emotional exhaustion is characterised by an inability to respond to the demands of the job, whereas depersonalisation is characterised by negative and impersonal attitudes towards clients. Personal accomplishment is described as a tendency to negatively evaluate one's competence and job performance. The terms burnout and stress are often used synonymously; however, they differ in that stress is a static state which can be equated to the element described by emotional exhaustion. Unlike stress, burnout is characterised by a longitudinal process, which offers specific predictions for emotional, attitudinal and behavioural change (Innstrand, Espnes and Mykletun, 2002; Hastings, Horne and Mitchell, 2004). This way of understanding burnout is useful for considering the long-term impact of stress upon staff in intellectual disability services.

Sources of stress and burnout in intellectual disability services

Previous literature has identified several sources of stress in staff working in intellectual disability services (see Skirrow and Hatton, 2007). Commonly reported sources of stress generally fall into three broad categories - client, staff and organisational factors.

One of the most researched areas is that of challenging behaviour. The research in this area has largely been driven by the hypothesis that challenging behaviour results in stress, leading to burnout in intellectual disabilities staff. Several studies have shown that rates of staff

stress and burnout are high in care settings where there are increased levels of challenging behaviour (Freeman 1994; Jenkins, Rose and Lovell, 1997; Chung and Harding, 2009). High levels of challenging behaviour have also been associated with increased negative emotions in staff (Lambrechts Kuppens and Maes, 2009). Rose, Horne, Rose and Hastings (2004) found an association between negative emotional responses to challenging behaviour and burnout; specifically, increased emotional exhaustion and depersonalisation.

Several staff related stressors have been identified in previous research. Individual differences between staff members, such as personality traits are an important area to consider in burnout research. People experience different responses to work-based stressors and personality might be one of the factors that account for this. This relationship has been demonstrated within health psychology research, which has demonstrated a relationship between people's physical and psychological well-being and their personality traits (Vollrath, 2006). Differing personality traits might explain why people perceive specific aspects of a given situation as more or less stressful and why their reactions to the situation might differ (Vollrath, 2001; Suls and Martin, 2005). Rose, David and Jones (2003) investigated the personality traits of extraversion and neuroticism on stress levels. The authors found that neuroticism was associated with elevated levels of stress and extraversion was associated with lower levels of stress. This suggests that personality traits might be important when considering stress levels amongst staff working in intellectual disability services.

Several organisational factors have been implicated in the development of burnout. Social support has been investigated extensively within burnout research in staff who work with people with intellectual disabilities. Greater levels of perceived support from others are associated with lower stress levels and burnout scores (Dyer and Quine, 1998; Ito, Kurita and Shiya, 1999). Previous research has shown that staff that have open, supportive relationships with their supervisors score significantly lower on measures of burnout (Gibson, Grey and

Hastings, 2009). Organisational culture (Dyer and Quine, 1998) and team climate (Rose and Schelewa-Davis, 1997) have been identified as potential sources of stress. Poor staff morale has been shown to impact on job performance in those who work in human service environments (Rose, 1995; Jenkins and Allen, 1998). Lack of feedback on job performance is related to burnout, suggesting that staff experiencing burnout might not have been able to assess how well they were performing. In a similar vein, role ambiguity, which is a lack of clarity around one's role, is associated with higher emotional exhaustion scores (Blumenthal, Lavender, and Hewson, 1998; Dyer and Quine, 1998; Hatton et al., 1999). Role-conflict has been identified as another potential source of stress and is said to occur when work-based demands interfere with family or other non-work based responsibilities (Netemeyer, Boles and McMurrian, 1996; Maslach et al., 2001). Work-home conflicts are strongly linked to general distress (Hatton, et al., 1999). Job insecurity is one of the least investigated work-related stressors. Job insecurity reflects the difference between the level of security a person perceives and their desired level of security. Job insecurity has been found to be associated with symptoms of psychological distress and burnout (Dekker and Schaufeli, 1995).

Aims of the review

A literature search revealed that several reviews have been conducted in this area; however, these reviews tend to be quite specific and have focused on psychological factors (Rose, 2011), organisational climate (Thompson and Rose, 2011) or studies which have used particular measures of burnout (Skirrow and Hatton, 2007). A general review of burnout in care staff working with people with intellectual disabilities was published by Hatton, Rose and Rose (2004). Therefore, the inclusion of articles from 2004 onwards was decided upon to avoid duplication and to ensure that the current review focused on recent research. This paper will review the literature to answer the following question: What factors affect burnout in direct care

staff working in adult community intellectual disability services?

METHOD

A literature search was conducted using the databases PsycINFO, CINAHL, PROQUEST and WEB OF SCIENCE. Search terms were selected after reading relevant literature and discussion with the research supervisor and librarian. The terms were combined to produce the articles for review. The search terms are contained in Table 1.

For the purpose of this review community settings were defined as those where service users are cared for in the community and have access to community resources without restriction. Therefore, studies which include staff working in secure services for people with intellectual disabilities will not be included. Studies which examine burnout across service settings (e.g. community and secure services) will only be included if the majority of participants are based within community services. Similarly, studies which examine burnout across clients groups (e.g. intellectual disability and brain injury) will only be included if the majority of participants are working with people with intellectual disabilities. The methodological quality of the identified studies will be discussed and rated using a quality assessment tool (Downs and Black, 1998).

Table 1: Search terms used for the literature search (10th May 2013)

Burnout	Learning disabilit*	Care staff
Occupational stress	Intellectual disab*	Carer*
Psychological stress	Intellectual development disorder	Support worker*
	Mental* retard*	

Table 2: Results of the literature search

Database	Results
Psychinfo	19
Cinahl	1
Proquest	16
Web of Science	36
TOTAL	72
Duplications	24
<u>Total minus duplications</u>	<u>48</u>

Only peer reviewed journal articles published in English between 2004 -2013 were used. The reference sections of the key papers were examined, which generated 1 further article. This resulted in 15 key papers being reviewed.

Table 3: Papers obtained and exclusion criteria

Identified papers	Number of papers
Total papers identified during search minus duplications	48
Exclusion criteria	
Reviews	4
Books	2
Family carers	2
Children	3
Did not investigate burnout or stress	17
Not a lived experience	1
Secure setting	3
Number of papers excluded	34
Remaining articles from search	14
Articles identified via reference search	1
<u>Total number of papers reviewed</u>	<u>15</u>

Search Results

The 15 studies for review have been presented in Appendix 1. The basic characteristics of the studies and the findings relevant to the review have been described. The studies have been presented in chronological order to show the development of the research in the field over time.

QUALITY ASSESSMENT TOOL

A quality assessment tool was used to assess the methodological quality of the studies reviewed and to ensure that this process was standardised and objective. A number of quality assessment tools were consulted. The Quality Index (Downs and Black, 1998) was selected based on its comprehensiveness. The Quality Index was originally developed to assess the quality of both randomised and non-randomised studies. The majority of the studies reviewed used a cross-sectional methodology; therefore, the Quality Index tool was modified for the purpose of this review to ensure that it was appropriate for the type of studies included. Thus, the items designed to assess the methodological quality of experimental studies were omitted. The modified version of the Down's and Black (1998) Quality Index contains 18 items, which assess study quality across five domains: Reporting, External Validity, Internal Validity-Bias, Internal Validity-Confounding and Power (see Appendix 3). The quality score for each study is provided in Appendix 2.

REVIEW OF THE LITERATURE

The papers were examined to identify whether the research investigated client, staff or organisational factors. The findings were organised under these broad categories. For clarity, the papers that explored several factors have been discussed in turn under each relevant heading.

Reciprocity and Burnout

Reciprocity is a concept which is based on investments and outcomes in social exchange relationships. Professional relationships in care settings are complementary with one person providing care and another person receiving that care. A lack of reciprocity develops when a caregiver perceives themselves as investing more in the relationship than they receive in return. A lack of reciprocity depletes an individual's emotional resources leading to emotional exhaustion (Buunk and Schaufeli, 1993) and subsequently depersonalisation of clients, which is characterised by decreased investments in the working relationship. This deterioration in the helping relationship leads to a reduced sense of personal accomplishment (Firth-Cozens and Payne, 1999). In combination, this process results in burnout. The concept of reciprocity has been applied to relationships with clients (Van Dierendonck, Schaufeli and Sixma, 1994), organisations (Schaufeli, Van Dierendonck and Gorp, 1996) and staff relationships (Van Horn, Schaufeli and Taris, 2001).

Thomas and Rose (2010) examined a model related to the concept of reciprocity and burnout in staff, which incorporated Weiner's (1980, 1986) cognitive-emotional model of helping behaviour. This model suggests that the attributions care staff make regarding an individual's behaviour impact upon their emotional state, subsequently influencing their willingness to engage in helping behaviour. The Maslach Burnout Inventory (MBI; Maslach et al., 1996) was used to collect information about rates of burnout with 102 staff. Reciprocity was

examined using the Global Reciprocity Measure (Van Horn, Schaufeli and Enzmann, 1999) and the Specific Reciprocity Measure (Jeffcott, 2002). The results showed that staff perceived themselves as investing more in their relationships with service users, the organisation and work colleagues than they received in return. A lack of perceived reciprocity with service users was associated with increased emotional exhaustion and with increased depersonalisation of clients, staff and the organisation. A lack of reciprocity with the organisation was associated with reduced personal accomplishment on both measures. Path analysis showed that significant paths exist between reciprocity (with colleagues and the organisation) and emotional exhaustion, and emotional exhaustion and positive and negative emotion. The results suggest that social exchange processes are implicated in the development of burnout. The study highlights the complex interplay between client, staff and organisational factors in the development of burnout. The nuanced relationships between these factors add to the complexity of conducting research in this area.

The structure used by Thomas and Rose (2010) reflects earlier research and appears to be a useful way to organise the findings. This structure will be used to organise the review of the literature. Client, staff and organisational factors will be considered respectively; however, these categories will be broadened to capture the full breadth of the literature. Client factors will focus on challenging behaviour. Staff factors will include demographic variables, personality, attributions and coping strategies. Finally, organisational factors will focus on general work demands, organisational support, organisational processes, perceived control, job-role conflict and job security.

Client Factors and Burnout

Challenging Behaviour

Rose, Horne, Rose and Hastings (2004) investigated staff negative emotional reactions to challenging behaviour and staff well-being. This relationship was previously explored in a study by Mitchell and Hastings (2001). The aim of this study was to replicate these findings using data from two independent studies. In the study by Hastings and Horne (2004) (study 1) data was used from 101 direct care staff working in social care settings where at least one service user had significant challenging behaviour. The results from this study demonstrated a significant positive association between emotional reactions (depression/anger and fear/anxiety) to challenging behaviour and emotional exhaustion and depersonalisation. This association was not found with personal accomplishment. In the study by Rose (2002) (study 2) data was used from 99 staff employed in a direct care capacity. All participants worked in community based services for adults with intellectual disabilities where at least one service user displayed frequent challenging behaviour. The results showed that negative emotion was positively associated with emotional exhaustion and depersonalisation. No such association was found with personal accomplishment. The findings from both studies are consistent with Hastings' (2002) prediction that emotional reactions to challenging behaviour may increase over time and impact upon staff well-being.

Robertson et al. (2005) investigated stress with 157 staff in two types of residential settings; congregate settings where the majority of clients displayed challenging behaviour and non-congregate settings where a minority of residents displayed challenging behaviour. The authors found that challenging behaviour contributed to higher stress levels in both types of residential settings, as measured by the General Health Questionnaire (Goldberg, 1978). Staff working in non-congregate residential settings where there were lower levels of challenging behaviour, reported higher stress levels than staff working in congregate settings when there was a lack of clear guidance on how to deal with challenging behaviour. A limitation of the study

was that information was gathered on a limited range of variables and only minimal data was collected on staff characteristics.

Later research supported the relationship between challenging behaviour and burnout. Vassos and Nankervis (2012) found an association between challenging behaviour and burnout, and Chung and Harding (2009) found that high levels of challenging behaviour were associated with increased emotional exhaustion and decreased personal accomplishment. This is in contrast to the findings of Mutkins, Brown and Thorsteinsson (2011) who did not find an association. However, Mutkins et al. (2011) suggest that the results might be due to the measures used to collect information about challenging behaviour and staff emotional responses. The finding by Mutkins et al. (2011) is consistent with a previous study with nurses (Chung and Corbett, 1998), although inconsistent with a study with intellectual disabilities staff (Devereux, Hastings, Noone, Firth and Totsika, 2009). The inconsistencies in results suggest that mediating factors might influence this relationship.

Challenging Behaviour and Mediating Variables

As a result of inconsistent findings, later studies investigated the role of mediating variables. Mills and Rose (2011) investigated whether staff perceptions mediate the relationship between challenging behaviour and burnout with 78 staff. High levels of challenging behaviour were associated with high levels of burnout, which provides support for some of the previously mentioned studies (e.g. Robertson et al., 2005; Chung and Harding, 2009; Vassos and Nankervis, 2012). Fear of assault, a cognitive variable, was associated with increased emotional exhaustion and depersonalisation and decreased personal accomplishment. Fear of assault mediated the relationship between challenging behaviour and burnout. The mediation effect occurred between two components of burnout; emotional exhaustion and depersonalisation, with both aggressive and other behaviours. The mediation effect was not found with personal accomplishment.

Rose, Mills, Silva and Thompson (2013) investigated the mediating role of fear of assault, a cognitive variable, with 77 care staff using a modified version of Mash and Johnston's (1990) model. The data from the Mills and Rose (2011) study was included and, as expected, similar results were found in both studies. The relationship between challenging behaviour and emotional exhaustion was supported and fear of assault was found to mediate this relationship. This finding suggests that staff factors, such as cognitive variables, might exert an influence on this relationship.

Staff Factors and Burnout

Demographic

A number of studies investigated the relationship between staff demographic factors and burnout. Kozak, Kersten, Schillmöller and Nienhaus (2013) found that females reported higher levels of burnout than male colleagues. This is in contrast to the findings by Vassos and Nankervis (2012) who found that males reported higher levels of depersonalisation than female workers. Kowalski et al. (2010) found that male workers were four times more likely to be in the risk group for emotional exhaustion, although the reason for this was not reported. Vassos and Nankervis (2012) found that full-time workers reported higher levels of emotional exhaustion and depersonalisation compared to part-time workers, whereas Devereux et al. (2009) found that part time workers reported lower levels of personal accomplishment than full time workers. Mascha (2007) found that single people reported significantly more feelings of job-related depersonalisation than married or divorced/separated people, with married people reporting the least depersonalisation. Finally, Kowalski et al. (2010) found that staff between the ages of 30-39 were more likely to experience higher levels of burnout than their younger colleagues. Devereux et al. (2009) found that age was not significantly associated with burnout in their sample.

Personality

The relationship between personality and burnout was investigated by Chung and Harding (2009) with 103 community care staff. The results showed that high neuroticism predicted high emotional exhaustion and low personal accomplishment. In contrast, high extraversion predicted low emotional exhaustion and high personal accomplishment. Furthermore, high conscientiousness predicted high levels of depersonalisation. The authors investigated the variables that influence this relationship and found that agreeableness moderated between challenging behaviour and emotional exhaustion. Neuroticism and extraversion were found to moderate between challenging behaviour and personal accomplishment. The results provide support for previous studies, which demonstrated an association between personality traits and stress/burnout (Rose et al., 2003; Suls and Martin, 2005).

Staff Attributions

Rose and Rose (2005) investigated the impact of stress on staff attributions of challenging behaviour within Weiner's (1986) model of helping behaviour with 107 staff. Stress was not found to have a primary role in influencing outcomes for staff and clients when examined within Weiner's (1986) model of helping behaviour. Staff reported high stress levels as measured by the General Health Questionnaire (Goldberg, 1972) and moderate burnout; however, this did not appear to relate to their reporting of thoughts, feelings or motivation to help concerning challenging behaviour as predicted by Weiner's model. The 'help' variable was not normally distributed; therefore the model could not be fully tested. In general, the hypothesised model was not supported and the model was a poor fit for the data.

Coping strategies

Devereux et al. (2009) examined the relationship between coping and burnout with 96 intellectual disability support staff. A longitudinal design was used to follow-up 38 staff, 22 months after the initial data was collected. The MBI (Maslach et al. 1996) was used in both phases of the study. The results showed that wishful thinking coping was a positive predictor of emotional exhaustion and practical coping was a positive predictor of personal accomplishment. Wishful thinking mediated the relationship between perceived work demands and emotional exhaustion. Longitudinal analysis showed that neither perceived work demands nor wishful thinking coping predicted emotional exhaustion over time. Practical coping was not found to be a longitudinal predictor of personal accomplishment. This finding supports previous research (Hatton and Emerson, 1995; Rose et al., 2003). The results of this study are limited by the small sample size, which resulted in statistical power being low particularly for the follow-up data. However, the score from the quality framework suggests that this is one of the more robust papers included in the review.

Organisational Factors and Burnout

Work-stress theory suggests that increased work demands are associated with increased burnout (Dermouti, Bakker, Nachreiner and Schaufeli, 2001). Increased workload is associated with increased emotional exhaustion and depersonalisation (Kowalski et al., 2010; Gray-Stanley and Muramatsu, 2011; Vassos and Nankervis, 2012) and is a significant predictor of burnout (Vassos and Nankervis, 2012; Kozak et al., 2013). This is a general finding and supports earlier research (e.g. Gardner and Rose, 1994).

Devereux et al. (2009) investigated the effects of coping and support on the relationship between perceived work demands and burnout. The authors found no main effect associations

between support and emotional exhaustion or depersonalisation. However, a significant interaction was found between perceived work demands and staff support in the prediction of personal accomplishment. The role of support was found to differ depending on the level of perceived work demands; high work demands and low levels of support and low work demands and high levels of support both resulted in high levels of personal accomplishment.

Organisational support

Staff perceptions of support are associated with stress and burnout (Dyer and Quine, 1998; Hatton et al., 1999; Ito et al., 1999). Rose, Ahuja and Jones (2006) investigated organisational support by examining the relationship between attitudes towards professionals, team climate and psychological well-being. The results showed that staff who held a more positive attitude towards their colleagues reported an improvement in team climate. Both of these variables were linked to increased psychological well-being in staff as measured by the General Health Questionnaire-12 (Goldberg, 1978). This paper has been rated highly on the Downs and Black (1998) quality framework, which suggests that these findings are useful in understanding the development of the literature. The findings from this study confirm previous research which identified work colleagues as being significant sources of support (Ford and Honnor, 2000).

