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Stress, coping and psychological well-being amongst healthcare professionals employed within forensic inpatient settings

Elliott, Katie

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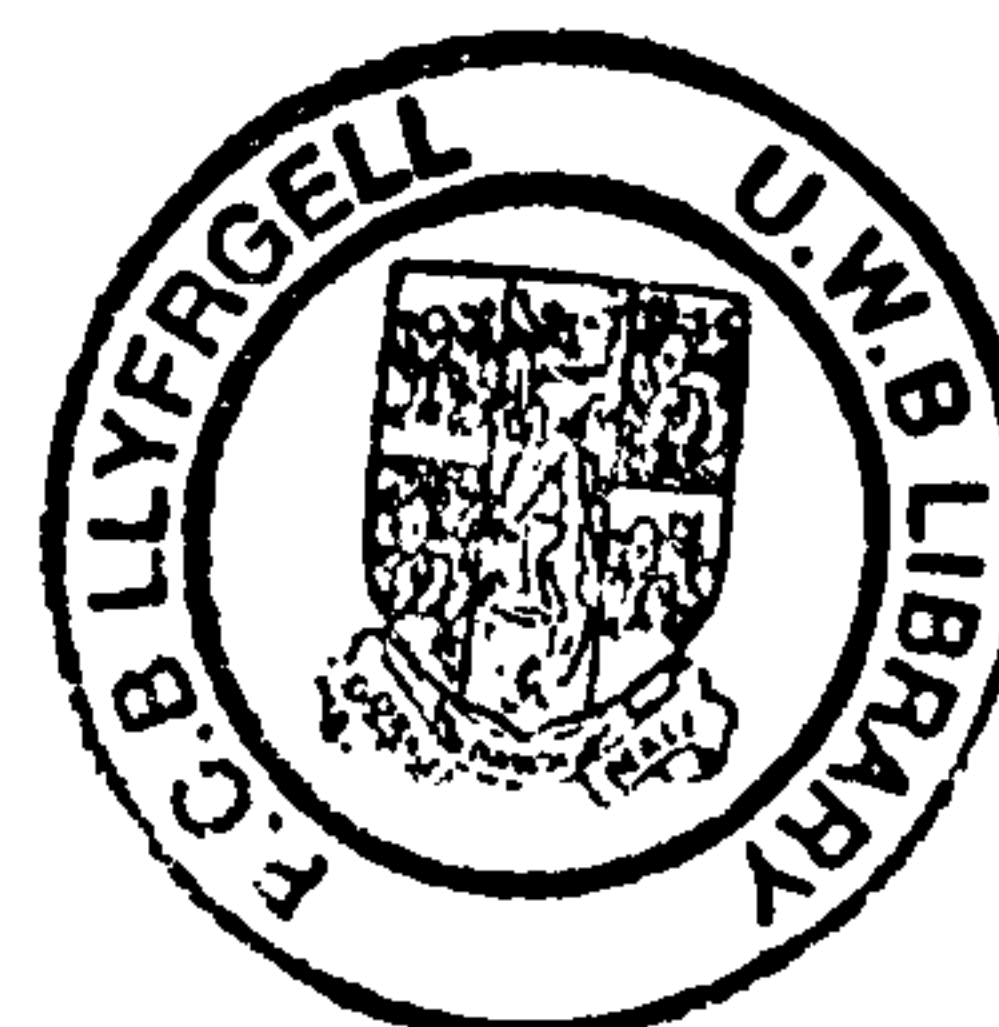
Stress, coping and psychological well-being amongst healthcare professionals
employed within forensic inpatient settings

Katie Ann Elliott

The University of Wales, Bangor

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January 2005



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Section One

Abstract

Although forensic services are often regarded as stressful, dangerous and emotionally demanding environments, there has been a surprising lack of research into the phenomena of stress amongst forensic healthcare professionals, especially in the UK.

There is mounting evidence to suggest that burnout influences a significant proportion of forensic healthcare professionals and can result in a range of detrimental consequences for the individual, their organization and clients. The small body of research evidence that has examined burnout amongst forensic healthcare professionals is reviewed. Methodological limitations are explored and questions regarding the generalisability and rigor of the available research findings are raised.

The research study investigated stress, coping and psychological well-being amongst 135 forensic healthcare professionals employed within four Medium Secure Units in the UK. Background information and measures of psychological well-being, burnout, occupational stress, work satisfaction and coping were collected using a postal survey. The results showed that a substantial proportion of forensic healthcare professionals experienced markedly elevated levels of occupational stress and psychological distress, whilst moderate levels of burnout and a range of problem-focused, emotion-focused and palliative coping strategies were demonstrated.

Contributions to theory, research and clinical practice are discussed. The strengths and limitations of the research study are further examined. Future research directions and potential implications for clinical practice are explored. Personal motivations and practical difficulties encountered during the research process are finally presented.

Acknowledgements

My first thanks go to all those forensic healthcare professionals who gave up their valuable time to participate in the research study and who were able to share such personal and emotive information, I am eternally grateful. I am indebted to the four forensic services (The Evenlode Unit, The Bracton Centre, Ty Llwyn MSU and The Kenneth Day Unit), their respective managers (Mr. Paul Tossi, Dr. Nick Keene, Ms. Lisa Dakin, Mr. Phil Roberts, Mr. Paul Hughes, Mr. Paul Thornton and Professor John Taylor), and their administrative assistants (Ms. Petrina Harris and Mrs. June Anson), for providing access to their clinical teams, for agreeing to distribute the research packs and for all of their administrative support and assistance.