Mascha (2007) investigated the relationship between sources of support and burnout using the Maslach Burnout Inventory with 36 community day centre staff. The results showed that increased satisfaction with supervision was associated with increased job satisfaction and decreased emotional exhaustion. This relationship was not found with personal accomplishment or depersonalisation, which differs from later studies that found a relationship between supervisor support and depersonalisation (Vassos and Nankervis, 2012). Supervisor support has been identified in previous research as being important in reducing levels of burnout (Ito et al.,

1999).

Mutkins et al. (2011) explored the relationship between perceived organisational and social support and burnout, and if support moderates the relationship between psychological stress and burnout. The results showed that low perceived organisational support was associated with increased emotional exhaustion and depersonalisation. Decreased social support was associated with reduced personal accomplishment. An interaction effect was found with satisfaction with social support moderating the relationship between high psychological stress to less emotional exhaustion. The findings support previous research which has shown that increased support from colleagues is associated with lower levels of burnout (Dyer and Quine, 1998) and improved psychological well-being (Harris and Thomson, 1993).

Organisational processes

Several organisational processes have been found to be associated with burnout. Robertson et al. (2005) completed measures of sources of stress with 157 staff and bureaucracy was identified as a stressor. Similarly, Vassos and Nankervis (2012) found that increased bureaucracy was associated with increased emotional exhaustion, in their study with 180 support workers.

In their study on challenging behaviour, Rose et al. (2013) investigated organisational processes in relation to challenging behaviour and the degree of threat that staff felt. The authors found a relationship between the organisational variable of experienced safety and emotional exhaustion. This relationship was fully mediated by fear of assault. The results provide support for the role of mediating variables in the burnout relationship and highlight the complex interplay between client, staff and organisational factors.

Feedback from supervisors and colleagues has been identified as contributing to the development of burnout. Kozak et al. (2013) investigated psychosocial work related predictors of

burnout. Measures of burnout and work related stressors were completed by 409 community staff. The authors found that staff who received performance-related feedback reported lower levels of burnout. Similarly, Vassos and Nankervis (2012) found that staff who reported receiving more performance related feedback reported higher levels of personal accomplishment. Job feedback is likely to help staff to establish their role and responsibilities. This may help to reduce role ambiguity, which has been associated with depersonalisation and emotional exhaustion (Vassos and Nankervis, 2012), although this relationship was not supported in another study (Gray-Stanley and Muramatsu, 2011). The scores from the quality framework suggest that the paper by Vassos and Nankervis (2012) is one of the least robust included in the review; therefore the results from this paper should be considered with some caution.

Perceived control within the organisation

A lack of influence over work decisions has been linked to increased emotional exhaustion and depersonalisation, and decreased personal accomplishment in previous research (Hatton and Emerson, 1993; Hatton et al., 1997; Blumenthal et al., 1998). Rose et al. (2006) investigated team climate (participative safety, support for innovation, vision and task orientation) and staff well-being with 120 direct care staff using the Team Climate Inventory (Anderson and West, 1994). One of the findings from this study suggests that active participation in decision making is related to improved psychological well-being.

Kowalski et al. (2010) investigated the association between emotional exhaustion and latitude in decision making with 175 staff. The authors found a positive association between latitude in decision making and emotional exhaustion. This is similar to a finding by Vassos and Nankervis (2012) who found that increased job control was linked to increased personal accomplishment. Gray-Stanley and Muramatsu (2011) investigated the relationship between internal and external control beliefs and burnout. They found that internal control beliefs were

associated with reduced levels of burnout, whilst external control beliefs were associated with increased levels of burnout in staff who reported limited participation in decision making. Staff who perceive themselves as having limited participation in decision making are likely to be those with lower job status.

Low job status and burnout was investigated in two studies. Robertson et al. (2005) found that low job status contributed to increased levels of reported stress. Vassos and Nankervis (2012) found that low job status was a significant predictor of depersonalisation, and was related to higher levels of emotional exhaustion. These findings support earlier research which found a similar relationship (Hatton et al., 1997).

Job-role conflict

Role conflict has been identified in previous research as being important in the development of burnout (Hatton et al., 1997; Dyer and Quine, 1998; Gil-Monte and Peiró, 1998) and was investigated in two studies. Vassos and Nankervis (2012) found that role-conflict was a significant predictor of emotional exhaustion, and work-home conflict was a significant predictor of emotional exhaustion and depersonalisation. Kozak et al. (2013) found that staff who reported increased work-privacy conflict or increased role-conflict reported higher levels of burnout, with both being identified as predictors of burnout.

Job security

Two studies investigated the impact of job security on the burnout relationship. Robertson et al. (2005) found that those in group residential settings reported greater perceived stress due to lack of job security. Kozak et al. (2013) identified job insecurity as a predictor of personal burnout. The care sector has a high turnover of staff (Hastings et al., 2004) and it has

been suggested that paying attention to job insecurity will help to reduce turnover (Robertson et al., 2005)

SUMMARY AND DISCUSSION

The aim of this paper was to review the literature published since 2004 on burnout in direct care staff working with adults with intellectual disabilities in community services. The studies reviewed in this paper have been classified into one of three broad areas; client, staff or organisational factors. Whilst an attempt has been made to review the papers using these broad categories, it has proven challenging due to the significant overlap between them as they reflect a very complex system. Figure 1 provides a diagrammatic representation of a proposed outline model of burnout and the factors that influence it. The model represents the findings of the studies discussed in this review; however, the model is speculative and aims to offer tentative hypotheses regarding the burnout relationship.

Client Factors

Several studies have found a relationship between challenging behaviour and burnout (Rose et al., 2004; Chung and Harding, 2009; Vassos and Nankervis, 2012; Mills and Rose, 2011 and Rose et al., 2013); therefore, this association has been represented in Figure 1. With regards to the three subscales of burnout, the relationship between challenging behaviour and increased emotional exhaustion was the most consistent and was found in all but one study (Mutkins et al., 2011). Several studies reported a relationship between challenging behaviour and decreased personal accomplishment (Chung and Harding 2009; Mills and Rose, 2011; Vassos and Nankervis, 2012). However, an earlier study (Rose et al., 2004) and previous research (Chung et al., 1996; Chung and Corbett, 1998) found no relationship between these variables. Only one study found a relationship between challenging behaviour and increased depersonalisation (Chung and Harding, 2009). It has been suggested that the inconsistencies in results might be due to other variables impacting on this relationship. Later research investigated this and

demonstrated the effect of mediating variables (Mills and Rose, 2011; Rose et al., 2013). These studies showed that the relationship between challenging behaviour and burnout is not linear. Fear of assault was found to mediate the relationship between challenging behaviour and burnout (Mills and Rose, 2011; Rose et al., 2013), which supports previous literature (Howard, Rose and Levinson, 2009). These studies seem to point to a relationship whereby burnout can be influenced by other variables even if the level of challenging behaviour remains the same. Some of these mediating relationships have been represented in figure 1.

Overall, the findings from the review appear to suggest that a relationship between challenging behaviour and burnout exists. The nuanced differences in the results seem to suggest that this relationship is complex and that these differences might be explained by the influence of mediating variables.

Staff Factors

Several staff factors have been shown to be related to burnout. Only one study investigated personality. Chung and Harding (2009) found that both neuroticism and extraversion were associated with increased emotional exhaustion and that these variables moderated the relationship between challenging behaviour and personal accomplishment. This finding supports previous literature (Vlerick, 2001). Previous research has also found a relationship between neuroticism and negative psychological outcomes (Parkes, 1994; Zellars et al., 2000, 2004, 2006), which suggests that these variables are important in understanding the burnout relationship (Hatton et al., 1999; Rose, David and Jones, 2003). Staff agreeableness was found to moderate the impact of challenging behaviour on emotional exhaustion. The relationship between personality and burnout has been depicted in figure 1.

Several demographic variables have also been shown to be associated with burnout, including gender (Kowalski et al., 2010; Vassos and Nankervis, 2012; Kozak et al., 2013), hours

worked (Devereux et al., 2009; Vassos and Nankervis, 2012), marital status (Mascha, 2007) and age (Kowalski et al., 2010; Devereux et al., 2009). The findings across several of these variables were inconsistent. It is difficult to draw firm conclusions given the wide range of variables investigated and the apparent contradictions in the results. Demographic variables were not the primary focus of any of the studies. To further the understanding of this relationship it might be useful for future research to focus primarily on exploring the relationship between demographic factors and burnout. As the relationships do not appear to be consistent, demographic variables have not been represented in figure 1.

Coping strategies have been shown to have a direct relationship to burnout and to mediate between work demands and burnout (Devereux et al., 2009). These findings support earlier work which found a relationship between coping strategies and burnout (Hatton and Emerson, 1995; Hatton et al., 1999; Rose et al, 2003). These relationships are represented in figure 1.

A relationship was not found between attributions and psychological stress in the reviewed studies. However, this finding is in contrast to previous research which has identified the relationship between attributions and burnout as being important in understanding the development of burnout (Philips and Rose, 2010; Dilworth Philips and Rose, 2011). Attributions have been included in the model based on previous research; however, this relationship remains to be proven.

Overall, the results from the studies related to staff characteristics were interesting; however, due to the diverse range of variables investigated it is difficult to establish with any certainty the influence that these variables exert. The findings from this review suggest that the interconnected nature of the variables studied are important.

Organisational Factors

A diverse range of organisational factors have been identified as being important in understanding the development of burnout in intellectual disabilities staff. There was evidence for an association between increased work demands and increased burnout (Devereux et al., 2009; Kowalski et al., 2010; Gray-Stanley and Muramatsu, 2011; Vassos and Nankervis, 2012; Kozak et al., 2013) and increased work demands and reduced personal accomplishment (Devereux et al., 2009). The relationship between work demands and burnout has been represented in figure 1. Reduced organisational support was found to be associated with burnout (Rose et al., 2006; Mascha 2007; Mutkins et al., 2011; Vassos and Nankervis, 2012; Gray-Stanley and Muramatsu, 2011). This relationship has been represented in figure 1.

Organisational support has been identified as being important in understanding the development of burnout (Rose et al., 2006; Mascha, 2007; Mutkins et al., 2011). Previous literature has identified an association between receiving support from colleagues, supervisors and managers and decreased stress (Browner, Ellis, Ford, Silsby, 1987; Hatton and Emerson, 1993; Rose, 1995). This relationship has been included in figure 1.

Several organisational processes have been identified as contributing to the development of burnout and this link has been included in figure 1. This includes bureaucracy (Robertson et al., 2005), role ambiguity (Vassos and Nankervis, 2012) although this has not been a consistent finding (Gray-Stanley and Muramatsu, 2011), lack of job feedback (Vassos and Nankervis, 2012; Kozak et al., 2013; Hatton and Emerson, 1993) and experienced safety (Rose et al., 2013). Fear of assault was found to mediate the relationship between experienced safety and burnout. This suggests that if fear of assault can be reduced then staff may experience less burnout. This relationship highlights the interaction between organisational, client and staff factors.

Perceived control in the organisation was found to be important in understanding burnout (Rose et al., 2006; Kowalski et al., 2010; Gray-Stanley and Muramatsu, 2011; Vassos and

Nankervis, 2012); this relationship has been represented diagrammatically in figure 1. This finding supports earlier work (Hatton and Emerson, 1993).

Role conflict was found to be associated with burnout (Vassos and Nankervis, 2012; Kozak et al., 2013). This relationship was consistent across studies and is supported by previous research (Gil-Monte and Peiró, 1998; Dyer and Quine, 1998; Hatton et al., 1997). This relationship has been included in the proposed model.

Job insecurity was identified as contributing to burnout (Robertson et al., 2005; Kozak et al., 2013) and has been identified as contributing to burnout in previous research (Rose, 1995). This has been included in figure 1.

A wide range of organisational factors have been identified as contributing to burnout in direct care staff. Organisational issues overlap with both client (e.g. Rose et al. 2013) and staff factors (e.g. Devereux et al., 2009). Improving the psychosocial work environment at the organisational level may reduce personal burnout and diminish unfavourable outcomes such as intention to leave the job or job dissatisfaction (Kozak et al., 2013). As with client and staff factors the relationship is complex and may be influenced by the presence of mediating variables. Further research is needed to understand this relationship.

In summary, there are several variables across client, staff and organisational factors that are important in understanding the development of burnout. The relationships between these variables are complex. The literature reviewed is comprehensive and offers a useful understanding of the burnout relationship; however, previous literature has suggested that other variables might influence this relationship. One such variable is role-identity which has been associated with burnout in nurses (Reilly, 1994). It might be useful for future research to investigate these factors.

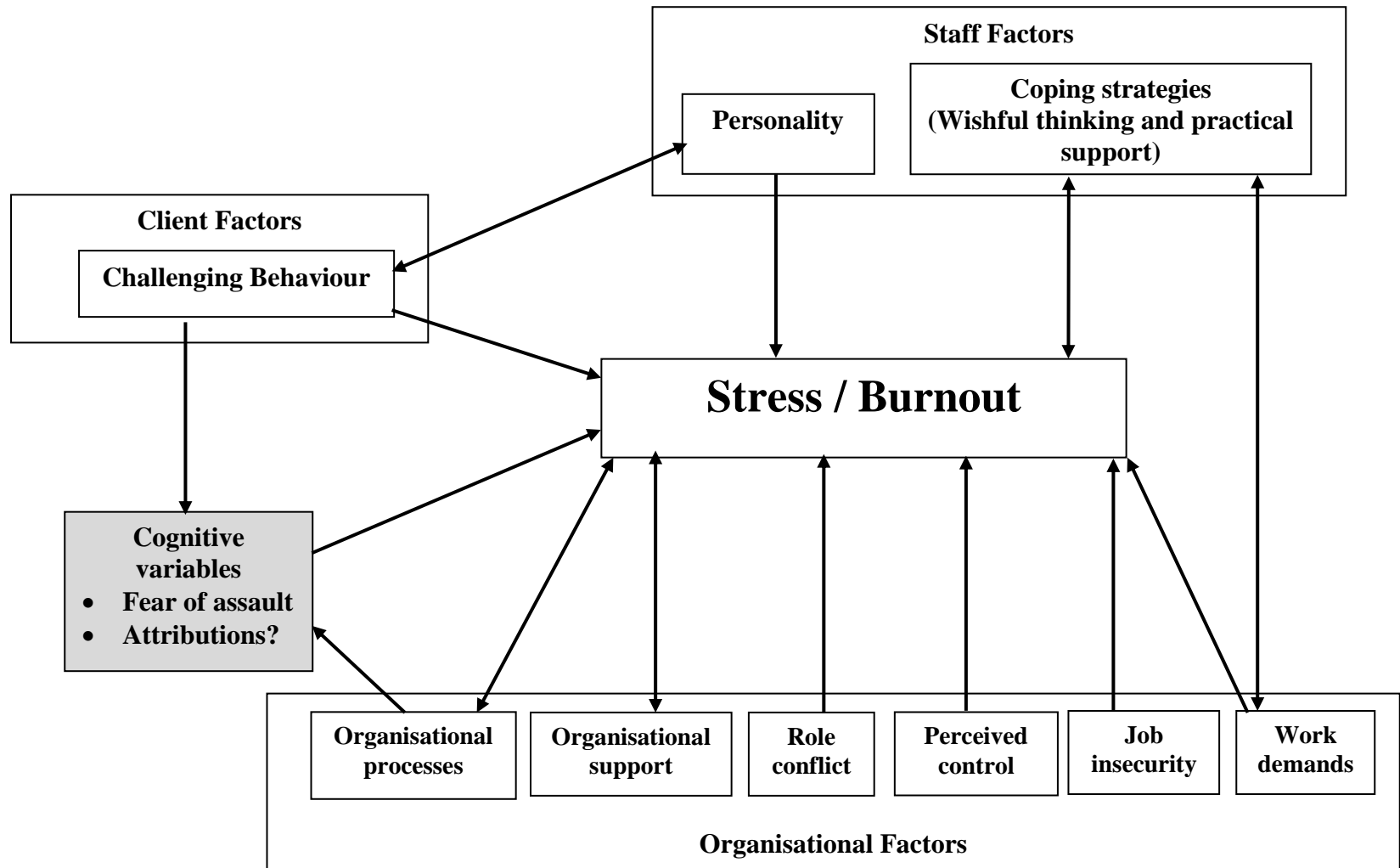


Figure 1: Proposed model of the factors that influence burnout

Methodological Limitations

A common methodological weakness of the reviewed studies is the use of cross-sectional designs. Although cross-sectional designs are useful for establishing associations between variables they preclude causality from being established. Research designs that allow for more causal inferences would be useful to advance the existing evidence base. Burnout is considered to be a state that develops over time; therefore longitudinal research designs would be particularly useful. Only one study employed a longitudinal research design (Devereux et al., 2009); however the follow-up sample for the longitudinal analysis was small, which resulted in statistical power being poor.

The studies relied upon self-report measures to collect data. This method of data collection is prone to social desirability bias. Participation was voluntary and it is possible that individuals experiencing high levels of burnout would be less willing to take part in a study which places additional demands on their time. Therefore, staff who participated in the aforementioned studies may have been those that were experiencing lower levels of burnout. In some studies the measures used to assess challenging behaviour relied on staff perceptions of challenging behaviour (e.g. Chung and Harding, 2009). It is possible that the reported levels of challenging behaviour were not an accurate representation of the actual level of challenging behaviour that staff experienced. Most of the studies used the Maslach Burnout Inventory (Maslach et al., 1996) to assess levels of burnout; however others did not (Robertson et al., 2005; Rose et al, 2006; Kozak et al., 2013), which makes it difficult to compare the findings across some of the studies. Some of the questionnaires have been adapted and their psychometric properties suggest that they may not be as reliable or valid in the context in which they have been applied (Mills and Rose, 2011; Rose et al., 2013). Therefore, the results from these measures need to be considered with caution.

The Downs and Black (1998) quality framework was used to systematically assess the

quality of the papers included in the review. Although this was a useful tool, at times, there appeared to be a discrepancy between the scores determined by the measure and subjective appraisal of the quality of the papers.

Clinical Implications

There are several clinical, service and training implications as a result of the studies reviewed. Due to the limitations of some of the studies only tentative clinical suggestions can be made. Services could reduce burnout in staff by ensuring that staff member's exposure to challenging behaviour is reduced. This could be achieved by having clear guidelines on how to respond appropriately (Rose, 2010) and training staff to deal effectively with challenging behaviour. This is likely to facilitate the development of a less hostile environment which may reduce emotional exhaustion (Rose, Harris and Burns, 2010). The relationships depicted in figure 1 suggest that the relationship between challenging behaviour and burnout can be mediated by the cognitive variable of fear of assault, which in turn is influenced by organisational processes including experienced safety. This suggests that if organisations focus on ensuring that their workers feel safe and supported that this may reduce reported levels of burnout even if the objective level of challenging behaviour remains unchanged.

The use of interventions that change environmental, organisational and staff cognitive variables might be useful for helping staff to manage challenging behaviours that are difficult to change (Philips and Rose, 2010). One way of achieving this could be to offer staff challenging behaviour specific training. Positive behaviour support is one such option and has been shown to be useful in bringing about a reduction in challenging behaviour (Carr, 1999; Harvey, Boer, Meyer and Evans, 2009). Learning practical skills might contribute to an increase in staff's confidence in their ability to manage the behaviour, which might result in a reduction in emotional exhaustion (Rose, 2010).

Staff personality traits have been shown to interact with challenging behaviour in maintaining or reducing burnout. Organisations could consider the role of personality factors including those which make individuals more vulnerable to burnout. It might be useful for services to apply some of the techniques from occupational psychology, such as the use of psychometric screening. This method of selecting employees is frequently used in other sectors, such as banking and management, to ensure that potential staff have personal attributes that are congruent with the role and ethos of the organisation. The evidence from this review suggests that this approach might be useful.

The relationship between increased support for staff and burnout has been shown to be important. Figure 1 suggests that for staff that perceive themselves as having increased work demands that receiving support may help to reduce burnout. Improving aspects of team functioning may be important in improving the psychological well-being of staff (Rose and Shelwa-Davies, 1997). Services should aim to ensure that staff have a formal supervision process and that a culture of informal staff support is developed. Increased support, regular supervision and improved acknowledgement and recognition from the organisation might reduce rates of burnout as supervision has been shown to be beneficial for workers in health related professions (Sines and McNally, 2007). It is likely that contact with co-workers, immediate managers and residents will become more important in future as services become more individualised and independent with fewer residents and staff (Rose, 1994).

Further Research

The literature review has highlighted some important areas for future research. The research in this area is broad; however, more detailed exploration of the factors that influence the burnout relationship is needed. This has started to be addressed in later research which focuses on mediational relationships but more work is needed to fully appreciate the

complexity of these relationships. Future research should also aim to address the various common methodological issues that preclude firm conclusions from being drawn from the literature.

References

- Allen, P., Pahl, J. M., & Quine, L. (1990). *Care staff in transition: The impact on staff of changing services for people with mental handicaps*. HM Stationery Office.
- Aman, M. G., & Singh, N. N. (1986). Manual for the aberrant behaviour checklist. *East Auroray, NY: Slosson Educational Publications*.
- Anderson, N., & West, M. A. (1996). The Team Climate Inventory: Development of the TCI and its applications in teambuilding for innovativeness. *European Journal of work and organizational psychology*, 5(1), 53-66.
- Bersani, H. A., & Heifetz, L. J. (1985). Perceived stress and satisfaction of direct-care staff members in community residences for mentally retarded adults. *American Journal of Mental Deficiency*.
- Blumenthal, S., Lavender, T., & Hewson, S. (1998). Role clarity, perception of the organization and burnout amongst support workers in residential homes for people with intellectual disability: A comparison between a National Health Service trust and a charitable company. *Journal of Intellectual Disability Research*, 42(5), 409-417.
- Borill, C., Wall, T. D., West, M. A., Hardy, G. E., Shapiro, D. A., Carter, A., Golya, D. A., & Haynes, C. E. (1996). *Mental Health of the Workforce in NHS Trusts: Phase 1 final report*. Institute of Work Psychology, University of Sheffield & Department of Psychology, University of Leeds.
- Browner, C. H., Ellis, K. A., Ford, T., & Silsby, J. (1987). Stress, social support, and health of psychiatric technicians in a state facility. *Mental Retardation*.
- Buunk, B. P., & Schaufeli, W. B. (1993). Burnout: A perspective from social comparison theory.

- Carr, E. G. (Ed.). (1999). *Positive behavior support for people with developmental disabilities: A research synthesis*. AAMR.
- Chung, M. C., Corbett, J., & Cumella, S. (1996). Relating staff burnout to clients with challenging behaviour in people with a learning difficulty: Pilot study 2. *The European journal of psychiatry*, 10(3), 155-165.
- Chung, M. C., & Corbett, J. (1998). The burnout of nursing staff working with challenging behaviour clients in hospital-based bungalows and a community unit. *International Journal of Nursing Studies*, 35(1), 56-64.
- Chung, M. C., & Harding, C. (2009). Investigating Burnout and Psychological Well-Being of Staff Working with People with Intellectual Disabilities and Challenging Behaviour: The Role of Personality. *Journal of Applied Research in Intellectual Disabilities*, 22(6), 549-560.
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and individual differences*, 13(6), 653-665.
- Dagnan, D., Trower, P., & Smith, R. (1998). Care staff responses to people with learning disabilities and challenging behaviour: A cognitive—emotional analysis. *British Journal of Clinical Psychology*, 37(1), 59-68.
- Dagnan, D., Grant, F., & McDonnell, A. (2004). Understanding challenging behaviour in older people; the development of the Controllability Beliefs Scale. *Behavioural and Cognitive Psychotherapy*, 32(4), 501-506.
- Dekker, S.W., & Schaufeli, W.B. (1995). The effects of job insecurity on psychological health and withdrawal: A longitudinal study. *Australian Psychologist*, 30, 57-63.
- Dermouti, E., Bakker, A.B., Nachreiner, F., Schaufeli W.B. (2001). The job demands resources model of burnout. *Journal of Applied Psychology*, 86, pp. 499–51.

- Devereux, J. M., Hastings, R. P., Noone, S. J., Firth, A., & Totsika, V. (2009). Social support and coping as mediators or moderators of the impact of work stressors on burnout in intellectual disability support staff. *Research in Developmental Disabilities, 30*(2), 367-377.
- Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology and Community Health, 52*(6), 377-384.
- Dyer, S., & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct care staff of a community learning disability service. *Journal of Applied Research in Intellectual Disabilities, 11*, 320-332.
- Ensel, W. M., & Lin, N. (2004). Physical fitness and the stress process. *Journal of Community Psychology, 32*(1), 81-101.
- Firth-Cozens, J., & Payne, R. (1999). The psychological problems of doctors. *Stress in health professionals: psychological and organizational causes and interventions*. London: Wiley, 12-26.
- Freeman, M. (1994). The differential impact on carers dealing with clients with challenging behaviours. *Journal of community & applied social psychology, 4*(3), 181-187.
- Ford, J & Honnor, J. (2000). Job satisfaction of community residential staff serving individuals with severe intellectual disabilities. *Journal of Intellectual and Developmental Disability, 25*(4), 343-362.
- Gardner, D., & Rose, J. (1994). Stress in a social services day centre. *British Journal of Learning Disabilities, 22*(4), 130-133.

- Gray-Stanley, J. A., Muramatsu, N., Heller, T., Hughes, S., Johnson, T. P., & Ramirez-Valles, J. (2011). Work stress and depression among direct support professionals: the role of work support and locus of control. *Journal of Intellectual Disability Research*, 54(8), 749-761.
- Gil-Monte, P. R., Peiró, J. M., & Valcárcel, P. (1998). A model of burnout process development: An alternative from appraisal models of stress. *Comportamento Organizacional e gestão*, 2(2), 211-220.
- Gibson, J. A., Grey, I. M., & Hastings, R. P. (2009). Supervisor support as a predictor of burnout and therapeutic self-efficacy in therapists working in ABA schools. *Journal of autism and developmental disorders*, 39(7), 1024-1030.
- Goldberg, D. P. (1978). *Manual of the general health questionnaire*. Nfer.
- Goldberg, D. P., & Hillier, V. F. (1979). A scaled version of the General Health Questionnaire. *Psychological medicine*, 9(01), 139-145.
- Goldberg, D. P. (1972). The detection of psychiatric illness by questionnaire: A technique for the identification and assessment of non-psychotic psychiatric illness.
- Harris, P., Humphreys, J., & Thomson, G. (1994). A checklist of challenging behaviour: the development of a survey instrument. *Mental Handicap Research*, 7(2), 118-133.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied psychology*, 60(2), 159.
- Harris, P., & Thomson, G. (1993). The Staff Support Questionnaire: a means of measuring support among staff working with people with challenging behaviour. *Journal of the British Institute of Mental Handicap (APEX)*, 21(4), 122-127.
- Harris, P., & Rose, J. (2002). Measuring staff support in services for people with intellectual disability: the Staff Support and Satisfaction Questionnaire, Version 2. *Journal of intellectual disability research*, 46(2), 151-157.

- Harvey, S. T., Boer, D., Meyer, L. H., & Evans, I. M. (2009). Updating a meta-analysis of intervention research with challenging behaviour: Treatment validity and standards of practice*. *Journal of Intellectual and Developmental Disability*, 34(1), 67-80.
- Hastings, R. P. (2002). Do challenging behaviors affect staff psychological well-being? Issues of causality and mechanism. *Journal Information*, 107(6).
- Hastings, R. P., & Brown, T. (2002). Behavior problems of children with autism, parental self-efficacy, and mental health. *Journal Information*, 107(3).
- Hastings, R., & Horne, S. (2004). Positive perceptions held by support staff in community mental retardation services. *Journal Information*, 109(1).
- Hastings, R. P., Horne, S., & Mitchell, G. (2004). Burnout in direct care staff in intellectual disability services: a factor analytic study of the Maslach Burnout Inventory. *Journal of Intellectual Disability Research*, 48(3), 268-273.
- Hatton, C., & Emerson, E. (1993). Organizational predictors of staff stress, satisfaction, and intended turnover in a service for people with multiple disabilities. *Mental retardation*.
- Hatton, C., & Emerson, E. (1995). The development of a shortened 'ways of coping' questionnaire for use with direct care staff in learning disability services. *Mental Handicap Research*, 8(4), 237-251.
- Hatton, C., Rivers M., Mason H., Kiernan C., Emerson E., Alborz A. & Reeves D. (1997) *Staff in Services for People with Learning Disabilities*. Hester Adrian Research Centre, University of Manchester, Manchester.
- Hatton, C., & Emerson, E. (1998). Brief report: organisational predictors of actual staff turnover in a service for people with multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 11(2), 166-171.

- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., Swarbrick, R., and Alborz, A. (1999). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research*, 43(4), 253-267.
- Hatton, C., Rose, J. and Rose, D. (2004) Researching Staff. In: *Handbook of methods for Research and Evaluation in Intellectual Disabilities*. Emerson, E., Hatton, C. Parmenter, T. and Thompson, T (Eds.). Wiley.
- Howard, R., Rose, J., & Levinson, V. (2009). The psychological impact of violence on staff working with adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 22(6), 538-548.
- Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2002). Burnout among people working with intellectually disabled persons: a theory update and an example. *Scandinavian journal of caring sciences*, 16 (3), 272-279.
- Ito, H., Kurita, H., & Shiya, J. (1999). Burnout among direct care-staff members of facilities for persons with mental retardation in Japan. *Mental Retardation*, 37, 477-481.
- Jeffcott, T. (2002). Burnout amongst Residential Care Staff for looked After Children. D.Clin. Psy Thesis, University of Birmingham, Birmingham.
- Jenkins, R., Rose, J., & Lovell, C. (1997). Psychological well-being of staff working with people who have challenging behaviour. *Journal of Intellectual Disability Research*, 41(6), 502-511.
- Jenkins, C., & Allen, C. (1998). The relationship between staff burnout/distress and interactions with residents in two residential homes for older people. *International journal of Geriatric Psychiatry*, 13, 466-472.

- Kowalski, C., Driller, E., Ernstmann, N., Alich, S., Karbach, U., Ommen, O. & Pfaff, H. (2010). Associations between emotional exhaustion, social capital, workload, and latitude in decision-making among professionals working with people with disabilities. *Research in developmental disabilities*, 31(2), 470-479.
- Kozak, A., Kersten, M., Schillmöller, Z., & Nienhaus, A. (2013). Psychosocial work-related predictors and consequences of personal burnout among staff working with people with intellectual disabilities. *Research in developmental disabilities*, 34(1), 102-115.
- Kristensen, T. S., Hannerz, H., Høgh, A., & Borg, V. (2005). The Copenhagen Psychosocial Questionnaire-a tool for the assessment and improvement of the psychosocial work environment. *Scandinavian journal of work, environment & health*, 438-449.
- Lambrechts, G., Kuppens, S., & Maes, B. (2009). Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research*, 53(7), 620-632.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, 33(3), 335-343.
- Mascha, K. (2007). Staff morale in day care centres for adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 20(3), 191-199.
- Mash, E. J., & Johnston, C. (1990). Determinants of parenting stress: Illustrations from families of hyperactive children and families of physically abused children. *Journal of Clinical Child Psychology*, 19(4), 313-328.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual*. Mountain View, CA: CPP. Inc., and Davies-Black.

- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.
- Mills, S., & Rose, J. (2011). The relationship between challenging behaviour, burnout and cognitive variables in staff working with people who have intellectual disabilities. *Journal of Intellectual Disability Research*, 55(9), 844-857.
- Mitchell, G., & Hastings, R. P. (1998). Learning disability care staffs emotional reactions to aggressive challenging behaviours: Development of a measurement tool. *British Journal of Clinical Psychology*, 37(4), 441-449.
- Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *Journal Information*, 106(5).
- Mutkins, E., Brown, R. F., & Thorsteinsson, E. B. (2011). Stress, depression, workplace and social supports and burnout in intellectual disability support staff. *Journal of Intellectual Disability Research*, 55(5), 500-510.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *Journal of applied psychology*, 81(4), 400.
- Newton, J. T., & Sturmey, P. (1988). The Aberrant Behaviour Checklist: a British replication and extension of its psychometric properties. *Journal of Intellectual Disability Research*, 32(2), 87-92.
- Nübling, M., Stöbel, U., Hasselhorn, H. M., Michaelis, M., & Hofmann, F. (2005). Methoden zur Erfassung psychischer Belastungen. *Erprobung eines Messinstrumentes (COPSOQ)*.
- Parkes, K. R. (1994). Personality and coping as moderators of work stress processes: Models, methods and measures. *Work & Stress*, 8(2), 110-129.

- Philips, N. & Rose, J. (2010). Predicting placement breakdown: individual and environmental factors associated with the success or failure of community residential placements for adults with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 23, 201-213.
- Reily, N.P. (1994). Exploring a Paradox: Commitment as a Moderator of the Stressor-Burnout Relationship. *Journal of Applied Social Psychology*, 24 (5), 397-414.
- Robertson, J., Hatton, C., Felce, D., Meek, A., Carr, D., Knapp, M., & Lowe, K. (2005). Staff Stress and Morale in Community-Based Settings for People with Intellectual Disabilities and Challenging Behaviour: A Brief Report. *Journal of Applied Research in Intellectual Disabilities*, 18(3), 271-277.
- Rose, J. (1995). Stress and residential staff: towards an integration of existing research. *Mental Handicap Research*, 8(4), 220-236.
- Rose, J. (1999). Stress and residential staff who work with people who have an intellectual disability: a factor analytic study. *Journal of Intellectual Disability Research*, 43(4), 268-278.
- Rose, D (2002) Staff in services for people with intellectual disabilities: the impact of stress on attributions of challenging behaviour. Doctoral Dissertation, University of Birmingham, UK.
- Rose, J. (2011). How do staff psychological factors influence outcomes for people with developmental and intellectual disability in residential services?. *Current Opinion in Psychiatry*, 24(5), 403-407.
- Rose, J., & Schelewa-Davies, D. (1997). The relationship between staff stress and team climate in residential services. *Journal of Intellectual Disabilities*, 1(1), 19-24.
- Rose, J., Jones, F., & Fletcher, B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research*, 42(2), 163-172.

- Rose, J., David, G., & Jones, C. (2003). Staff who work with people who have intellectual disabilities: The importance of personality. *Journal of Applied research in intellectual disabilities*, 16(4), 267-277.
- Rose, D., Horne, S., Rose, J. L., & Hastings, R. P. (2004). Negative emotional reactions to challenging behaviour and staff burnout: Two replication studies. *Journal of Applied Research in Intellectual Disabilities*, 16(3), 219-223.
- Rose, D., & Rose, J. (2005). Staff in services for people with intellectual disabilities: the impact of stress on attributions of challenging behaviour. *Journal of Intellectual Disability Research*, 49(11), 827-838.
- Rose, J., Ahuja, A. K., & Jones, C. (2006). Attitudes of direct care staff towards external professionals, team climate and psychological wellbeing A pilot study. *Journal of Intellectual Disabilities*, 10(2), 105-120.
- Rose, J. L., & Cleary, A. (2007). Care staff perceptions of challenging behaviour and fear of assault. *Journal of intellectual and developmental disability*, 32(2), 153-161.
- Rose, J., Harris, P., & Burns, M. (2010). *Supporting yourself and your team. Module 10 challenging behaviour pack*. London Pavillion
- Rose, J., Mills, S., Silva, D., & Thompson, L. (2013). Client characteristics, organizational variables and burnout in care staff: The mediating role of fear of assault. *Research in developmental disabilities*, 34(3), 940-947.
- Ross, C. E., & Mirowsky, J. (1989). Explaining the social patterns of depression: control and problem solving--or support and talking?. *Journal of Health and Social Behavior*, 206-219.
- Schalast, N., Redies, M., Collins, M., Stacey, J., & Howells, K. (2008). EssenCES, a short questionnaire for assessing the social climate of forensic psychiatric wards. *Criminal Behaviour and Mental Health*, 18(1), 49-58.