My thanks go to Professor Glynn Owens for agreeing to supervise a heavily pregnant trainee and for his continued enthusiasm. My thanks also go to Dr. Richard Hastings for all of his advice during the early stages of the research study and particularly for his help and support with the MREC application and meeting. I am most grateful to Dr. Dave Daley for all of his advice, guidance, support, encouragement, and particularly for his time and unwavering patience. I would also like to thank my training coordinator Professor Bob Woods for his endless support, encouragement and optimism during the research study and throughout my clinical training.

I would also like to thank all those who provided the emotional support, practical help, encouragement and reassurance which helped get me through a time that often proved to be full of difficult personal circumstances: my family (especially mum, dad, The Elliott boys, grandma & Sharon), my friends (especially Donna, Sandra, Jez, Steph, Sam, Dave, Pete, Nicole, Tim, Tish, Hamish, Steph, Simon, Lajla, Linda, Dillan & Spoof), my clinical supervisors (Patrick, Liz & Sue), my wonderful cohort (Jean, Lynn, Lesley, Trish, Beth, Sarah & Vanessa) and my cats (Amber & Blue)!

Finally, and most importantly, I would like to thank my beautiful little girl, Olivia, who arrived in the midst of clinical training and has only known her mummy plagued by relentless deadlines! Thank you for keeping life in perspective, for reminding me where my priorities lie and for being the most amazing (albeit unexpected) life-event!

Section Two

Ethics Proposal

NHS Research Ethics Committee APPLICATION FORM

This form should be completed by the Chief Investigator, after reading the guidance notes.
See Glossary for clarification of different terms in the application form.

Short title and version number (maximum 70 characters - this will be inserted as header on all forms):

Staff stress and coping within forensic in-patient settings (V2)

Name of NHS research ethics committee to which application for ethical review is being made:

Trent MREC, Derby

Project Reference number from above REC: 04/MRE04/21

Submission Date: 31/05/2004

PART A

A1. Title of Research

Full title: Stress, coping and psychological well-being amongst health care professionals employed within forensic in-patient settings

Key words: Stress, coping, psychological well-being, burnout, nursing, health care, professionals, forensic, secure units, Maslach Burnout Inventory (MBI), Staff Stressor Questionnaire (SSQ), General Health Questionnaire (GHQ), COPE Inventory (COPE), Staff Support & Satisfaction Questionnaire (3SQ)

A2. Chief Investigator

Title: Miss First Name/Initials: Katie Ann Last Name: Elliott

Post: Clinical Psychologist in Training

Qualifications: Psychology BSc (hons), Forensic Psychology MSc

Organisation: North Wales Clinical Psychology Programme

Address: North Wales Clinical Psychology Programme, School of
Psychology, University of Wales - Bangor, College Road
Bangor, Gwynedd

Postcode: LL57 2DG

Email: katieannelliott@hotmail.com

Telephone: 07960 309 062

Fax: 01248 383 718

A copy of a current CV (maximum 2 pages of A4) for the Chief Investigator must be submitted with application.

A3. Proposed Study Dates and Duration

Start date: 01/07/2004

End date: 01/11/2004

Duration Years Months 4

A4. Primary purpose of the research: (Tick as appropriate)

- Commercial product development and/or licensing
- Publicly funded trial or scientific investigation
- Educational qualification
- Establishing a database/data storage facility
- Other

A5. Tick the box if your research:

- involves testing a medicinal product
- involves investigating a medical device
- involves additional radiation above that required for clinical care
- involves using stored samples of human biological material (e.g. blood, tissue)
- involves taking new samples of human biological material
- involves only patient records or data, with no direct patient contact
- involves prisoners or others in custodial care
- involves adults with incapacity
- has the primary aim of being educational (eg student research, a project necessary for a postgraduate degree or diploma, other than an MD or PhD)

A6. Do you consider that this research falls within the category where there is no local investigator?YES NO *If yes, please justify:*

Having read the available guidance notes, I remain uncertain as to whether this research project falls into the category of 'no local investigator'. I have discussed the nature of the research project with a member of the COREC Team in London, who advised me that the current guidelines do not take into account postal survey research designs and that the inclusion criterion are currently being reviewed.

This research project will not have 'local investigators' on site because it will involve the use of a postal survey. The postal survey will be completed by health care professionals employed within forensic in-patient settings (e.g., Medium Secure Units). Preliminary contact with four forensic in-patient service managers has been made and the general aims and feasibility of the research project have been discussed. Agreement in principle has been obtained from the four service managers, pending appropriate ethical approval (please see enclosed letters). The researcher will not have direct contact with the participants, only with the service managers. The service managers will be responsible for distributing the postal survey amongst their staff teams and the participants will be provided with a S.A.E. for returning their completed postal survey to the researcher.

Advice can be found in the Guidance Notes on this topic. Some studies do not require further consideration of site-specific issues by NHS Research Ethics Committees, but will still require approval to proceed from the host organisation(s).

A7. What is the principal research question/objective? (Must be in language comprehensible to a lay person.)

The principal objective of this research project is to investigate the psychological well-being of health care professionals employed within forensic in-patient settings.