- Schaufeli, W. B., Dierendonck, D. V., & Gorp, K. V. (1996). Burnout and reciprocity: Towards a dual-level social exchange model. *Work & Stress*, 10(3), 225-237.
- Schaufeli, W., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). MBI-General Survey. Palo Alto.
- Schaufeli, W., Firth-Cozens, J., & Payne, R. (1999). Stress in health professionals. *Stress in health professionals*.
- Shanafelt, T. D., Bradley, K. A., Wipf, J. E., & Back, A. L. (2002). Burnout and self-reported patient care in an internal medicine residency program. *Annals of internal medicine*, 136(5), 358-367.
- Sharrock, R., Day, A., Qazi, F., & Brewin, C. R. (1990). Explanations by professional care staff, optimism and helping behaviour: an application of attribution theory. *Psychological Medicine*, 20(4), 849-855.
- Skirrow, P., & Hatton, C. (2007). 'Burnout' amongst Direct Care Workers in Services for Adults with Intellectual Disabilities: A Systematic Review of Research Findings and Initial Normative Data. *Journal of Applied Research in Intellectual Disabilities*, 20(2), 131-144.
- Sines, D., & McNally, S. (2007). An investigation into the perceptions of clinical supervision experienced by learning disability nurses. *Journal of Intellectual Disabilities*, 11(4), 307-328.
- Suls, J. & Martin, R. (2005). The daily life of the garden-variety neurotic: Reactivity, stressors exposure, mood spillover, and maladaptive coping. *Journal of Personality*, 73, 1-25.
- Tackenberg, P., Müller, B., & Next-Study group. (2003). Working conditions and intent to leave the profession among nursing staff in Europe. H. M. Hasselhorn (Ed.). Arbetslivsinstitutet, förlagstjänst.

- Thomas, C. & Rose, J. (2010). The relationship between reciprocity and the emotional and behavioural responses of staff. *Journal of Applied Research in Intellectual Disabilities*, 23 (2), 167-169.
- Thompson, L., & Rose, J. (2011). Does organizational climate impact upon burnout in staff who work with people with intellectual disabilities? A systematic review of the literature. *Journal of Intellectual Disabilities*, 15(3), 177-193.
- Van Dierendonck, D., Schaufeli, W. B., & Sixma, H. J. (1994). Burnout among general practitioners: a perspective from equity theory. *Journal of Social and Clinical Psychology*, 13(1), 86-100.
- Van Horn, J. E., Schaufeli, W. B., & Enzmann, D. (1999). Teacher Burnout and Lack of Reciprocity. *Journal of Applied Social Psychology*, 29(1), 91-108.
- Van Horn, J. E., Schaufeli, W. B., & Taris, T.W. (2001). Lack of Reciprocity among Dutch teachers: Validation of reciprocity indices and their relation to stress and well-being. *Work and Stress* 15, 191-213.
- Vassos, M. V., & Nankervis, K. L. (2012). Investigating the importance of various individual, interpersonal, organisational and demographic variables when predicting job burnout in disability support workers. *Research in Developmental Disabilities*, 33(6), 1680-1691.
- Vlerick, P. (2001). Personality correlates of burnout: a cross-validation study.
- Vollrath, M. (2001). Personality and stress. *Scandinavian Journal of Psychology*, 42(4), 335-347.
- Vollrath, M. (ed) (2006). *Handbook of Personality and Health*. John Wiley and Sons, Ltd., Chichester.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.
- Weiner, B. (1980). A cognitive (attribution) – emotion – action model of motivated behavior: An analysis of judgments of help-giving. *Journal of Personality and Social Psychology*, 39(2), 186-200.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- West, M., & Savage, Y. (1988). Coping with stress in health visiting. *Health Visitor*, 366-368.
- Williams, R. J., & Rose, J. L. (2007). The development of a questionnaire to assess the perceptions of care staff towards people with intellectual disabilities who display challenging behaviour. *Journal of Intellectual Disabilities*, 11(2), 197-211.
- Zellars, K. L., Perrewé, P. L., & Hochwarter, W. A. (2000). Burnout in health care: The role of the five factors of personality. *Journal of Applied Social Psychology*, 30(8), 1570-1598.
- Zellars, K. L., Hochwarter, W. A., Perrewé, P. L., Hoffman, N., & Ford, E. W. (2004). Experiencing job burnout: The roles of positive and negative traits and states. *Journal of Applied Social Psychology*, 34(5), 887-911.
- Zellars, K. L., Perrewé, P. L., Hochwarter, W. A., & Anderson, K. S. (2006). The interactive effects of positive affect and conscientiousness on strain. *Journal of Occupational Health Psychology*, 11(3), 281.

EMPIRICAL PAPER

Is there a relationship between role-identity, work demands and burnout in direct care staff working with individuals with intellectual disabilities?

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ABSTRACT

Introduction

Previous literature has identified a relationship between work demands and burnout. However, the nature of this relationship is complex and it is likely that a number of different variables mediate this relationship. The aim of the study is to confirm whether there is a relationship between work demands and staff burnout, and to explore whether role-identity or self-determination mediate this relationship.

Method

Seventy staff completed self-report measures of burnout, role-identity, self-determination and work demands.

Results

Significant positive correlations were found between work demands and emotional exhaustion and depersonalisation, and role-identity and personal accomplishment. A significant positive correlation was found between self-determination and personal accomplishment and a negative correlation was found between work demands and self-determination. Regression analyses demonstrated that role-identity and self-determination did not mediate the relationship between work demands and burnout.

Conclusion

The results confirm the relationship between increased work demands and emotional exhaustion and depersonalisation. Role-identity and self-determination are associated with personal accomplishment.

Keywords: staff, burnout, intellectual disability, work demands, role-identity and self-determination

INTRODUCTION

Rationale for the Research

Increased staff stress and burnout can have a detrimental impact on the delivery of services (Hastings, 2002). Staff with increased stress levels interact less with clients and the quality of that interaction is diminished (Rose, Jones and Fletcher, 1998). Increased stress levels have been linked to higher rates of sickness and absenteeism and increased turnover of staff (Hatton and Emerson, 1995). Furthermore, burnout has been identified as a risk factor for employee's intention to terminate their employment (Hastings, Horne and Mitchell, 2004). This results in economic costs to services when finding additional staff to cover absenteeism from sickness and employing and training new staff due to high turnover. Employers have a legal and moral obligation to ensure high quality care for their clients and to ensure the well-being of their staff (Hastings, 2002).

Burnout in Staff who work with People with Intellectual Disabilities

Psychological stress has been highlighted as a problem amongst staff working with individuals with intellectual disabilities. Stress in intellectual disability services has been shown to affect between 32.5% (Hatton et al., 1999) and 25% (Robertson et al., 2005) of staff. Due to its prevalence and impact on providing high quality services (Hatton, Rose and Rose, 2004) there has been increasing interest in researching this area (e.g. Aitken and Schloss, 1994; Alexander and Hegarty, 2000; Mitchell and Hastings, 2001) and understanding the factors that contribute to it.

A particular focus for research within the intellectual disabilities field has been distress in care staff (Hastings and Horne, 2004). Distress is a difficult area to conceptualise, which has meant that drawing firm conclusions from the research regarding causes and

prevalence has been difficult (Hastings et al., 2004). To overcome this difficulty with conceptualisation burnout has been frequently used as an indicator of distress in previous research (Hastings et al., 2004).

Burnout is thought to be prevalent in staff who work in jobs where there is an emotional investment (Maslach, Schaufeli and Leiter, 2001) or in jobs where the perceived investment is greater than the return (Hastings et al., 2004). Burnout is a longitudinal process which occurs following a period of prolonged stress. It is characterised by increased emotional exhaustion, depersonalisation and reduced personal accomplishment. Emotional exhaustion refers to an experience of excessive emotional stress and feeling drained by interpersonal contact. Depersonalisation refers to indifferent and insensitive reaction to clients and personal accomplishment refers to a reduction in self-efficacy in one's work. Burnout has an advantage over the traditional conceptualisation of psychological stress as it offers specific predictions regarding attitudinal, emotional and behavioural changes over time (Instraand Espnes and Mykletun, 2002; Hastings et al., 2004) and emphasises changes across three domains, whereas psychological stress pertains only to the domain of emotional exhaustion.

Work Demands and the Association with Burnout

The role of a direct care worker is varied and encompasses diverse tasks such as administering medication, assisting with activities of daily living, managing challenging behaviour and facilitating the individual's inclusion into the community. The ability to cope with multiple and often competing demands has been identified as important by Lazarus and Folkman (1984). The development of stress is said to be a transactional process which occurs when the demands of a situation are greater than a person's coping resources (Lazarus and Folkman, 1984). Several work demands have been identified within the literature as contributing to burnout in intellectual disabilities support staff.

Challenging behaviour has been identified as contributing to the development of burnout and is the most frequently reported work stressor in disability services (Jenkins, Rose and Lovell, 1997; Hastings, 2002). Increased levels of challenging behaviour have been shown to be associated with increased emotional exhaustion and depersonalisation and reduced levels of personal accomplishment in intellectual disability staff (Chung and Harding, 2009; Vassos and Nankervis, 2012). Rose, Horne, Rose and Hastings (2004) found negative emotional reactions to challenging behaviour were associated with increased emotional exhaustion and depersonalisation.

A wide range of organisational issues have been shown to be related to burnout levels (Dyer and Quine, 1998). A lack of support from the organisation and work colleagues has been shown to contribute to burnout in several studies. Mutkins, Brown and Thorsteinsson (2011) found that lower levels of perceived organisational and social support were related to higher levels of emotional exhaustion and depersonalisation in direct care staff. Higher levels of perceived organisational and social support were associated with increased levels of personal accomplishment. This latter finding supports the results of Devereux et al. (2009) who found that support moderated the impact of work demands on personal accomplishment.

A lack of organisational control has been linked to higher levels of burnout in previous research (Blumenthal, Lavender and Hewson, 1998; Hatton et al., 1997). Vassos and Nankervis (2012) found that increased job control was associated with higher levels of personal accomplishment. Kowalski et al. (2010) found that latitude in decision making was associated with increased emotional exhaustion. Gray-Stanley and Muramatsu (2011) investigated internal and external control beliefs and their relationship to burnout. The authors found a relationship between internal control beliefs and reduced levels of burnout, and external control beliefs and increased levels of burnout in staff who reported limited participation in decision making.

Role-identity and the Association with Burnout

A potential area of importance in understanding the relationship between staff stress and burnout is role-identity. Role-identity theory states that behaviour is driven by how an individual sees oneself in a variety of personal and professional roles (Siebert and Siebert, 2005). Role-identities are hierarchically organised by salience, with the more salient identities having the greatest influence on behaviour. They are given meaning through an iterative process of interaction with others and evaluation of one's own performance in that role. Identity theory suggests that we experience emotional distress when our role-relevant behaviours or goals are blocked.

Previous studies have examined the relationship between role-identity and burnout. A study by Reilly (1994) investigated the relationship between work demands and burnout and whether commitment to the nursing role moderated this relationship in nurses. The author found that highly committed nurses experienced less burnout overall but the relationship between work demands and burnout was stronger for more committed workers. Siebert and Siebert (2005) examined the relationship between caregiver role-identity and burnout. They found that those who scored highly on the caregiver role-identity measure reported having greater difficulty asking for help and reported seeking help less frequently than those who scored lower on the measure. Those who scored highly on the role-identity measure also reported higher levels of depressive symptoms, professional impairment and burnout. A study by Vesala (2011) investigated the relationship between role-identity and self-efficacy following the deinstitutionalisation of people with learning disabilities in Finland. This study investigated whether direct care staff viewed their role as being akin to that of a servant or an adviser and the impact that this had on their psychological well-being. The author found that those who viewed their role as an adviser had higher levels of self-efficacy than those who viewed their role as a servant. In this regard it could be said that these people were able to

cope with the demands of the job more effectively. The relationship between burnout and role-identity has not been extensively researched with staff who work in intellectual disabilities services and the relationship between the two remains unclear. Further research is needed to clarify this relationship and investigate the factors that impact upon this relationship.

Self-Determination

Self-determination has emerged as a major focus of interest in the field of intellectual disabilities. In the UK the focus on self-determination has been driven by legislation (Valuing People White Paper, Department of Health, 2001) which promotes the rights, independence, choice and inclusion of people with intellectual disabilities. Self-determination of people with intellectual disabilities involves behaviours such as goal setting, decision making, problem solving and self-management skills (Wehmeyer, Agran and Hughes, 1998). Direct care staff are encouraged to see people with intellectual disabilities as independent agents who have responsibilities for making choices and decisions regarding aspects of their lives. Direct care workers are expected to support the self-determination of their clients by offering advice and information to the person with intellectual disabilities. In this regard it could be said that staff who support the self determination of their clients will perceive themselves as performing fewer tasks and therefore having fewer work-demands. When considering self-determination in the context of role-identity theory, it can be viewed as a role-relevant behaviour. If staff view themselves as an adviser and are supporting the self-determination of their clients there will be congruence between their view of their role and their role-relevant behaviours. Conversely, if staff view themselves as an adviser but are not supporting the self-determination of their clients there will be a lack of congruence between the person and the role in which they occupy. This lack of congruence has been implicated in the development

of chronic strain (Maslach, 2003).

Methodological Limitations of Current Research

The research in this area is varied and many variables have been linked to the development of burnout; however, little research has been conducted to explore the impact of role-identity on the development of burnout in intellectual disabilities staff. Maslach (2003) described burnout as “chronic strain that results from an incongruence, or misfit, between the worker and the job” (Maslach, 2003, p189). This explanation seems to suggest that the greater the congruence between a person and their job role, the less likely they are to experience burnout. The present study seeks to establish if the way a person views their job role affects their level of burnout.

Current research has focused on establishing correlational relationships between burnout and several other variables. The burnout relationship has been shown to be complex and affected by the presence of mediating variables (Mills and Rose, 2011; Rose, Mills Silva and Thompson, 2013). Therefore, to continue to build on this body of research and further the understanding of the development of burnout, the present study will investigate the relationship between work demands and burnout and the factors that mediate this relationship.

Aims and Hypotheses of the Study

The overarching aim of the study is to investigate the relationship between work demands, role-identity and burnout in direct care staff who work with individuals with intellectual disabilities. The study has several aims; (1) to confirm the relationship between work demands and burnout. (2) To explore whether care staff's view of their role (role-identity) is associated with burnout. (3) To explore whether self-determination is associated with burnout. (4) To investigate whether role-identity mediates the relationship between work demands and burnout. (5) To investigate whether self-determination mediates the relationship between work demands and burnout. The review of the literature informed several hypotheses:

Hypothesis 1: Work-Demands are associated with Burnout

Staff who experience increased work demands will experience higher levels of emotional exhaustion and depersonalisation and lower levels of personal accomplishment.

Hypothesis 2: Role-identity is associated with Burnout

Staff who perceive themselves as being in the 'servant' role will experience higher levels of emotional exhaustion and depersonalisation and lower levels of personal accomplishment than staff who perceive themselves as being in the 'adviser' role.

Hypothesis 3: Work demands will be related to Role-identity

Staff who view themselves as an adviser will perceive less work demands than staff who view themselves as being a servant.

Hypothesis 4: Work demands will be related to Self-Determination

Staff who support the self-determination of their clients will perceive less work-demands than staff who do not support the self-determination of their clients.

Hypothesis 5: Self-Determination is associated with decreased levels of Burnout

Staff who support the self-determination of their clients will experience higher levels of personal accomplishment and lower levels of emotional exhaustion and depersonalisation.

Hypothesis 6: There will be a relationship between Self-Determination and Role-identity

Staff who support the Self-determination of their clients will view themselves as taking an 'adviser' role. Staff who do not support the self-determination of their clients will view themselves as taking a 'servant role'.

Hypothesis 7: Role-Identity will mediate the relationship between Work-Demands and Burnout

Role-identity will mediate the relationship between work demands and burnout. Staff who experience high work demands but who view themselves as taking an 'adviser' role will experience higher levels of personal accomplishment and lower levels of emotional exhaustion and depersonalisation.

Hypothesis 8: Self-Determination will mediate the relationship between Work Demands and Burnout

Self-determination will mediate the relationship between work demands and burnout. Staff who experience high work demands but who support the self-determination of their clients will experience higher levels of personal accomplishment and lower levels of emotional exhaustion and depersonalisation.

METHOD

Design

The study used a cross-sectional design. A staff survey was used to collect data from direct care staff working in services for people with intellectual disabilities.

Sample and setting

The inclusion criteria specified that participants were either qualified or unqualified staff working in a direct care role with people with intellectual disabilities in community services. Staff were expected to have been employed in their current role for at least three months and be working a minimum of 16 hours per week in a direct care capacity. In total 70 staff from 14 services participated in the study. The services were independent organisations. The types of services included were group residential facilities, supported living, day centres and community support/day provision.

197 questionnaires were distributed and 88 were returned, which gave a response rate of 39%. 18 of the returned questionnaires had to be excluded from the analysis due to more than 20 percent of the questionnaire being incomplete, which resulted in a total sample of 70 participants.

Ethical Review

The study was reviewed by the University of Birmingham's ethics committee and received full ethical approval (Appendix 4).

Procedure

Organisations that offer community based support for people with intellectual disabilities were identified by the researcher, supervisor and local clinicians. The identified

services were approached and invited to take part in the study. Where possible, the researcher attended a team meeting and provided staff with information about the research. Questionnaire packs were either distributed directly to the staff team or given to managers to distribute. The questionnaire packs included a participant information sheet (Appendix 5) and the questionnaires (Appendix 6). The questionnaires took approximately 25 minutes to complete. Once completed, the questionnaires were sealed in an envelope and were either returned directly to the researcher via prepaid post or stored by managers in a secure place until they could be collected by the researcher. The researcher telephoned the organisations approximately two weeks after distribution of the questionnaires to ask managers to remind staff to complete the questionnaires. The researcher's contact details were made available to staff at each organisation. The participant information sheet included detailed information about the purpose of the study, anonymity and confidentiality and the right to withdraw. The information sheet advised participants that completion and return of the questionnaire implied consent. Due to the procedure used participants were not identifiable once they had sealed and returned their questionnaire and were therefore unable to withdraw after this point.