A8. What are the secondary research questions/objectives? (If applicable. Must be in language comprehensible to a lay person.)

1. To examine stress and psychological burnout levels experienced amongst health care professionals employed within forensic in-patient settings.
2. To identify and explore the types of coping mechanisms employed by health care professionals employed within forensic in-patient settings.
3. To make recommendations to service managers to reduce identified stressors and promote psychological well-being.

A9. What is the scientific justification for the research? What is the background? Why is this an area of importance? (Must be in language comprehensible to a lay person.)

Although it is widely accepted that forensic settings are highly stressful environments, there has been a surprising lack of research into the phenomena of stress, coping and psychological well-being of health care professionals working within such settings in the UK, particularly within in-patient settings (e.g., Medium Secure Units).

Psychological research investigating stress, coping and well-being of health care professionals employed within forensic in-patient settings, is duly warranted for the following reasons:

1. Research has shown that elevated levels of occupational stress are often experienced amongst health care professionals, especially nurses, when compared with other sectors.
2. Occupational stress can have significant detrimental effects upon health care professionals: physical health, psychological well-being and increase their risk of suffering from psychological burnout.
3. Occupational stress can have a negative impact upon service users (e.g., limited continuity, inexperienced staff and poor engagement). Elevated stress levels, poor psychological well-being and associated coping strategies inevitably impact upon staff's behaviour and attitudes towards their patients, thus influencing the quality of care provided.
4. Occupational stress can also have far reaching financial and practical implications for the National Health Service (e.g., high absenteeism, poor morale, reduced efficiency, retention and recruitment difficulties).

A10. Give a brief synopsis/summary of methods and overview of the planned research. This should include a brief description of how prospective research participants and concerned communities (not necessarily geographical) from which they are drawn have been consulted over the design and details of the research. (Where appropriate a flow chart or diagram should be submitted separately. It should be clear exactly what will happen to the research participant, how many times and in what order.)

Design: A cross-sectional survey design will be employed and administered through the distribution of a postal research pack (e.g., information sheet, consent form, demographic questionnaire, assessment measures and S.A.E.).

Participants & Recruitment: The participants will include any health care professional (e.g., nursing assistants, nurses, occupational therapists or psychologists) employed within a forensic in-patient service (e.g., Medium Secure Units). All of the participants will be adults aged 18-65 years. 100 health care professionals will be needed to participate in this research project, due to the common problem of poor response rates associated with postal surveys, the research project will aim to distribute the postal research packs to at least 250 potential participants. Preliminary contact with four service managers has been made and the general aims and feasibility of this research project have been discussed. Access to the following forensic in-patient staff teams have been agreed in principle with the relevant service managers (please see enclosed letters):

1. Ty Llewelyn MSU, Bryn y Neuadd Hospital, Llanfairfechan, LL30 0HH
2. Evenlode MSU, The Oxford Clinic, Littlemore, Oxford, OX4 4XN
3. The Bracton Centre MSU, Leyton Cross Road, Dartford, DA2 7AF
4. Forensic Services, Northgate Hospital, Morpeth, Northumberland, NE61 3BP

Procedures: The procedures employed by this research project will involve the following stages:

1. The relevant service managers will be responsible for distributing the research packs amongst their staff team (e.g., placing address labels onto envelopes and posting to all staff via their internal mail system).
2. The participants will read an information sheet that will explain the purpose of the research project, give assurances regarding confidentiality, contact numbers and general instructions.
3. The participants will be asked to carefully complete the necessary questionnaires and assessment measures.
4. Each participant will receive an individual 'code number card' inside their research pack, which they will be advised to retain for future reference (i.e., should they later require that their data is removed from the research).
5. The participants will return the completed postal research packs in the provided S.A.E.
6. A summary of the research findings and recommendations will be sent to the service managers to distribute amongst their entire staff team.

Measures: This research project will employ the following questionnaires and assessment measures: Background Information Questionnaire: (e.g., gender, age, occupation, sick days, time in post); The Maslach Burnout Inventory (MBI); The Staff Stressor Questionnaire (SSQ); The General Health Questionnaire (GHQ-12); The Brief COPE (COPE); and The Staff Support and Satisfaction Questionnaire (3SQ). Please see enclosed copies.

Feedback: Arrangements for feedback regarding the overall findings of this research project will involve:

1. Presentations: All potential research participants will be invited to attend a presentation of the research findings which will be facilitated at their local work base.
2. Postal Feedback: A summary of the research findings will be mailed to each of the relevant service managers who will be responsible for distributing the summary amongst their entire staff team.

Inconvenience & Risks: The participants will be asked to complete a postal research pack. It is anticipated that this will take approximately 30 minutes to complete. The relevant service managers have agreed that time permitting, their staff team will be able to complete the postal research packs in work time. No significant risks or hazards are anticipated. In the unlikely event that the participants find completing the necessary items in the postal research pack distressing or offensive, they will be free to discontinue their participation at any time. To help deal with this eventuality, participants will be made aware of this possibility in the information sheet and will be provided with appropriate contact numbers for support services available within their organisations.

Benefits: This research project demonstrates interest in forensic staff teams and gives individuals the opportunity to disclose some of their thoughts within a forum anonymous to service managers. The research findings will identify occupational stressors, stress levels, coping mechanisms and help promote psychological well-being.

Time Table: It is hoped that data collection will commence in July/August 2004 and be completed by October/November 2004. A return deadline will be given to encourage the participants to return the completed research packs a.s.a.p. This research project will form part of the Chief Investigators Clinical Psychology Doctoral thesis, the final submission deadline is 28/01/05.

A11. Will any intervention or procedure, which would normally be considered a part of routine care, be withheld from the research participants?

YES

NO

A12. Will the research participants receive any clinical intervention(s) or procedure(s) including taking samples of human biological material over and above that which would normally be considered a part of routine clinical care?

YES

NO

A13. Will the research participant be subject to any non-clinical research-related intervention(s) or procedure(s)? YES NO

Additional intervention	Average number per patient		Average time taken (mins/hrs /days)	Details of additional intervention or procedure, who will undertake it, and what training they have received.
	Routine Care	Research		
Other Questionnaire	N/A	N/A	30 mins	This research project will involve the completion of a postal research pack (e.g., background information questionnaire and five assessment measures) by each participant. The postal research packs will be distributed amongst the staff teams employed within the identified in-patient forensic units by the service managers. The participants will be allowed to complete the postal research packs during work-time and will return them in the provided S.A.E.
<i>Please give details for any other(s):</i>				

A14. Will individual or group interviews/questionnaires discuss any topics or issues that might be sensitive, embarrassing or upsetting, or is it possible that criminal or other disclosures requiring action could take place during the study (e.g. during interviews/group discussions, or use of screening tests for drugs)? YES NO

Give details of procedures in place to deal with these issues:

In the unlikely event that participants find completing the items in the postal research pack distressing or offensive they will be free to discontinue their participation at any time. To help deal with this eventuality, participants will be made aware of this possibility in the information sheet and will be provided with appropriate contact numbers for support services available within their organisations (e.g., Occupational Health and/or Counselling Services).

The Information Sheet should make it clear under what circumstances action may be taken.

A15. What is the expected total duration of participation in the study for each participant?

30 minutes (approximately).

A16. What are the potential adverse effects, risks or hazards for research participants either from giving or withholding medications, medical devices, ionising radiation, or from other interventions (including non-clinical):

Not applicable.

A17. What is the potential for pain, discomfort, distress, inconvenience or changes to lifestyle for research participants?

In the unlikely event that the participants find completing the necessary items in the postal research pack distressing or offensive they will be free to discontinue their participation at any time. To help deal with this eventuality, participants will be made aware of this possibility in the information sheet and will be provided with appropriate contact numbers for support services available within their organisations (e.g., Occupational Health and/or Counselling Services).

A18. What is the potential for benefit for research participants?

No direct benefits are anticipated. Indirect benefits via the forensic in-patient services where the participants are employed, will include the following:

1. The postal survey and aims of the research project demonstrate an interest in health care professionals employed within forensic in-patient settings, which as a group have largely been ignored by previous researchers.
2. The postal survey gives individuals the opportunity to disclose and express some of their thoughts and feelings about working in forensic in-patient settings within a forum anonymous to service managers.
3. The research findings will help identify occupational stressors and overall stress levels experienced amongst health care professionals employed within forensic in-patient settings.
4. The research findings will help identify current coping mechanisms (adaptive +/- or maladaptive) used amongst health care professionals employed within forensic in-patient settings.
5. The research findings will have implications for how services support their staff teams: highlighting areas of good practice or those which may need improvement (e.g., access to counselling services) and informing service managers how to further promote psychological well-being amongst their team members.

A19. What is the potential for adverse effects, risks or hazards, pain, discomfort, distress or inconvenience for the researchers themselves? (if any)

None, as the research project will involve a cross-sectional postal survey.

A20. How will potential research participants in the study be (i) identified, (ii) approached and (iii) recruited?*Give details for cases and controls separately if appropriate:*

Participants: The participants will include any health care professional (e.g., nursing assistants, nurses, occupational therapists or psychologists) employed within a forensic in-patient service (e.g., Medium Secure Units). All of the participants will be adults aged 18-65 years.

Number of Participants: 100 health care professionals will be needed to participate in the research project, due to the common problem of poor response rates associated with postal surveys, the research project will aim to distribute the postal research packs to at least 250 potential participants.

Recruitment of Forensic in-patient Units: Preliminary contact with four service managers has been made and the general aims and feasibility of the research project have been discussed. Access to the following forensic in-patient staff teams have been agreed in principle with the relevant service managers (please see enclosed letters):

1. Ty Llewelyn MSU, Bryn y Neuadd Hospital, Llanfairfechan, LL30 0HH
2. Evenlode MSU, The Oxford Clinic, Littlemore, Oxford, OX4 4XN
3. The Bracton Centre, Leyton Cross Road, Dartford, DA2 7AF
4. Forensic Services, Northgate Hospital, Morpeth, Northumberland, NE61 3BP

Recruitment of Participants: Due to data protection issues the relevant service manager will be responsible for distributing the postal research packs amongst their staff team. The service manager will be responsible for putting the necessary address labels onto the individual postal research packs and mailing them, via their units internal mail system, to every member of their staff team. The participants will receive the postal research packs through the internal mail system at their place of work and will be provided with a S.A.E. for returning the completed postal research packs to the researcher. Due to the cross-sectional postal survey design the researcher will only have direct contact with individual participants, if they have questions relating to the instructions provided within the postal research pack and require further clarification. Participation will be entirely voluntary and the participants will be free to discontinue their participation in the research project at any time they wish to.