Measures

Demographic Information Questionnaire

This questionnaire collected information regarding age, gender, qualifications, and length of time in current employment and with people with intellectual disabilities, and training received. Additional information was collected about the service including the number of staff on shift, the type of service and the level of intellectual disability of the clients.

Maslach Burnout Inventory - Human Services Survey (MBI-HSS) (Maslach, Jackson and Leiter, 1996)

This questionnaire measures levels of burnout in staff across three domains: emotional exhaustion, depersonalisation and personal accomplishment. The MBI-HSS comprises 22 statements about participant's feelings towards their job. Respondents are required to rate how often they experience the feeling or attitude described in each statement on a 7-point scale ranging from never to everyday. High levels of burnout are represented by high scores on the emotional exhaustion and depersonalisation subscale and low scores on the personal accomplishment subscale. This measure has previously been used with staff working with people with intellectual disabilities (Chung and Harding, 2009). Hastings, Horne and Mitchell (2004) conducted a factor analytic study of the MBI with care staff working in intellectual disabilities services. This demonstrated that the MBI has good construct validity and reliability across the three domains (emotional exhaustion, $\alpha = 0.87$; depersonalisation $\alpha = 0.68$; personal accomplishment $\alpha = 0.76$).

The Demands of Job Inventory (Rose, 1999)

This measure consists of 33 items and represents some of the most frequently reported work demands placed on community staff. The measure consists of four scales; social role/contact, resident interaction, domestic issues and work pressures. Questions are rated on a 5-point scale (ranging from 1 -not at all demanding to 5 - very demanding). High scores represent high demands. The authors reported that the questionnaire demonstrates a good level of internal consistency ($\alpha = 0.838$; Rose, 1999). This questionnaire has previously been used in research with staff working in intellectual disabilities services (Rose, David and Jones, 2003).

Self-Determination (Vesala, 2011)

This questionnaire measures the level of self-determination staff demonstrate towards the clients they work with. The measure comprises three subscales - general intention, specific situations and other values. The measure consists of 20 questions rated on a 7-point scale (ranging from 1- totally disagree to 7- totally agree). The author reported the Cronbach's Alpha as .692, which is slightly below the acceptable alpha level of 0.7 (Nunnally, 1978).

Role-identity (Vesala, 2011)

This questionnaire measures role-identity. It consists of 15 questions, which measure staff's view of their role on a 7-point scale (ranging from 1- not at all to 7- represents my work very well). The measure comprises two subscales – adviser and servant. Adviser encompasses the roles of teacher and coach. Servant encompasses the role of waiter/waitress and guardian. The measure has good internal consistency across the two domains (adviser $\alpha = .856$; servant $\alpha = .826$). Lower values reflect stronger identification to the role of servant and higher values reflect stronger identification to the role of adviser.

RESULTS

Demographic information was collected, which is presented in Tables 1 and 2.

Descriptive Statistics

Table 1: Demographic Information: Age and Length of Time in Current and Previous Employment in Intellectual Disability Services

	Mean	Range	SD	N
Age (years)	39.7	20-60	12.05	68 (2 missing)
Length of time in current employment (months)	69.89	3-420	80.1	69 (1 missing)
Length of time intellectual disabilities services (months)	105	2-300	87.71	68 (2 missing)

Table 2: *Demographic Information: Gender, Job Title, Qualifications and Type of Service*

Demographic data		N	Percent	Total
Gender	Male	22	31.9	69 (1 missing)
	Female	47	68.1	
Job Title	Managerial	5	7.2	69 (1 missing)
	Direct care staff	64	92.7	
Qualifications	GCSE/NVQ2	13	20.0	65 (5 missing)
	A-Level/NVQ3	33	50.8	
	Degree/NVQ4	19	29.2	
Type of service	Day centre	30	42.9	69 (1 missing)
	Group Home	24	34.3	
	Supported living	1	1.4	
	Other	14	20.0	

Reliability of Measures

The Role-identity questionnaire and Self-Determination questionnaire are both relatively new measures and their use in previous research is limited. Internal consistency, one form of reliability of the measures, was determined by calculating the Cronbach's Alpha scores. The Alpha level for each questionnaire used in the study is reported below (Table 3). A reasonable level of internal consistency is considered to be between 0.70 - 0.80 (Nunnally, 1978). The Role-identity questionnaire has an acceptable level of internal consistency. The Self-Determination questionnaire has an alpha level below 0.7; therefore, the results from this measure should be interpreted with caution.

Table 3: Cronbach's Alpha scores for measures used in the study

Measure	Scale	Cronbach's Alpha	Cronbach's Alpha for study sample
Role-identity questionnaire (Vesala, 2011)	Main scale	.738	.747
Self-Determination questionnaire (Vesala, 2011)	Main scale	.692	.639
The Demands of The Job Inventory (Rose, 1999)	Main scale	.83	.857
MBI – HSS <i>Maslach, Jackson and Leiter, 1996)</i>	Emotional	0.90	0.92
	Exhaustion		
	Depersonalisation	0.79	.688
	Personal Accomplishment	0.71	0.77

Analysis

A power analysis was conducted to determine the number of participants that would be required for the study. According to Cohen's (1988) principles for determining effect sizes, 68 participants would be required to show a medium effect (power = 0.8; Alpha = 0.05 two-tailed, multiple regression). The present study had a sample size of 70.

The data was analysed using the statistical package SPSS Version 21 (2013). The data was checked for normal distribution using the Kolmogorov Smirnov tests to determine the appropriate statistical analysis to use. The majority of the scales were not normally

distributed, therefore the data was analysed using a non-parametric alternative; Spearman's Rho.

Correlational Analysis

Six sets of correlations were performed on the data to test the study's hypotheses. Correlations were performed between burnout and work demands, burnout and role-identity, work-demands and role-identity, work demands and self-determination, burnout and self-determination and role-identity and self-determination.

Hypothesis 1: Work-Demands and Burnout

The Maslach Burnout Inventory and the Demands of the Job Inventory were analysed using the non-parametric test, Spearman's Rho, to look for correlations. The results show significant positive correlations between emotional exhaustion and all subscales of the Demands of the Job Inventory (see table 4). Significant positive correlations were also found between depersonalisation and all scales of the Demands of the Job Inventory except for Resident Interaction. No significant correlations were found between personal accomplishment and work demands. The strongest relationship was found between depersonalisation and Social Role/Contact (SRC) ($\rho = .527$, $n = 70$, $p < 0.01$), which demonstrates that the higher the level of SRC the higher the level of depersonalisation.

Table 4: Correlations between burnout and work demands

		Demands of the Job Inventory Total Mean Score	Social Role/Contact	Resident Interaction	Domestic Issues	Work pressures
EE	Spearman's Rho	.540**	.413**	.400**	.401**	.444**
	Sig 2 tailed	.000	.000	.001	.001	.000
	N	70	70	70	70	70
DP	Spearman's Rho	.365**	.527**	.164	.303*	.207
	Sig 2 tailed	.002	.000	.176	.011	.086
	N	70	70	70	70	70
PA	Spearman's Rho	-.211	-.161	-.266	-.192	-.042
	Sig 2 tailed	.079	.184	.060	.111	.732
	N	70	70	70	70	70
Notes: ** Correlation significant at the 0.01 level (2-tailed)						
* Correlation significant at the 0.05 level (2-tailed)						

Hypothesis 2: Role-identity and Burnout

The data from the Maslach Burnout Inventory and the Role-identity questionnaire were explored for correlations. Overall, emotional exhaustion and depersonalisation showed no relationship to the subscale of adviser vs. servant. Significant positive correlations were found between personal accomplishment and the adviser vs. servant subscale.

Several individual items on the role-identity scale showed a relationship to personal accomplishment. A Bonferroni correction was used to adjust for multiple correlations being performed on the data and to reduce the chances of type 1 and false positives being reported due to multiple correlations being reported. The significant value was set at 0.001 based on this correction ($0.05 / 45 = 0.001$). The servant ($\rho = -.474, n = 70, p < .01$) and parent ($\rho = -.345, n = 70, p < .01$) roles were negatively associated with personal accomplishment. The adviser ($\rho = .407, n = 70, p < .01$) role was positively associated with personal accomplishment.

Table 5: Correlations between role-identity and the three facets of burnout

		Adviser Vs Servant	R1 Friend	R2 Helper	R3 Teacher	R4 Servant	R5 Guide	R6 Adviser	R7 Coach	R8 Guard	R9 Interpreter	R10 Waiter	R11 Home helper	R12 Parent	R13 Therapist	R14 Public-health nurse	R15 Support person
EE	Rho	-.118	-.196	.032	.132	.298	.054	.079	.081	.155	.083	.262	.196	.009	.032	.011	.026
	Sig	.337	.112	.799	.287	.016	.663	.520	.522	.210	.503	.032	.112	.945	.796	.929	.835
	N	68	67	67	67	65	68	68	65	67	68	67	67	66	67	67	68
DP	Rho	-.031	.208	.160	.107	.186	.067	-.011	.058	.072	-.136	.163	-.059	.280	.273	.165	-.098
	Sig	.801	.091	.195	.389	.138	.590	.930	.644	.561	.269	.187	.635	.023	.025	.183	.428
	N	68	67	67	67	65	68	68	65	67	68	67	67	66	67	67	68
PA	Rho	.414**	.020	.215	.135	-.474**	.256	.407**	.247	.026	.162	-.390	-.143	-.354**	-.236	-.219	.263
	Sig	.000	.871	.081	.277	.000	.035	.001	0.48	.837	.186	.001	.250	.004	.055	.075	.030
	N	68	67	67	67	65	68	68	65	67	68	67	67	66	67	67	68
Notes: ** Correlation significant at the 0.01 level (2-tailed)																	
Sig = 2 tailed																	

Hypothesis 3: Work Demands and Role-identity

The data from the Demands of the Job Inventory and the adviser vs servant subscale from the Role-identity questionnaire were explored for correlations. The results showed that no significant relationships exist between work demands and role-identity.

Table 6: Correlations between work demands and role-identity

Work Demands		Adviser vs Servant
	Spearman's Rho	-.180
	Sig 2 tailed	.143
	N	68
	Notes: ** Correlation significant at the 0.01 level (2-tailed) * Correlation significant at the 0.05 level (2-tailed)	

Hypothesis 4: Work demands and Self-Determination

The total scores from the Demands of the Job Inventory and the Self-Determination questionnaire were explored for correlations. The results showed that a significant negative relationship exists between work demands and self-determination.

Table 7: Correlations between work demands and self-determination

Work Demands		Self-Determination Total
	Spearman's Rho	-.247*
	Sig 2 tailed	.039
	N	70
	Notes: ** Correlation significant at the 0.01 level (2-tailed) * Correlation significant at the 0.05 level (2-tailed)	

Hypothesis 5: Self-Determination and burnout

Significant positive correlations were found between personal accomplishment and the three scales of the Self-Determination questionnaire. The strongest relationship was between Supporting Self-Determination in Specific Situations and personal accomplishment ($\rho = .334$, $N=70$, $P < 0.01$). No significant relationships were found between emotional exhaustion and depersonalisation and the scales of the Self-Determination questionnaire.

Table 8: Correlations between burnout and self-determination

		Self-Determination Questionnaire Total Mean	General Intention	Specific Situations	Other Values
EE	Spearman's Rho	-.096	.167	-.203	.054
	Sig 2 tailed	.429	.166	.092	.658
	N	70	70	70	70
DP	Spearman's Rho	-.076	-.145	-.146	.071
	Sig	.534	.230	.227	.557
	N	70	70	70	70
PA	Spearman's Rho	.438**	.282*	.334**	.328**
	Sig 2 tailed	.000	.018	.005	.006
	N	70	70	70	70
Notes: ** Correlation significant at the 0.01 level (2-tailed)					
* Correlation significant at the 0.05 level (2-tailed)					

Hypothesis 6: Role-identity and Self-Determination

The data from the main scales of the Role-identity questionnaire and Self-Determination questionnaires were explored for correlations. No significant relationships were found between role-identity and self-determination.

Table 9: Correlations between role-identity and self-determination

		Self-Determination total
Adviser vs. Servant	Spearman's Rho	.200
	Sig 2 tailed	.102
	N	68

Mediation Analysis

Mediation is the process whereby some variables exert influence on others through mediator variables. A large amount of literature exists which describes the procedure for testing simple mediation hypotheses. Simple mediation effects are described as those whereby an independent variable (X) has an effect on a dependent variable (Y), which is mediated by one additional variable (M). There are several paths involved. Path *a* shows the effect of X on the mediator variable, whilst Path *b* shows the effect of M on Y, partialling out the effect of X. M is understood as being the product of *ab*. The model of mediation proposed by Preacher and Hayes (2008) is presented below (see figure 1). The data was non-parametric; therefore a bootstrapping resampling procedure was used to test for mediation. This test does not assume normality of the sampling distribution. The bootstrapping method involves repetitively sampling from the data set and estimating the indirect effect in each resampled data set using computational methods. This process is repeated many times, generating an approximation of the sampling distribution of *ab*, which is used to create confidence intervals (CI) for the indirect effect. Bootstrapping has been supported for use in simple mediation models (Bollen and Stine, 1990; Lockwood and MacKinnon, 1998; MacKinnon et al., 2004; Shrout and Bolger, 2002 and Preacher and Hayes (2004, 2008).

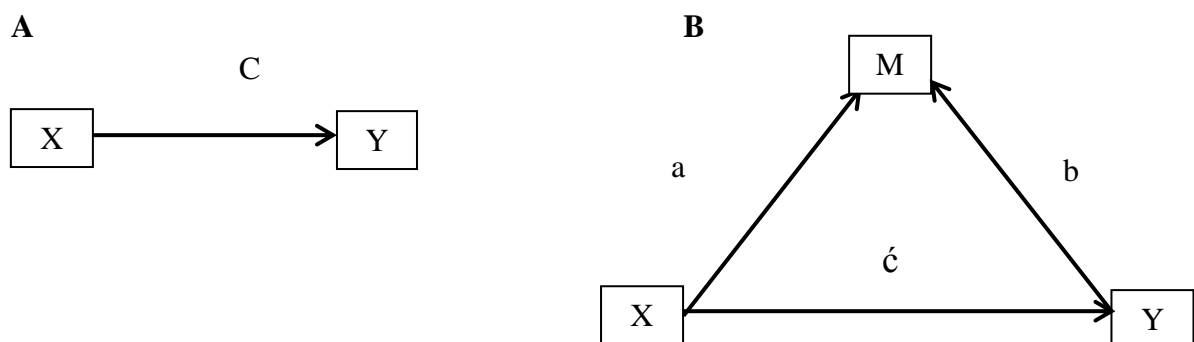


Figure 1. (A) Illustration of a direct effect. X affects Y. (B) Illustration of a mediation design. X is hypothesized to exert an indirect effect through M (Preacher and Hayes, 2008).

Hypothesis 7: Mediation between Work-Demands and Burnout

Correlations between the three variables are illustrated in the mediation model for Role-Identity (see Figure 2).

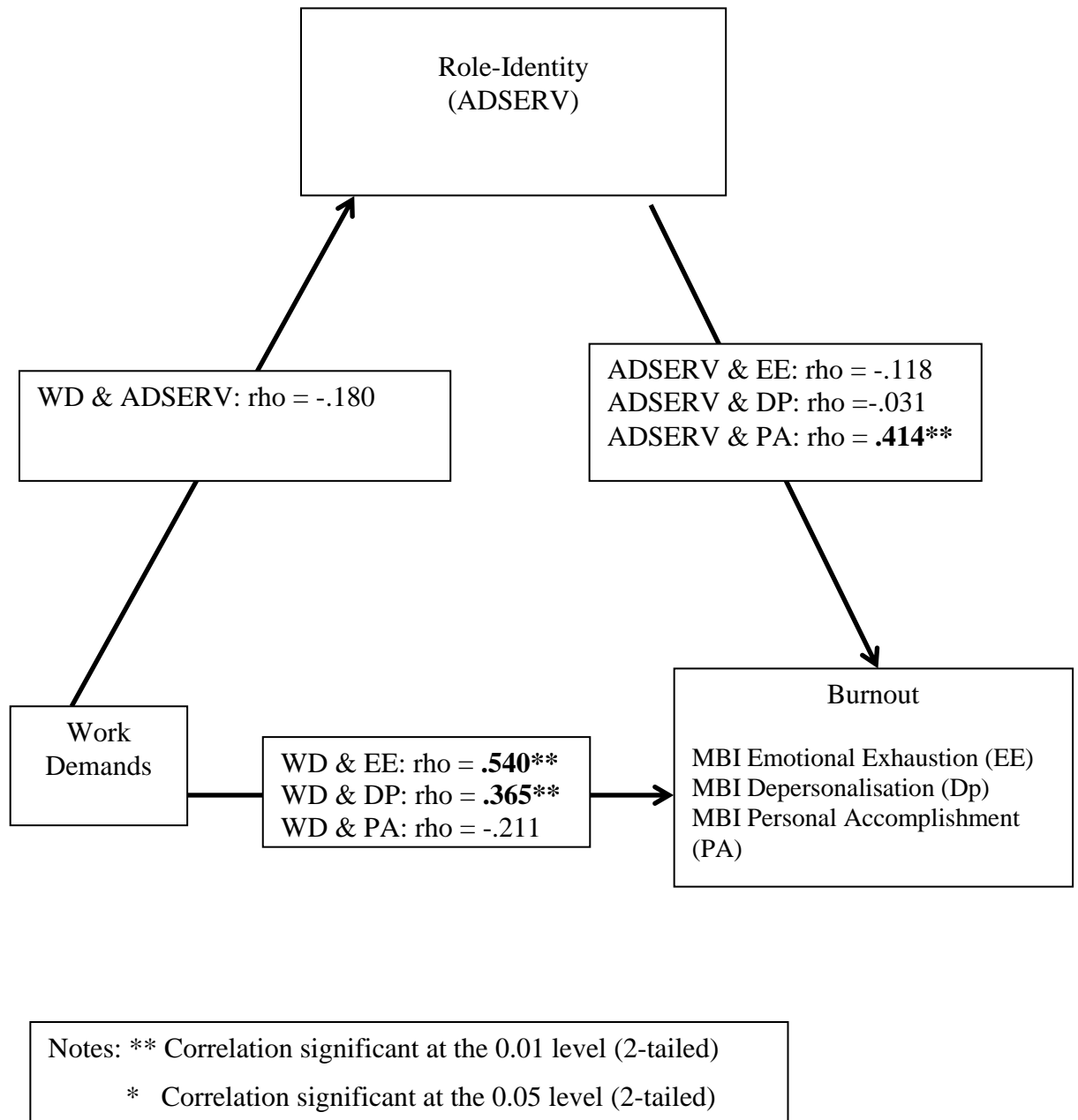


Figure 2. Correlations between the variables in the proposed mediation model for Role-identity.