Summary of Recruitment Process: Arrangements for recruiting potential participants and distributing the necessary research packs will involve the following stages:

1. The four service managers will inform the researcher exactly how many members of staff are currently employed within their forensic in-patient service.
2. The researcher will post the necessary number of research packs to each of the four forensic in-patient service managers via Royal Mail.
3. Appropriate name and address labels will be placed onto the postal research packs by the service managers (or their secretaries).
4. The research packs will then be distributed to all members of staff via the forensic in-patient services internal mail system.
5. The participants will receive their research pack at their place of work.
6. The participants will complete their research pack at their place of work.
7. The participants will return their completed research packs to the researcher in the prepaid envelope enclosed within the research pack via Royal Mail.

A21. Will research participants be recruited via advertisement?YES NO

A22. What are the principal inclusion criteria? (Please justify.)

The participants involved in this research project will include any health care professional (e.g., nursing assistants, nurses, occupational therapists or psychologists) employed within an forensic in-patient service, irrespective of speciality (e.g., mental health or learning disability), level of security (e.g., high, medium or low secure units) or locality (e.g., local or non-local).

The participants involved in this research project will include all health care professionals who have direct (e.g., nurses) and/or indirect (e.g., managers) patient contact.

All of the participants involved in this research project will be adults aged 18-65 years.

A23. What are the principal exclusion criteria? (Please justify.)

Not applicable.

A24. Will the participants be from any of the following groups? (Tick as appropriate.)

- Children under 16
- Adults with learning disabilities
- Adults who are unconscious or very severely ill
- Adults who have a terminal illness
- Adults in emergency situations
- Adults with mental illness (particularly if detained under mental health legislation)
- Adults suffering from dementia
- Prisoners
- Young Offenders
- Adults in Scotland who are unable to consent for themselves
- Healthy volunteers
- Those who could be considered to have a particularly dependent relationship with the investigator, e.g. those in care homes, medical students
- Other vulnerable groups

Justify their inclusion:

Not applicable. The participants will be health care professionals employed within forensic in-patient settings.

A25. Will any research participants be recruited who are involved in existing research or have recently been involved in any research prior to recruitment?

YES NO Not Known

A26. Will informed consent be obtained from the research participants?

YES NO

Give details of who will take consent and how it will be done. Give details of any particular steps to provide information (in addition to a written information sheet) e.g. videos, interactive material.

If participants are to be recruited from any of the potentially vulnerable groups listed in A24, give details of extra steps taken to assure their protection. Describe the arrangements to be made for obtaining consent from a legal representative.

Information: In the postal research pack the participants will be provided with a detailed written information sheet which will explain the overall aims and requirements of this research project (please see enclosed copy).

Contacts: The participants will be provided with a contact number for the researcher (CI) and her supervisor if they require any further information or clarification concerning their participation in this research project.

Consent Form: A signed record of consent will not be obtained from the participants. Implicit consent will be provided by the participants completing the necessary questionnaires and assessment measures and returning them to the researcher. It is hoped that this will increase the participants confidentiality and reduce the possibility of a poor response rate.

Anonymity: The participants completed postal research packs will remain anonymous to everyone. Each postal research pack will include a 'code number card' which the participants will be advised to retain for future reference. The researcher will place a code number card inside every postal research pack. The researcher will write the corresponding code number onto the top right hand corner of the front page of the questionnaire booklet for every postal research pack. The completed questionnaires and assessment measures will be scored and entered onto a spreadsheet using the code number from the top right hand corner of the front page of the questionnaire booklet. If a participant contacts the researcher at a later date and requests that their data is removed from the research project, they will be asked to provide their individual code number so the researcher will be able to remove their data.

Copies of the written information and all other explanatory material should accompany this application.

A27. Will a signed record of consent be obtained?

YES NO

If answer is NO, please justify:

A signed record of consent will not be obtained from the participants. Implicit consent will be provided by the participants completing the necessary questionnaires and assessment measures and returning them to the researcher.

A28. How long will the participant have to decide whether to take part in the research?

The research participants will receive the postal research pack via the internal mail system at their place of work. The participants will have one month to decide whether they wish to participate in this research project, complete the necessary forms and return the completed postal research pack to the researcher in the S.A.E..

A29. What arrangements have been made for participants who might not adequately understand verbal explanations or written information given in English? (e.g. translation, use of interpreters etc.)

English Language: The participants included in the research project will be health care professionals employed within forensic in-patient settings in the United Kingdom. It is not anticipated that any of the participants will be unable to understand written explanations in English, as part of these professional's clinical duties would involve writing patient notes in English.

Welsh Translations: In accordance with the Welsh Language Act (1993) all written correspondence to health care professionals employed within forensic in-patient units in Wales, will be appropriately translated by the University of Wales - Bangor translation department. All written correspondence in the research packs will therefore be sent in both English and Welsh versions to such services. However, it will not be possible to have the five assessment measures translated into Welsh due to the potential problem of losing important aspects of their meaning.

A30. What arrangements are in place to ensure participants receive any information that becomes available during the course of the research that may be relevant to their continued participation?

In the unlikely event that this proves necessary, contact will be made with the research participants through the relevant service managers.