Figure 2 shows that a significant correlation exists between work demands and emotional exhaustion ($r = .540$, $p = 0.01$) and work demands and depersonalisation ($r = .365$, $p = 0.01$). A significant correlation was not shown between work demands and personal accomplishment. The results also demonstrated a significant relationship between role-identity and personal accomplishment ($r = .414$, $p < 0.01$). A significant correlation was not found between role-identity and emotional exhaustion or depersonalisation. To determine the presence of a mediating relationship, Preacher and Hayes' (2008) bootstrapping three-step regression procedure was used. The results showed that role-identity did not mediate the relationship between work demands and burnout (see table 10).

Table 10: Mediation effect of Role-Identity on Work Demands and Burnout

	Asymptotic Estimate	Bootstrap Path Estimate	Bias	Standard Error	Lower BC 95% CI	Upper BC 95% CI
MBI: Emotional Exhaustion	.0978	.1195	.0216	.4128	-.4715	1.5286
MBI: Depersonalisation	-.1010	-.1111	-.0101	.2483	-.8954	.1923
MBI: Personal Accomplishment	-.8471	-.8870	-.0399	.6582	-2.5219	.2463
n = 70; Bootstrap sample size = 1000; BC: Bias corrected.						

Hypothesis 8: Self-Determination will mediate the relationship between Work Demands and Burnout

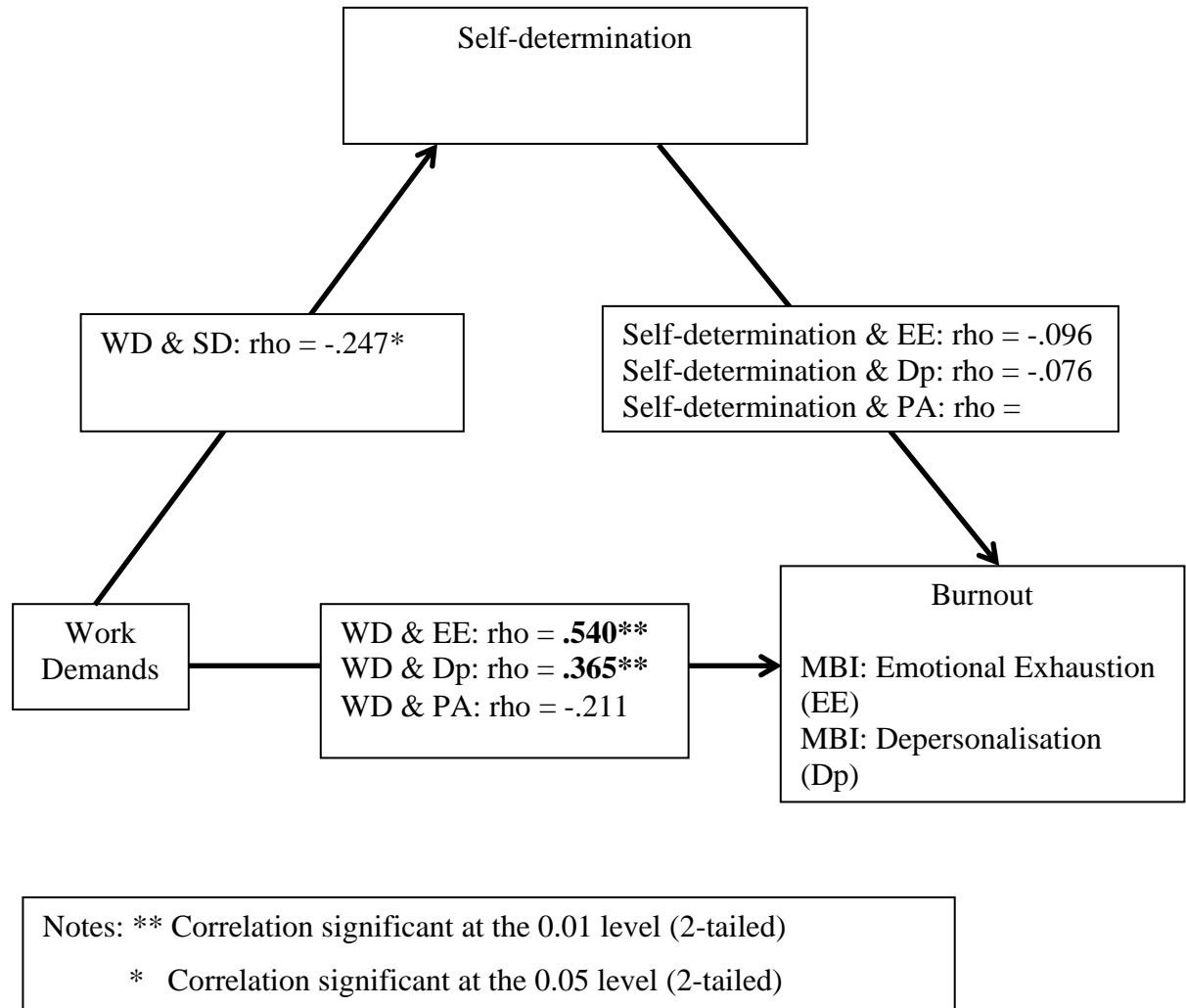


Figure 3: Correlations between the variables in the proposed mediation model for Self-Determination.

Figure 3 shows the same result as identified in the previous model (figure 1) for work demands and burnout. The results demonstrated a significant relationship between self-determination and personal accomplishment ($r = .438, p < 0.01$). No significant relationship was found between self-determination and emotional exhaustion or depersonalisation. Using Preacher and Hayes' (2008) three-step regression procedure, the results show that self-determination does not mediate the relationship between work demands and burnout (see Table 11).

Table 11: Mediation effect of Self-Determination on Work Demands and the three facets of Burnout

	Asymptomic Estimate	Bootstrap Path Estimate	Bias	Standard Error	Lower BC 95% CI	Upper BC 95% CI
MBI: Emotional Exhaustion	.0633	.0041	-.0592	.4564	-8.777	1.1293
MBI: Depersonalisation	-.0236	-.0456	-.0220	.2278	-.6483	.3187
MBI: Personal Accomplishment	-.3144	-.3795	-.0650	.9778	-2.4753	1.5084
n = 70; Bootstrap sample size = 1000; BC: Bias corrected.						

DISCUSSION

The results which relate to hypothesis 1 show that increased work demands are associated with increased levels of burnout. This relationship was consistent between emotional exhaustion and all subscales of the Demands of the Job Inventory. This suggests that work demands are important in the development of emotional exhaustion, which is the first stage of burnout. Work pressures exerted the most influence on this relationship followed by social/role contact. This finding supports previous research which has identified work demands as being associated with increased levels of emotional exhaustion (Kowalski et al., 2010; Gray-Stanley and Muramatsu, 2011; Vassos and Nankervis, 2012). Depersonalisation showed a significant relationship to all scales of the Demands of the Job Inventory, with the exception of the subscale relating to elements of resident interaction. This finding suggests that prolonged exposure to work pressures and social/role contact result in negative changes in the way that staff feel about their clients. The strongest relationship was found between social role/contact, suggesting that the more contact staff have with clients the more depersonalisation they experience. Interestingly, no relationship was found between work demands and personal accomplishment. Overall, hypothesis 1 is partially supported with a relationship between work demands and emotional exhaustion and depersonalisation being identified.

With regards to hypothesis 2, a significant relationship was found between role-identity and personal accomplishment. The results show that staff who identified themselves as taking an adviser role experienced higher levels of personal accomplishment than staff who identified themselves as taking a servant role. This suggests that staff who take a more active role in advising their clients and supporting them to develop independent skills for daily living experienced a greater sense of accomplishment in their role. This finding supports

previous research which has found that verification of role-based identities has a stronger impact on efficacy based self-esteem; that is seeing oneself as competent and capable (Cast and Burke, 2002). No relationship was found between role-identity and emotional exhaustion or depersonalisation, which suggests that the way a person views their job role is not related to their psychological well-being or how they interact with clients. Overall, hypothesis 2 was partially supported with a relationship between role-identity and personal accomplishment being identified.

With regards to hypothesis 3, the results do not show a relationship between role-identity and work demands. This suggests that the view that staff take of their role does not influence their perception of the demands of their job. Hypothesis 3 was not supported.

With regards to hypothesis 4, a negative correlation was found between work demands and self-determination. This result suggests that staff may perceive increased work demands if they do not support their client's self-determination by encouraging them to be autonomous agents. It is likely that staff who support the self-determination of their clients will view themselves as performing fewer tasks and therefore having less work demands than staff who do not support the self-determination of their clients.

The results that relate to hypothesis 5 show that self-determination is related to personal accomplishment with the strongest relationship being found between personal accomplishment and specific situations. The results suggest that staff who support and promote the rights and choices of their clients experience a greater sense of accomplishment and view themselves as more accomplished in their work-based role. This finding supports previous research, which found that negative emotions are associated with not meeting one's identity expectations, whilst positive emotions are associated with meeting one's identity expectations (Stets and Burke, 2003). It was predicted that higher levels of self-determination would be associated with lower levels of emotional exhaustion and depersonalisation;

however, this was not found. Whilst a relationship exists between personal accomplishment and self-determination it is independent from emotional exhaustion and depersonalisation – as a result hypothesis 5 was partially supported.

Both role-identity and self-determination are related to increased levels of personal accomplishment. Taken together the results suggests that individuals who view themselves as an adviser and who support their client's self-determination by offering advice and support experience increased personal accomplishment. Identity theory states that role-identity and role-relevant behaviour and goals should be congruent. We can only speculate, but one explanation for these results might be that the congruence between role-identity and role-relevant behaviour has resulted in increased personal accomplishment in this study sample. Since this is a speculative hypothesis this needs to be investigated further in future studies.

With regards to hypothesis 6, the results show that a relationship does not exist between role-identity and self-determination. This suggests that one's view of their role is not affected by whether or not they demonstrate role-relevant behaviours.

With regards to hypothesis 7, the results show that role-identity did not mediate the relationship between work demands and burnout as predicted; however, there is a correlational relationship between role-identity and personal accomplishment.

A similar result was found for self-determination. Hypothesis 8 predicted that self-determination would mediate the relationship between work demands and burnout; however this was not found. These results are interesting as they suggest that role-identity and self-determination are acting independently of the work demands that staff are responding to, and whilst they don't influence emotional exhaustion and depersonalisation they are important in terms of personal accomplishment.

Methodological Limitations

The study relied on the use of self-report measures, which raises the possibility of social desirability bias and staff under-reporting on items which they deem to be negative (e.g. levels of burnout). Although this is a consideration with this type of research, the burnout scores reported in the study appear to be comparable to previous studies (Rose et al., 2013). The mean scores for the MBI-HS subscales were compared to normative data. The mean emotional exhaustion score reported in this study is within the average range, whereas the depersonalisation score was slightly lower, and the personal accomplishment score higher than the average range for burnout in mental health workers (Maslach, Jackson and Leiter, 1996). The mean scores for all scales of the MBI-HSS are slightly lower than a recent study by Rose et al. (2013); however, they show a similar pattern.

There are some issues with the measures used which need to be considered. The alpha level for the Self-Determination questionnaire was found to be below 0.7 in the current study and in previous research by Vesala (2011). This is a new measure and its reliability has not been fully established. The results from this measure may not be reliable and should be interpreted with caution. This measure requires further psychometric evaluation such as test retest reliability and validity. The Role-identity questionnaire requires further psychometric evaluation; however the results obtained here suggest that it is a reasonably robust measure.

Several of the questionnaires that were returned did not contain full data sets and therefore could not be included in the study. This suggests that the respondents might have lacked confidence in the anonymity procedures used in the study. The questionnaires were either returned by post or to managers for collection by the researcher. This latter procedure might have contributed to the respondent's fears regarding disclosure of any information that could be deemed to be negative.

The study would have benefitted from having a larger sample size. Although, the

number of questionnaires returned was more than the amount recommended in the power analysis, a larger sample would have been useful, especially for the mediational analysis. The study sample was representative and was diverse in terms of gender, educational level and length of employment.

The study utilised a cross-sectional design, which is typical for this type of research. The correlational nature of the study precludes causal inferences from being made. It might be useful to conduct further research using a longitudinal design.

Clinical Implications

The association between personal accomplishment and role-identity suggests that how staff view their role is important for their personal well-being and sense of self-efficacy. It might be useful for organisations to consider this in their recruitment procedures. Organisations could employ occupational psychology methods such as psychometric testing to help them with selecting staff whose role-identity and role-relevant behaviours are congruent with the ethos of the organisation and the nature of the job they are applying for. If staff who view themselves as an adviser and who support the self-determination of their clients are actively selected then the work-force will experience higher levels of personal accomplishment.

Work demands have been shown to be associated with emotional exhaustion and depersonalisation. Organisations should ensure that they have adequate procedures to deal with the impact of work demands on their staff. This could involve offering regular supervision or peer support groups, offering on-the job training to help to cope with the demands of the work and offering interventions to help staff develop personal stress management resources (Tierney, Quinlan and Hastings, 2007).

Self-determination is about supporting individuals to develop the skills to be an

autonomous agent. In order to facilitate this, staff would need clear guidance on about what is expected as part of their role. Staff would also need to have autonomy to support people in the way that they see as being most appropriate whilst having a guiding framework within which to operate. If staff do not have this, it could result in role-ambiguity. Staff should have a clear understanding of their role as role-ambiguity has been found to be associated with increased burnout (Vassos and Nankervis, 2012)

Future research

Burnout is considered to be a longitudinal process which occurs over time. The results of the present study show that role-identity and self-determination are related to personal accomplishment but are not related to emotional exhaustion or depersonalisation. It would be interesting to conduct longitudinal research to explore the direction of this association. Further research could also explore what other factors role-identity and self-determination are related to.

Role- identity and self-determination are acting independently of the demands that staff are responding to. Role- identity and self-determination do not influence emotional exhaustion and depersonalisation but both are important in terms of personal accomplishment. It might be important to investigate these variables to help staff to develop meaning from their jobs. If staff are going to develop their careers it is going to be vital for them to view their jobs in a way that that is congruent with the expectations of the role and ethos of the service. Staff should be given support to work with clients in ways that encourage the client's self-determination but that are flexible enough to offer the staff member autonomy to work within the service framework.

References

- Aitken, C. J., & Schloss, J. A. (1994). Occupational stress and burnout amongst staff working with people with an intellectual disability. *Behavioral Interventions*, 9(4), 225-234.
- Alexander, M., & Hegarty, J. R. (2000). Measuring staff burnout in a community home. *The British Journal of Development Disabilities*, 46(90), 51-62.
- Blumenthal, S., Lavender, T., & Hewson, S. (1998). Role clarity, perception of the organization and burnout amongst support workers in residential homes for people with intellectual disability: A comparison between a National Health Service trust and a charitable company. *Journal of Intellectual Disability Research*, 42(5), 409-417.
- Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological methodology*, 20(1), 15-140.
- Cast, A. D., & Burke, P. J. (2002). A theory of self-esteem. *Social forces*, 80(3), 1041-1068.
- Chung M. C. & Harding C. (2009) Investigating burnout and psychological well-being of staff working with people with intellectual disabilities and challenging behaviour: the role of personality. *Journal of Applied Research in Intellectual Disabilities* 22, 549–60.
- Department of Health. (2001) *Valuing People: a New Strategy for Learning Disability for the 21st Century (Cm5086)*. The Stationary Office, London.
- Devereux, J. M., Hastings, R. P., Noone, S. J., Firth, A., & Totsika, V. (2009). Social support and coping as mediators or moderators of the impact of work stressors on burnout in intellectual disability support staff. *Research in Developmental Disabilities*, 30(2), 367-377.

- Dyer, S. & Quine, L. (1998). Predictors of job satisfaction and burnout among the direct care staff of a community learning disability service. *Journal of Applied Research In Intellectual Disabilities*, 11 (4), 320-332.
- Freeman M. (1994) The differential impact on carers dealing with clients with challenging behaviours. *Journal of Community & Applied Social Psychology* 4, 181–7.
- Gray-Stanley, J. A., Muramatsu, N., Heller, T., Hughes, S., Johnson, T. P., & Ramirez-Valles, J. (2011). Work stress and depression among direct support professionals: the role of work support and locus of control. *Journal of Intellectual Disability Research*, 54(8), 749-761.
- Hastings, R.P. (2002). Do challenging behaviours affect staff psychological well-being? Issues of causality and mechanism (electronic version). *American Journal on Mental Retardation*, 107 (6), 455-467.
- Hastings, R., & Horne, S. (2004). Positive perceptions held by support staff in community mental retardation services. *Journal Information*, 109(1).
- Hastings, R. P., Horne, S., & Mitchell, G. (2004). Burnout in direct care staff in intellectual disability services: a factor analytic study of the Maslach Burnout Inventory. *Journal of Intellectual Disability Research*, 48(3), 268-273.
- Hatton, C. & Emerson, E. (1995). The Development of a Shortened ‘Ways of Coping’ Questionnaire for use with Direct Care Staff in Learning Disabilities Services. *Mental Handicap Research*, 8, 237-251.
- Hatton, C., Rivers M., Mason H., Kiernan C., Emerson E., Alborz A. & Reeves D. (1997) *Staff in Services for People with Learning Disabilities*. Hester Adrian Research Centre, University of Manchester, Manchester.