A31. Does this study have, or require, approval of PIAG (Patient Information Advisory Group) or other bodies with a similar remit? (see Guidance Notes)YES NO **A32. Will the research participant's General Practitioner be informed that they are taking part in the study?**YES NO *Explain why not:*

The research participants' GPs will not be informed that they are participating in this research project, as the research participants will be staff members, not patients of the services involved.

A33. Will individual research participants receive any payments for taking part in this research?

YES NO

A34. Will individual research participants receive reimbursement of expenses or any other incentives or benefits for taking part in this research?

YES NO

A35. What arrangements have been made to provide indemnity and/or compensation in the event of a claim by, or on behalf of, participants for negligent harm?

I am of the understanding that potential claims made by participants, with regards to 'negligent harm', caused by their involvement in this research project, are covered by my employers insurance arrangements. I am a full-time employee of 'Conwy & Denbighshire NHS Trust'.

Please forward copies of the relevant documents.

A36. What arrangements have been made to provide indemnity and/or compensation in the event of a claim by, or on behalf of, participants for non-negligent harm?

I am of the understanding that potential claims made by participants, with regards to 'non-negligent harm', caused by their involvement in this research project, are covered by my employers insurance arrangements. I am a full-time employee of 'Conwy & Denbighshire NHS Trust'.

Please forward copies of the relevant documents.

A37. How is it intended the results of the study will be reported and disseminated? (Tick as appropriate)

- Peer reviewed scientific journals
- Internal report
- Conference presentation
- Other publication
- Submission to regulatory authorities
- Access to raw data and right to publish freely by all investigators in study or by Independent Steering Committee on behalf of all investigators
- Written feedback to research participants
- Presentation to participants or relevant community groups
- Other/none e.g. Cochrane Review, University Library

If other/none of the above, give details and justify:

This research project will form part of the researcher's (CI) final Clinical Psychology Doctoral thesis, a copy of which will be stored in the library at the University of Wales - Bangor.

A38. How will the results of the research be made available to research participants and communities from which they are drawn?

Feedback: A written summary will be posted to all potential participants and presentations given at each service.

Publications: The research findings will be submitted for publication in a peer reviewed scientific journal.

A39. Will the research involve any of the following activities at any stage (including identification of potential research participants)? (Tick as appropriate)

- Examination of medical records by those outside the NHS, or within the NHS by those who would not normally have access
- Electronic transfer by magnetic or optical media, email, or computer networks
- Sharing of data with other organisations
- Export of data outside the European Union
- Use of personal addresses, postcodes, faxes, emails or telephone numbers
- Publication of direct quotations from respondents
- Publication of data that might allow identification of individuals
- Use of audio/visual recording devices
- Storage of personal data on any of the following:
 - Manual files including X-rays
 - NHS computers
 - Home or other personal computers
 - University computers
 - Private company computers
 - Laptop computer

Further details:

This research project will involve the collection of completed postal research packs (e.g., questionnaires and assessments). The completed research packs will not have any identifiers which will enable anyone to trace the collected data back to the participant. The researcher will enter a code number (e.g., written on to the top right hand corner of the front page of the questionnaire booklet) and a corresponding code number card in every postal research pack. The completed assessment measures and questionnaires will be scored by the researcher and the raw data will be entered onto a electronic spreadsheet for data analysis purposes using the participants code number. The participants data will be totally anonymous. The code number will be only be used to identify individual participants data, if a participant requests that their data is removed from the research project at a later date and provides their individual code number.

A40. What measures will be put in place to ensure confidentiality of personal data? Give details of whether any encryption or other anonymisation procedures will be used, and at what stage:

The researcher will ensure that this research project complies with the requirements of the Data Protection Act. The researcher will ensure that the participants confidentiality and anonymity is maintained at all times. Participants will not be requested to provide their names. Each postal research pack will include a 'code number card' which the participants will be advised to retain for future reference. The researcher will place a code number card inside every postal research pack and will write the corresponding code number onto the top right hand corner of the front page of the questionnaire booklet for each postal research pack. The completed questionnaires and assessment measures will be scored and entered onto a spreadsheet using the code number. If a participant contacts the researcher at a later date and requests that their data is removed from the research project, they will be asked to provide their individual code number, so that their data can be removed. The raw data and electronic data analysis file will both be securely stored (e.g., locked filing cabinet) at the University of Wales (Bangor) by the researcher's supervisor.

A41. Where will the analysis of the data from the study take place and by whom will it be undertaken?

Where: The analysis of the data will take place at the University of Wales - Bangor.

Who: The analysis of the data will be undertaken by the researcher and her supervisor.

A42. Who will have control of, and act as the custodian for, the data generated by the study?

The researchers supervisor.

A43. Who will have access to the data generated by the study?

The researcher (CI) and her supervisor will have access to the data generated by the research project.

A44. For how long will data from the study be stored?

Years Months

Give details of where they will be stored, who will have access, and of the custodial arrangements for the data:

Where: The data will be stored in a locked filing cabinet in the researcher's supervisors office at the School of Psychology, University of Wales - Bangor.

Access: The data will only be accessible to the researcher (CI) and her supervisor.

Custodial Arrangements: The researcher's supervisor will be responsible for the custodial arrangements of the data during the necessary twelve month period. The researcher's supervisor will also be responsible for the eventual destruction of the data at the end of this period.