- Hatton, C., & Emerson, E. (1998). Brief report: organisational predictors of actual staff turnover in a service for people with multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 11(2), 166-171.
- Hatton, C., Emerson, E., Rivers, M., Mason, H., Mason, L., Swarbrick, R., and Alborz, A. (1999). Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *Journal of Intellectual Disability Research*, 43(4), 253-267.
- Hatton, C., Rose, J. and Rose, D. (2004) Researching Staff. In: *Handbook of methods for Research and Evaluation in Intellectual Disabilities*. Emerson, E., Hatton, C. Parmenter, T. and Thompson, T (Eds.). Wiley.
- Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2002). Burnout among people working with intellectually disabled persons: a theory update and an example. *Scandinavian journal of caring sciences*, 16 (3), 272-279.
- Ito, H., Kurita, H. & Shiya, J. (1999). Burnout among direct-care staff members of facilities for persons with mental retardation in Japan. *Mental Retardation*, 37, 477-481.
- Jenkins, R., Rose, J., & Lovell, C. (1997). Psychological well-being of staff working with people who have challenging behaviour. *Journal of Intellectual Disability Research*, 41(6), 502-511.
- Kowalski, C., Driller, E., Ernstmann, N., Alich, S., Karbach, U., Ommen, O. & Pfaff, H. (2010). Associations between emotional exhaustion, social capital, workload, and latitude in decision-making among professionals working with people with disabilities. *Research in developmental disabilities*, 31(2), 470-479.
- Lambrechts G., Kuppens S. & Maes B. (2009) Staff variables associated with the challenging behaviour of clients with severe or profound intellectual disabilities. *Journal of Intellectual Disability Research* 53, 620–32.

- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lockwood, C. M., & MacKinnon, D. P. (1998, March). Bootstrapping the standard error of the mediated effect. In *Proceedings of the 23rd annual meeting of SAS Users Group International* (pp. 997-1002). Cary, NC: SAS Institute, Inc.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research*, 39(1), 99-128.
- Maslach, C., & Jackson, S.E. (1986). Maslach Burnout Inventory Manual (2nd ed.) Palo Alto, CA; Consulting Psychologists Press. Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviors. *Journal Information*, 106(5).
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.
- Maslach, C. (2003). Job Burnout New Directions in Research and Intervention. *Current directions in psychological science*, 12(5), 189-192.
- Mutkins, E., Brown, R. F., & Thorsteinsson, E. B. (2011). Stress, depression, workplace and social supports and burnout in intellectual disability support staff. *Journal of Intellectual Disability Research*, 55(5), 500-510.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill, Inc.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Reily, N.P. (1994). Exploring a Paradox: Commitment as a Moderator of the Stressor-Burnout Relationship. *Journal of Applied Social Psychology*, 24 (5), 397-414.
- Robertson, J., Hatton, C., Felce, D., Meek, A., Carr, D., Knapp, M., & Lowe, K. (2005). Staff Stress and Morale in Community-Based Settings for People with Intellectual Disabilities and Challenging Behaviour: A Brief Report. *Journal of Applied Research in Intellectual Disabilities*, 18(3), 271-277.
- Rose, J., Jones, F. & Fletcher, C.B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research*, 42, 163-172.
- Rose, J. & Shelewa-Davis, D. (1996). The relationship between staff stress and team climate in residential services. *Journal of Learning Disabilities for Nursing, Health and Social Care*, 1, 19-24.
- Rose, J., Jones, F. & Fletcher, C.B. (1998). Investigating the relationship between stress and worker behaviour. *Journal of Intellectual Disability Research*, 42, 163-172.
- Rose, J. (1999). Stress and residential staff who work with people who have an intellectual disability: a factor analytic study. *Journal of Intellectual Disability Research*, 43(4), 268-278.
- Rose, J., David, G. and Jones, C. (2003) Staff who work with people who have intellectual disabilities: The importance of personality. *Journal of Applied Research in Intellectual Disabilities*, 16, 4, 267-278.
- Rose, D., Horne, S., Rose, J. L., & Hastings, R. P. (2004). Negative emotional reactions to challenging behaviour and staff burnout: Two replication studies. *Journal of Applied Research in Intellectual Disabilities*, 16(3), 219-223.

- Rose, J. (2011). How do staff psychological factors influence outcomes for people with developmental and intellectual disability in residential services? *Current Opinion in Psychiatry*, 24(5), 403-407.
- Rose, J., Mills, S., Silva, D., & Thompson, L. (2013). Client characteristics, organizational variables and burnout in care staff: The mediating role of fear of assault. *Research in developmental disabilities*, 34(3), 940-947.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological methods*, 7(4), 422.
- Siebert, D.C., & Siebert, C.F. (2005). The Caregiver Role Identity Scale – A Validation Study. *Research on Social Work Practice*, 15 (3), 204-212.
- Stets, J. E., & Burke, P. J. (2003). A sociological approach to self and identity. *Handbook of self and identity*, 128-152.
- Tierney, E., Quinlan, D., & Hastings, R. P. (2007). Impact of a 3-Day Training Course on Challenging Behaviour on Staff Cognitive and Emotional Responses. *Journal of Applied Research in Intellectual Disabilities*, 20(1), 58-63.
- Vassos, M. V., & Nankervis, K. L. (2012). Investigating the importance of various individual, interpersonal, organisational and demographic variables when predicting job burnout in disability support workers. *Research in Developmental Disabilities*, 33(6), 1680-1691.
- Vesala, H. (2011, May). Supporting the self-determination of people with intellectual disabilities as a part of staff's occupational identity: Comparison between Finland and Italy. Paper presented at Nordic Network on Disability Research Reykjavik, (NNDR 2011).

Wehmeyer, M. L., Agran, M., & Hughes, C. (1998). *Teaching self-determination to students with disabilities: Basic skills for successful transition*. Paul H. Brookes Publishing Co., PO Box 10624, Baltimore, MD 21285-0624.

PUBLIC DOMAIN BRIEFING PAPER

The relationship between Role-identity, Work Demands and Burnout in direct care staff working with individuals with Intellectual Disabilities

The research study was carried out by Cara Outar (Trainee Clinical Psychologist) in partial fulfilment of the degree of Doctor of Clinical Psychology (Clin. Psy. D.) at the University of Birmingham.

Background

Increased staff stress and burnout can have a detrimental impact on the delivery of services (Hastings, 2002). Staff with increased stress levels interact less with clients and the quality of that interaction is diminished (Rose, Jones and Fletcher, 1998). Increased stress levels have been linked to higher rates of sickness and absenteeism and increased turnover of staff (Hatton and Emerson, 1995). Furthermore, burnout has been identified as a risk factor for employee's intention to terminate their employment (Hastings, Horne and Mitchell, 2004). This results in economic costs to services when finding additional staff to cover absenteeism from sickness and employing and training new staff due to high turnover. Employers have a legal and moral obligation to ensure high quality care for their clients and to ensure the well-being of their staff (Hastings, 2002).

A review of the literature on burnout in direct care staff was conducted in 2004 by Hatton, Rose and Rose (2004). There have been several studies published since then. Therefore, a review of the literature was conducted between 2004 and 2013 to offer an update to the review by Hatton et al. (2004). The search terms used to generate papers were variations on the terms 'burnout,' 'stress,' 'community and 'intellectual disability,' and the search focused on paid direct care staff working with adults in community services. The search generated fifteen journal articles relevant to the review. The findings of this review suggest that several variables contribute to the development and maintenance of burnout. This includes client factors, such as challenging behaviour and staff factors such as, personality and coping strategies. There are several organisational factors that contribute to burnout

including support, organisational and job security. The variables within these broad categories overlap with one another, suggesting that the development of burnout is complex and influenced by many factors. The present study aims to investigate the burnout relationship by exploring the concepts of role-identity and self-determination and its relationship to burnout.

Aims

The aim of the study is to explore the relationship between work demands and burnout and whether role-identity or self-determination mediate this relationship.

Method

A total of 70 staff participated in the study from a range of community based services in the independent sector. Staff were asked to complete questionnaires on burnout, their view of their role and work demands. The questionnaire collected demographic information, including age, gender, length of employment and type of service that staff worked in.

Burnout was measured using the Maslach Burnout Inventory – Human Services Survey (Maslach, Jackson and Leiter, 1996). Maslach (2003) describes burnout’ as a psychological syndrome which occurs as a result of prolonged exposure “to chronic emotional and interpersonal stressors on the job” (Maslach, 2003, p. 189). Role-identity was measured using the Role-identity questionnaire (Vesala, 2011). Self-determination was measured using the Self-determination questionnaire (Vesala, 2011), and work demands were measured using the Demands of the Job Inventory (Rose, 1999).

Summary of Research Findings

Correlational analyses demonstrated that increased worked demands are associated with higher levels of emotional exhaustion and depersonalisation of clients. Staff who viewed

themselves as taking an adviser role as opposed to a servant role reported higher levels of personal accomplishment. Staff who supported the self-determination of their clients by encouraging the development of independent skills reported experiencing more personal accomplishment and less perceived work demands than staff who did not support the self-determination of their clients.

Limitations of the Research

The research relied upon staff to report on their experience of difficult feelings in regards to their job role. It is possible that staff did not want to disclose this information or did not disclose the full extent of their feelings. The research was correlational which means that although relationships can be established causality cannot be determined.

Implications for Clinical Practice

The results suggest that the view staff take of their role does not affect their level of emotional exhaustion or how they interact with their clients but it does affect how accomplished they feel in their job role. Staff who view themselves in a supportive role, offering advice to clients feel a greater sense of personal accomplishment than staff who feel like a servant. Staff who support their clients to be independent and develop new skills feel more accomplishment and perceive less work demands than staff who support their clients by physically performing tasks on their behalf.

Future Research

Much of the research into burnout is cross-sectional. Burnout is known to develop over time and it might be interesting to conduct longitudinal research which maps this change.

APPENDICES

Appendix 1: Summary of studies included in the review

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Rose, Horne, Rose and Hastings (2004) UK	A replication study to investigate the relationship between staff emotional reactions to challenging behaviour and well-being.	Study 1 n=101 staff Study 2 n= 99 staff	Maslach Burnout Inventory (MBI; Maslach Jackson and Leiter, 1996). Emotional Reactions to Challenging Behaviour Scale (Mitchell and Hastings, 1998) Vignettes and Emotion Scale (Dagnan et al., 1998)	The results showed significant positive correlations between negative emotional reactions and emotional exhaustion and depersonalisation. No association was found between negative emotional reactions and personal accomplishment. The findings replicate the study by Mitchell and Hastings (2001).

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Rose and Rose (2005)	Investigated the relationship between stress and attributions of challenging behaviour.	n = 107 Direct care staff working in community homes.	<p>Attribution Style Questionnaire (Peterson et al., 1982; Sharrock et al., 1990)</p> <p>Emotion Reactions (Dagnan et al., 1998).</p> <p>Optimism (Dagnan et al., 1998)</p> <p>Aberrant Behaviour Checklist (Aman and Singh, 1986).</p> <p>Staff Self-Report Measure (Likert, 1932)</p> <p>Helping Behaviour (Weiner 1986; Sharrock et al., 1990; Dagnan et al., 1998)</p> <p>General Health Questionnaire (Goldberg, 1972)</p> <p>Maslach Burnout Inventory (Maslach et al., 1996)</p>	Partial support was found for the role of attributions and emotions.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Robertson, Hatton, Felce, Meek, Carr, Knapp, Hallam, Emerson, Pinkney, Caesar and Lowe (2005)	To investigate stress, morale and intended job turnover in staff in two types of community-based residential support services.	n = 157 Direct care staff.	General Health Questionnaire-12 (Goldberg, 1978) Staff Stress and Morale - (Hatton et al., 1997). Potential Sources of Stress (Bersani and Heifetz, 1985; Hatton et al., 1995). Job strain (Borrill et al., 1996). Propensity to leave the organization (Allen et al., 1990; Hatton and Emerson, 1993) Work satisfaction (Hackman and Oldham, 1975)	Challenging behaviour was associated with increased stress. Staff working in non-congregate settings reported increased stress when there were higher levels of challenging behaviour. Bureaucracy and low job status were identified as stressors. Job insecurity was identified as a stressor for those working in congregate settings.

Author and country	Main focus of research	Sample	Measures	Main finding relevant to review
Rose, Ahuja and Jones (2006) UK	To develop a measure of staff attitudes towards professionals and to investigate the relationship between team climate and psychological well-being.	n =72 Direct care staff working in community homes.	Care Staff Attitude Questionnaire (Rose, Ahuja and Jones, 2006) General Health Questionnaire-12 (Goldberg, 1978) Team Climate Inventory (Anderson and West, 1994)	Significant correlations were found between care staff attitudes, team climate and psychological well-being.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Mascha (2007) UK	To investigate burnout, job satisfaction and intended turnover of staff in relation to role clarity, staff support, supervision, and coping strategies used by staff.	n = 36 Direct care staff.	Maslach Burnout Inventory (Maslach and Jackson, 1986) The Staff Support Questionnaire (Harris and Thomson, 1993) Shortened Ways of Coping-Revised (Hatton and Emerson, 1995; Hatton et al., 1999)	Single people reported more feelings of depersonalisation than married or divorced/separated people. Increased satisfaction with supervision was associated with decreased emotional exhaustion and increased job satisfaction.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Devereux, Hastings, Noone, Firth and Totsika (2009) UK	Investigated the relationship between coping, support, perceived work demands and burnout.	n = 96 Qualified and unqualified.	Maslach Burnout Inventory (Maslach et al., 1996) Staff Stressor Questionnaire (Hatton et al., 1999) Shortened Ways of Coping Questionnaire (Hatton and Emerson, 1995) Staff Support and Satisfaction Questionnaire (Harris and Rose, 2002)	Part-time worker reported lower levels of personal accomplishment than full-time workers. Wishful thinking coping was a positive predictor of emotional exhaustion. Practical coping was a positive predictor of personal accomplishment. Wishful thinking partially mediated between work demands and emotional exhaustion.

Author and country	Main focus of research	Sample	Measures	Main finding relevant to review
Chung and Harding (2009) UK	Investigated the impact of personality on burnout and psychological well-being.	n =103 Direct care staff working in residential homes.	Aberrant Behaviour Checklist (Aman et al., 1985; Newton and Sturmey, 1988) Maslach Burnout Inventory (Maslach and Jackson, 1986) General Health Questionnaire-28 (Goldberg and Hillier, 1979) NEO-Five Factor Inventory (Costa and McCrae, 1992)	Personality traits can affect the degree of burnout and poor psychological well-being that staff may experience.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
<p>Kowalski, Driller, Ernstmann, Alich, Karbach, Ommen, Schulz-Nieswandt and Pfaff (2010)</p> <p>Germany</p>	<p>Investigated the relationship between social capital, latitude in decision-making and emotional exhaustion.</p>	<p>n=165</p> <p>Staff working in residential and non-residential services.</p>	<p>Emotional Exhaustion subscale from Maslach Burnout Inventory – General Survey. (Schaufeli, Leiter, Maslach and Jackson, 1996)</p> <p>Social Capital in Organisations (Pfaff, Lütticke, Badura, Piekarski and Richter, 2004)</p> <p>Socio-demographic variables, working experience, workload and latitude in decision-making (Richter et al., 2000)</p>	<p>Males reported higher burnout levels than females.</p> <p>Increased workload was associated with increased emotional exhaustion and depersonalisation.</p> <p>Perceived lack of latitude in decision-making was associated with increased emotional exhaustion.</p>

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Thomas and Rose (2010) UK	Investigated the relationship between reciprocity, burnout and emotional and physical withdrawal in staff.	n =102 (7 excluded from analysis) Staff working in community homes for people with intellectual disabilities.	Maslach Burnout Inventory (Maslach et al., 1996) Global Reciprocity Measure (Van Horn et al., 1999). Specific Reciprocity Measure (Jeffcott, 2002) Optimism (Dagnan, Trower and Smith, 1998). Helping Behaviour Scale (e.g. Weiner, 1980; Sharrock, Day, Qazi and Brewin, 1990) Positive and Negative Affect Schedule (Watson, Clark and Tellegen, 1998)	A lack of perceived reciprocity with service users was associated with increased emotional exhaustion.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Mutkins, Brown and Thorsteinsson (2011) Australia	Investigated associations between work stressors, staff emotional responses, social and organisational support and burnout.	n= 80 (58 female, 21 male). Intellectual disability support staff.	Maslach Burnout Inventory (MBI; Maslach Jackson and Leiter, 1996) DASS-21 (Lovibond and Lovibond, 1995). Perceived Organisational Support (POS). Social Support Questionnaire (SSQ).	No relationship was found between challenging behaviour and burnout. Low perceived organisational support was associated with increased emotional exhaustion and depersonalisation. Social support was associated with reduced personal accomplishment. Satisfaction with social support moderated between high psychological stress to less emotional exhaustion.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Mills and Rose (2011) UK	Investigated the relationship between cognitive variables, challenging behaviour and burnout.	n =78 Qualified and unqualified staff direct care staff.	Maslach Burnout Inventory (Maslach et al., 1996) Checklist of Challenging Behaviour (Harris et al., 1994) Challenging Behaviour Perception Questionnaire (Williams and Rose, 2007) Controllability Beliefs Scale (Dagnan et al., 2004) Fear of Assault (Rose and Cleary, 2007)	Higher levels of challenging behaviour are associated with higher levels of burnout. Fear of assault was associated with increased burnout. Fear of assault mediated the relationship between challenging behaviour and burnout.