A45. How has the scientific quality of the research been assessed? (Tick as appropriate)

- Independent external review
 Review within a company
 Review within a multi-centre research group
 Internal review (e.g. involving colleagues, academic supervisor)
 None external to the investigator
 Other, e.g. methodological guidelines

If you are not in possession of any referees' or other scientific critique reports relevant to your proposed study, justify and describe the review process and outcome. If review has been undertaken but not seen by the researcher, give the details of the body which has undertaken the review:

1. The research project proposal has been reviewed and approved by the researchers supervisor, Professor Richard G. Owens.
2. The research project proposal has been reviewed and approved by Dr. Richard Hastings, the Research Director on the North Wales Clinical Psychology Programme (NWCPP), (please see enclosed copy of approval letter).
3. The research project proposal has been reviewed and approved by the School of Psychology Research and Ethics Committee, University of Wales - Bangor, (please see enclosed copy of approval letter).

A copy of any referees' comments or other scientific critique reports relevant to the proposed research must be enclosed with the application form.

A46. Has similar research on this topic been done before?YES NO *Why should it be repeated?*

Although there is a growing body of literature on stress experienced amongst health care professionals, very little research has been conducted with health care professionals employed within forensic services in the UK. The few published studies that do exist have mainly focused upon forensic mental health nurses based within community teams (FCMHN). Research investigating stress, burnout or coping of health care professionals employed within forensic in-patient services is very sparse. Only three published studies were identified. The first compared two groups of nurses perceptions of their working environments (e.g., forensic in-patient unit and acute in-patient unit). The second measured stress and burnout levels amongst a small number of nurses employed in a variety of forensic units and prisons in Australia. The third investigated the impact of a psychological intervention on stress levels experienced amongst a group of nurses employed within a forensic in-patient setting.

A47. Have all existing sources of evidence, especially systematic reviews, been fully considered?YES NO *Please give details of search strategy used:*

Literature Searches: Extensive searches have been conducted using 'medline' and 'psychinfo' search engines.

Relevant Materials: Checked reference sections for additional relevant materials.

A48. What is the primary outcome measure for the study?

This research project will employ the following questionnaires and assessment measures: A Background Information Questionnaire: (e.g., gender, age, occupation, sick days, time in post); The Maslach Burnout Inventory (MBI); The Staff Stressor Questionnaire (SSQ); The General Health Questionnaire (GHQ-12); The Brief COPE (COPE); and The Staff Support and Satisfaction Questionnaire (3SQ). Please see the enclosed research protocol for a detailed description of the assessment measures to be employed by this research project.

A49. What are the secondary outcome measures? (If any)

Not applicable.

A50. How many participants will be recruited? How many of these participants will be in a control group?

100 health care professionals will be needed to participate in this research project, however due to the problem of poor response rates often associated with postal surveys, the researcher will aim to distribute the postal research packs to at least 250 potential participants. There is no control group in this research project.

A51. Has the size of the study been informed by a formal statistical power calculation?

YES NO

Indicate the basis upon which this was done and give sufficient information to allow the replication of the calculation:

The researcher has discussed the size of the study and the necessary statistical aspects of this research project with Dr. Richard Hastings the Research Director for the North Wales Clinical Psychology Programme (NWCPP), University of Wales - Bangor. Although this is only an estimated calculation, a sample size of 100 participants would be sufficient to detect a medium-sized effect of predictor variables in a multiple regression analysis, assuming approximately eight predictors are used (Cohen, 1992). The researcher will seek further advice and supervision from Dr. Richard Hastings with regards to the most appropriate statistical methods to employ once the data has been collected and the final size of the study has been established.

Reference: Cohen, J. (1992). A Power Primer. Psychological Bulletin, 112, 1, 155-159.

A52. Has a statistician given an opinion about the statistical aspects of the research?

YES NO

A53. Describe the statistical methods and/or other relevant methodological approaches (e.g. for qualitative research) to be used in the analysis of the results. Give details of the methods of randomisation process to be used if applicable:

Data Analysis Plan: Once the researcher has checked for outlying data points and data distributions:

1. **Internal consistency:** The ratings from the research sample will be used to estimate Cronbach's alpha coefficient for all total scores and sub-scale scores on the assessment measures. Some measures have fewer psychometric data currently available (i.e., Staff Stressor Questionnaire (SSQ) and Staff Support & Satisfaction Questionnaire (3SQ)). If internal consistency is poor for these measures, it may prove necessary to revisit their factor structures using data from the present sample and other staff-based research.
2. **Descriptive data:** Scores for the sample on all four assessment measures will be presented. Where possible, the data will be sub-divided by context/patient category with which staff work.
3. **Group comparison tests:** Will be used to explore any differences between work context/client group focus.
4. **Associations between main outcome measures:** Correlations will be used to explore associations between the outcomes measures. If these are moderate, regression analyses will be carried out on each assessment measure separately. This would be preferable because existing studies typically focus on only one outcome measure and so comparisons with other findings could be facilitated. Which may prove easier to interpret the psychological meaning of the findings. However, if the associations are substantial, the researcher will consider creating a latent variable via a principal components analysis of the outcome measures and using this in the regression analysis.
5. **Univariate analysis of correlates of well-being:** Appropriate univariate tests will be used to explore associations between potential psychological (i.e., coping and social support) and background (i.e., age and sex) variables and the outcome measures. Variables with statistically significant associations at the univariate level will be identified for inclusion in the regression analyses.
6. **Exploratory regression analysis:** By selecting potential predictors from the univariate analyses, the researcher hopes to remain within the boundaries of the power estimate given above (i.e., roughly 8-10 predictor variables). It is difficult to be precise here, but the researcher is interested in predictors that have theoretical interest and also clinical meaning. We feel that clinical meaning is best represented by at least medium effects within the present research project. The regression analysis would be hierarchical in nature. Specifically, exploring whether psychological variables (i.e., support and coping) add anything to the prediction of well-being once other correlates have been controlled. For example, if working context were found to be important a set of dummy codes would be entered into the analysis with other 'control' variables. Although Type I errors are a potential problem within the approach to analysis of analysing outcomes separately, care will be taken to qualify the findings and we do not want to apply stringent experiment-wise error rate conditions on the analyses because of the dangers of making Type II errors. Thus the researcher recognises that these analyses are best described as exploratory in nature.