Author and country	Main focus of research	Sample	Measures	Main finding relevant to review
Gray-Stanley and Muramatsu (2011) USA	Investigated the relationship between work stress, resources and burnout.	n =323 Direct care workers.	Emotional Exhaustion subscale from Maslach Burnout Inventory (Maslach and Jackson, 1996) Work Stress (Hester Adrian Research Centre, 1999) Work Social Support (West and Savage, 1988) Locus of Control (Ross and Mirowsky, 1989)	Increased workload is associated with increased emotional exhaustion and depersonalisation. Internal control beliefs were associated with reduced burnout and external control beliefs were associated with increased burnout in staff who reported limited participation in decision-making.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Vassos and Nankervis (2012) Germany	Investigated factors that contribute to the prediction of burnout.	n = 108 Disability support workers.	Maslach Burnout Inventory- Human Services Survey (Maslach et al.,1996) Sources of Stress Questionnaire (Hatton et al., 1999) Opinion items regarding workplace practices (Hatton et al., 1997)	Challenging Behaviour was a significant predictor of burnout. Increased workload was a predictor of emotional exhaustion. Increased job feedback and job control was a predictor of personal accomplishment. Role-ambiguity was a predictor of depersonalisation and emotional exhaustion. Supervisor support and work-home and role-conflict were predictors of depersonalisation. Role conflict was a predictor of emotional exhaustion. Gender was a predictor of depersonalisation

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Rose, Mills, Silva and Thompson (2013) UK	Relationship between staff psychological well-being, challenging behaviour and the therapeutic environment and the role of fear of assault as a mediating variable.	n = 77 Qualified and unqualified direct care staff working in homes for adults with intellectual disabilities. 86 % worked in community settings and 14 % worked in secure settings	Maslach Burnout Inventory – Human Services Survey (Maslach et al., 1996) Fear of Assault (adapted from Leather et al., 1997 by Rose and Cleary, 2007) A Checklist of Challenging Behaviours (Harris et al., 1994) Modified Version of Essen Climate Evaluation Schema (Schalast et al., 2008)	An association was found between challenging behaviour and emotional exhaustion. Fear of assault mediated this relationship. A relationship was found between experienced safety and emotional exhaustion. This relationship was mediated by fear of assault.

Author and country	Main focus of research	Sample	Measures	Main findings relevant to review
Kozak, Kersten, Schillmöller, Nienhaus (2013) Germany	Relationship between demographic, job-related characteristics and perceived psychosocial factors and burnout.	n = 409 Staff at all levels from various professional backgrounds working with an intellectual disability.	Copenhagen Burnout Inventory (Kristensen, Hannerz, Hogh, Borg, 2005) Copenhagen Psychosocial Questionnaire (Nübling, Stöbel, Hasselhorn, Michaelis and Hoffman, 2005)	Females were found to experience higher levels of burnout than males. Increased performance related feedback was associated with lower levels of burnout. Job insecurity, work-privacy and role -conflict were found to be predictors of burnout.

Appendix 2: Quality Index scores (Downs and Black, 1998)

Author	Total	Reporting	External validity	Internal validity – bias	Internal validity – confounding	Power
	(18)	(8)	(2)	(4)	(3)	(1)
Kozak, et al. (2013)	10	5	2	3	0	0
Rose et al. (2013)	12	6	2	3	0	1
Vassos and Nankervis (2012)	9	5	2	2	0	1
Mills and Rose (2011)	13	6	2	3	1	1
Gray-Stanley and Muramatsu (2011)	13	6	2	2	2	1
Mutkins et al. (2011)	13	6	2	3	2	0
Kowalski et al. (2010)	13	6	2	3	1	1
Thomas and Rose (2010)	13	6	2	3	1	1
Chung and Harding (2009)	14	6	2	3	2	1
Devereux et al. (2009)	13	6	2	4	1	1
Mascha (2007)	11	5	2	2	2	0
Rose et al. (2006)	14	6	2	2	3	1
Robertson et al. (2005)	13	2	2	2	2	1
Rose and Rose (2005)	14	6	2	3	2	1
Rose et al. (2004)	10	4	2	2	1	1

Appendix 3: Quality Index scoring criteria (Downs and Black, 1998)

Criteria	Points		
Reporting	Yes	No	
1. Clear description of hypothesis / aims	1	0	
2. Main outcomes to be measured reported	1	0	
3. Characteristics of sample clearly reported	1	0	
4. Intervention clearly reported	1	0	
5. Principle confounders reported	1	0	
6. Findings clearly reported	1	0	
7. Estimates of random variability provided	1	0	
8 Actual probability values reported e.g. 0.035 not <0.05 except where less than 0.001	1	0	
External validity			Unable to determine
9. Sample representativeness of population	1	0	0
10. Participation representativeness of population	1	0	0
Internal Validity – Bias			
11. No unplanned statistical analyses	1	0	0
12. Adjustment for different lengths of follow-up	1	0	0
13. Appropriateness of statistical analysis	1	0	0
14. Outcome measures accurate (reliable and valid)	1	0	0
Internal Validity Confounding (selection bias)			
15. Participants recruited from same population	1	0	0
16. Participants recruited over same period of time	1	0	0
16. Adjustment for confounding variables	1	0	0
Power			
18. Sufficient power to detect clinically significant effect	1	0	0

Appendix 4: Ethical Approval Letter



UNIVERSITY OF
BIRMINGHAM

Finance Office

Director of Finance
Mrs G Ball FCCA

10th August 2012

Dr John Rose
School of Psychology
University of Birmingham

Dear Dr Rose

Re: “Work stressors and burnout in direct care staff: Does role-identity mediate this relationship?”

Application for Ethical Review ERN_12-0366

Thank you for your application for ethical review for the above project, which was reviewed by the Science, Technology, Engineering and Mathematics Ethical Review Committee.

On behalf of the Committee, I can confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at <http://www.rcs.bham.ac.uk/ethics/links/index.shtml>) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (<http://www.rcs.bham.ac.uk/ethics/forms/index.shtml>) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.



University of Birmingham Edgbaston Birmingham B15 2TT United Kingdom

INVESTOR IN PEOPLE

Participant Information Sheet

Study Title:

Work-Stress and Burnout in direct care staff: Does role-identity mediate this relationship?

The purpose of the study

The following questionnaire pack examines levels of staff burnout and two factors which may affect burnout:

- 1) How staff view their role (role-identity)
- 2) Level of work-stressors

Who is the research being conducted by?

This questionnaire pack has been developed by Cara Outar (Trainee Clinical Psychologist) based at:

Clinical Psychology Office

School of Psychology

University of Birmingham

Edgbaston

Birmingham

B15 2TT

The research is part of a Doctorate in Clinical Psychology, and is being supervised by Dr. John Rose (Clinical Psychologist) at the University of Birmingham.

Why have I been asked to take part?

Those who have been asked to take part are:

- Direct care staff who are currently working in community services with people with learning disabilities.
- Staff who have been employed for at least three months in their current service.
- Direct care staff who work at least 16 hours per week in their current service.

Do I have to take part?

Participation in the research is completely voluntary. Non-participation will not affect your employment. The questionnaires do not contain any personally identifiable information. To maintain confidentiality, once completed the questionnaire will be immediately sealed in a pre-paid envelope and returned to the Chief Investigator by post.

What will happen if I take part / What do I have to do?

If you would like to take part, you will be asked to complete a questionnaire pack. It is important to be as honest as possible when answering the questionnaires, in order to obtain an

accurate reflection what influences staff burnout. The questionnaires will ask you about aspects of your employment, levels of stress and your view your job role. Once you have completed the questionnaire pack they need to be immediately sealed to maintain confidentiality and returned to the Chief Investigator in the stamped addressed envelope provided.

How long will the questionnaire pack take to complete?

The questionnaire pack will take approximately 20 minutes to complete.

What are the possible benefits of taking part?

The research gives an opportunity to reflect upon your current employment and factors which might contribute to increased stress levels. By taking part you will be contributing to an important area of research which may have implications for managing staff well-being.

What are the possible disadvantages and risks of taking part?

The questionnaires will be asking about potentially sensitive issues related to your employment. If any of the questions cause you distress, and you feel you would like to talk to someone about these issues in confidence, please contact Prof. John Rose who is a Clinical Psychologist supervising the research, who will be able to signpost you to appropriate support.

When the Chief Investigator visits the service, it is possible that they might witness or hear something of concern, which needs to be reported. A discussion will be held with managers to formulate a plan of action should this occur.

What will happen when the research study stops?

The results of the research will be fed back to staff by way of a report.

Will my taking part in the study be kept confidential?

If you decide not to participate in the research, this will not affect your employment. Your colleagues and managers will not be informed of any individual results. The questionnaire is anonymous, which means that no individual answers will be identifiable. However, this means that it will not be possible to withdraw from the research once the completed questionnaire has been returned. To maintain confidentiality completed questionnaires will be immediately sealed and returned in pre-paid envelopes to the Chief Investigator.

What if there is a problem?

If there is a problem, or you require more information about the study, please do not hesitate to contact Prof. John Rose.

Contact details:

If you have any queries, concerns or comments about the research please feel free to contact Prof. John Rose at the University of Birmingham on 0121 4144915. The internal contact at your organisation will be your service manager.

Consent to take part in the research

Completion and return of the questionnaire implies consent. The questionnaires contain no personally identifiable information, therefore once the questionnaires have been returned withdrawal from the study is not possible.

Thank you for taking the time to read this

Appendix 6: Questionnaire



UNIVERSITY OF
BIRMINGHAM

School of Psychology

Does Role-Identity mediate the relationship between Work-Stress and Well-Being in direct care staff working with individuals with intellectual

Thank you for taking the time to read though and complete the questionnaires for the above mentioned research. The information you provide is treated in strictest confidence and will be used only for the purpose of the present research.

Your participation in the research is voluntary. However, once the questionnaire is returned withdrawal from the study is not possible.

Guidelines for completing the questionnaires

You are required to complete a personal Information section and to provide information about where you work. You will not be asked to write your name on the form or to name the service that you work for. This background information is an important aspect of the research. It provides us with a summary of who participated in the research. Following this you will proceed to complete four short questionnaires.

- For each section you are asked to tick, circle or write the response which most closely matches your opinion.

- Please answer each question as openly and honestly as possible. Please do not discuss the questions with colleagues, as this may influence your answer. I am interested in a range of individual opinions rather than a ‘group’ opinion.
- This is not a test; therefore there is no right or wrong answer.
- Answer **all** the questions. Unfortunately, incomplete questionnaires cannot be used. If you are not sure, please give the most honest response.

The time taken to complete the questionnaire is approximately 20 minutes.

Questionnaire for staff working with people with intellectual disabilities

This questionnaire is aimed at staff working in services for people with intellectual disabilities (ID). The questions aim to explore your opinions, experiences and views about your work. There are no “right” answers; we are interested what you think about these matters. Please mark your answers either by circling the appropriate answer or writing your answer in the space provided. Please answer **all** questions. The term “client” has been used to refer people with ID with whom you are working.

Please return the questionnaire in the self-addressed envelope provided.

PERSONAL INFORMATION

The following questions will provide information about your background and experience of working with clients with intellectual disabilities:

1. Age: _____

2. Male: ☐ Female: ☐

3. Job title: _____

4. Length of time in current employment:

years _____ months _____

5. Length of time employed in services for people with learning disabilities:

years _____ months _____

6. Qualifications

7. Training received

INFORMATION ABOUT THE PLACE WHERE YOU WORK

8. The service unit is (please circle):

- 1 Day centre for people with ID
- 2 Group home for people with ID, where there are staff present at night-time
- 3 Group home for people with ID, where there are staff present only during the daytime
- 4 Supported living for people with ID (Staff visit but are not present daily)
- 5 Other living service unit (please give details) _____
- 6 Other (please give details): _____

9. Number of staff during one shift (on average): _____ persons

10. Number of clients: _____ people, from whom have (approximately)

Profound intellectual disability	_____ persons
Severe intellectual disability	_____ persons
Moderate intellectual disability	_____ persons
Mild intellectual disability	_____ persons
Do not have an intellectual disability	_____ persons

11. How many of your clients have:

Severe physical disability (needs other persons help to move)	_____ persons
Communication deficits	_____ persons
Mental health problems	_____ persons
Aggressive behaviour	_____ persons
Self-injurious behaviour	_____ persons

YOUR VIEWS ABOUT YOUR WORK

12. In your work with people with ID you need varied skills and knowledge. The work includes different types of tasks which require different personal characteristics. Below you'll find a list of different titles. Consider them and estimate to what extent your work and your relationship with clients have characteristics similar to those listed. How well do these titles represent you and your work?

(Scale: 1 = Not at all; to 7 = Represents my work very well)

	Not at all						Represents my work very well
1. Friend	1	2	3	4	5	6	7
2. Helper (Assistant)	1	2	3	4	5	6	7
3. Teacher	1	2	3	4	5	6	7
4. Servant	1	2	3	4	5	6	7
5. Guide	1	2	3	4	5	6	7
6. Adviser	1	2	3	4	5	6	7
7. Coach (Trainer)	1	2	3	4	5	6	7
8. Guard	1	2	3	4	5	6	7
9. Interpreter	1	2	3	4	5	6	7
10. Waiter / Waitress	1	2	3	4	5	6	7
11. Home helper	1	2	3	4	5	6	7
12. Parent	1	2	3	4	5	6	7
13. Therapist	1	2	3	4	5	6	7

14. Public-health nurse	1	2	3	4	5	6	7
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15. Support person	1	2	3	4	5	6	7
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13. Please evaluate how well the following statements describe your work and the principles which guide your performance. (Scale 1 to 7; so that 1 = Totally disagree; 7 = Totally agree)

	Totally disagree					Totally agree	
1. I aim to work according to the objectives for client's care and rehabilitation, even if this was against client's own will.	1	2	3	4	5	6	7
2. My aim is repeat everyday routines in as similar manner as possible, because it will provide security for my clients.	1	2	3	4	5	6	7
3. I try always to encourage my clients to have initiative and to express their opinions.	1	2	3	4	5	6	7
4. I try to take care of my client's security, even if it is against his/her own will.	1	2	3	4	5	6	7
5. In a hurry, it is better to do things on behalf of the clients than trying to encourage them do things themselves.	1	2	3	4	5	6	7
6. If I notice that my client is making a bad decision, I try to make him/her change his/her decision.	1	2	3	4	5	6	7
7. Because many decisions are much too difficult for my clients, I often have to make decisions on their behalf.	1	2	3	4	5	6	7
8. I aim to work according to my client's decisions and	1	2	3	4	5	6	7

opinions, even though they were contradictory to the care and rehabilitation objectives.

9. I try to offer my clients opportunities to make choices and express their opinions in all daily situations.	1	2	3	4	5	6	7
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10. Taking care of my client's basic needs (eating, washing, dressing, etc.) is an important part of my work.	1	2	3	4	5	6	7
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11. In my work it is important, that the clients have clear rules which are followed.	1	2	3	4	5	6	7
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12. Supporting my client's social networks (e.g. relationships with relatives and friends) is an important part of my work.	1	2	3	4	5	6	7
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13. If my clients have insufficient communication skills and understanding, it is my duty to make decisions on their behalf.	1	2	3	4	5	6	7
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14. I try to help my clients with decision making for example by describing the options available and their consequences.	1	2	3	4	5	6	7
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15. Keeping order amongst my clients is an important part of my work.	1	2	3	4	5	6	7
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16. I try to avoid making clients do things the way I like.	1	2	3	4	5	6	7
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17. In a group, my duty is to function as a leader and make decisions on behalf of my clients.	1	2	3	4	5	6	7
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18. Supporting my clients to get involved in the community is an important part of my work.	1	2	3	4	5	6	7
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19. In a group it is not possible to take all clients' individual opinions into account.	1	2	3	4	5	6	7
--	---	---	---	---	---	---	---

20. Teaching good manners and social skills to my clients is an important part of my work.	1	2	3	4	5	6	7
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What do you think is most important in your work? _____

14. What kind of things make your work demanding? (Scale 1 to 5; so that 1 = Not at all demanding; 5 = Very demanding).

	Not at all demanding			Very demanding	
1. The pressure to get more work done	1	2	3	4	5
2. Limited time to get the work completed	1	2	3	4	5
3. Keeping up standards for the person in charge	1	2	3	4	5
4. Continuing change	1	2	3	4	5
5. The needs of the clients	1	2	3	4	5
6. Having little contact with other workers	1	2	3	4	5
7. Factors at home	1	2	3	4	5
8. Playing an important part in the care of the clients	1	2	3	4	5
9. Having to deal with relatives of my	1	2	3	4	5

clients					
10. The cooking	1	2	3	4	5
11. The severity of clients' disabilities	1	2	3	4	5
12. The shift system	1	2	3	4	5
13. Having too many people living in the house/unit	1	2	3	4	5
14. Having too much overtime	1	2	3	4	5
15. The behaviour of certain clients	1	2	3	4	5
16. The cleaning	1	2	3	4	5
17. The laundry	1	2	3	4	5
18. Being moved from house to house	1	2	3	4	5
19. Not having enough useful things to do	1	2	3	4	5
20. Having too few staff on each shift	1	2	3	4	5
21. The lack of results	1	2	3	4	5
22. Feeling isolated from colleagues	1	2	3	4	5
23. The job can be boring at times	1	2	3	4	5
24. Helping clients to move (e.g. lifting from bed)	1	2	3	4	5
25. Responsibility for the safety of clients	1	2	3	4	5
26. Self-injurious behaviour of clients	1	2	3	4	5
27. Clients' aggressive behaviour towards	1	2	3	4	5

staff or other clients					
28. Difficulties in understanding clients' communication	1	2	3	4	5
29. Clients' unrealistic goals or wishes	1	2	3	4	5
30. Taking clients opinions into account	1	2	3	4	5
31. Keeping company with clients	1	2	3	4	5
32. Supervising clients	1	2	3	4	5
33. The limited communication skills of some of the clients	1	2	3	4	5

Are there other things that make your work demanding?

What: _____

WORK WELLBEING

15. How often you have had the following feelings?

Please evaluate by using scale:

0 = Never

1 = A few times a year or less

2 = Once a month or less

3 = A few times a month

4 = Once a week

5 = A few times a week

6 = Every day

	Never						Every day
1. I feel emotionally drained from my work	0	1	2	3	4	5	6
2. I feel used up at the end of my workday	0	1	2	3	4	5	6
3. I feel fatigued when I get up in the morning and have to face another day on the job	0	1	2	3	4	5	6
4. I can easily understand how my recipients feel about things	0	1	2	3	4	5	6
5. I feel I treat some recipients as if they were impersonal objects	0	1	2	3	4	5	6
6. Working with people all day is really a strain for me	0	1	2	3	4	5	6
7. I deal very effectively with the problems of my recipients	0	1	2	3	4	5	6
8. I feel burned out from my job	0	1	2	3	4	5	6
9. I feel I'm positively influencing other people's lives through my work	0	1	2	3	4	5	6
10. I've become more callous toward people since I took this job	0	1	2	3	4	5	6
11. I worry that this job is hardening me emotionally	0	1	2	3	4	5	6
12. I feel very energetic	0	1	2	3	4	5	6

16. Job satisfaction	Very dissatisfied					Very satisfied
On the whole, how satisfied you are with your job?	1	2	3	4	5	