A54. Where will the research take place? (Tick as appropriate)

- UK
- Other States in the European Union
- Other States in the European Economic Area
- Other

A55. Has this or a similar application been previously rejected by a Research Ethics Committee in the UK, the European Union or in the European Economic Area?

YES NO

A56. In how many and what type of host organisations (NHS or other) in the UK is it intended that the proposed study will take place?

Indicate the type of organisation by ticking the box and give approximate numbers if known:

	Number of organisations
<input type="checkbox"/> Acute teaching NHS Trusts	
<input type="checkbox"/> Acute NHS Trusts	
<input type="checkbox"/> NHS Community and/or Primary Care Trusts	
<input checked="" type="checkbox"/> NHS Trusts providing mental healthcare	4
<input type="checkbox"/> NHS Care Trusts	
<input type="checkbox"/> Social Care Organisations	
<input type="checkbox"/> Prisons	
<input type="checkbox"/> Independent hospitals	
<input type="checkbox"/> Educational establishments	
<input type="checkbox"/> Independent research units	
<input type="checkbox"/> Other (give details)	

A57. What arrangements are in place for monitoring and auditing the conduct of the research?

The researcher (CI) will meet with her supervisor on a fortnightly basis in order to monitor the progress of the research project.

Will a data monitoring committee be convened?

YES

NO

What are the criteria for electively stopping the trial or other research prematurely?

Not applicable, as this research project will involve a postal survey design.

A58. Has funding for the research been secured?YES NO

What arrangements are being made to cover any costs of the research? If no external funding is being sought, please say so:

Funding to cover any financial costs incurred by this research project will be covered by the Welsh Assembly. The Welsh Assembly directly funds the North Wales Clinical Psychology Programme (N.W.C.P.P.) and covers all costs incurred by my clinical post as an employee of 'Conwy & Denbighshire NHS Trust', university fees, clinical training and research pursuits.

I understand that the Welsh Assembly directly provides funding to the N.W.C.P.P. to cover costs incurred by trainees' large scale research projects (LSRPs). As part of the Research Protocol, the materials and costs outlined below were submitted to Dr. Richard Hastings, Research Director, N.W.C.P.P. and were approved by him on behalf of the N.W.C.P.P. (see enclosed approval letter):

Materials & Costs: It is envisaged that the research project will necessitate the following costs and materials:

- Photocopying - 250 postal questionnaire packs
- Postage - 250 questionnaire packs and 250 prepaid return envelopes
- Envelopes - 500 large brown envelopes
- Address Labels - 500 printed address labels
- General Stationery - 500 staples and paper-clips
- Travel Expenses - To attend necessary meetings with relevant service managers and provide presentations
- The Maslach Burnout Inventory (MBI) - 250 assessment sheets which will cost \$300 approximately

A59. Has the funder of the research agreed to act as sponsor as set out in the Research Governance Framework?YES NO Not yet known

Has the employer of the Chief Investigator agreed to act as sponsor of the research?

YES NO Not yet known

Give details of the organisation who will act as the sponsor of the research:

Organisation: North Wales Clinical Psychology Programme

Address: School of Psychology, University of Wales -
Bangor, College Road, Bangor, Gwynedd

Postcode: LL57 2DG

UK Contact: Dr. Richard Hastings

Telephone: 01248 388 214 Fax: 01248 383 718

Email: r.hastings@bangor.ac.uk

A copy of documentation indicating that the organisation has accepted the role of sponsor should be enclosed if the sponsor is not the main funder, the Chief Investigator's employer, or an NHS body hosting the research.

A60. Has any responsibility for the research been delegated to a subcontractor?

YES NO

A61. Will individual *researchers* receive any personal payment over and above normal salary for undertaking this research?

YES NO

A62. Will individual *researchers* receive any other benefits or incentives for undertaking this research?

YES NO

A63. Will the host organisation or the researcher's department(s) or institution(s) receive any payment or benefits in excess of the costs of undertaking the research?

YES NO

A64. Does the Chief Investigator or any other key investigator/collaborator have any direct personal involvement (e.g. financial, share-holding, personal relationship etc.) in the organisation sponsoring or funding the research that may give rise to a possible conflict of interest?

YES NO

A65. Other relevant reference numbers if known (give details and version numbers as appropriate):

Applicant's/organisation's own reference number, e.g. R&D (if available):	N/A
Sponsor's/protocol number:	N/A
Funder's reference number:	N/A
International Standard Randomized Controlled Trial Number (ISRCTN):	N/A
European Clinical Trials Database (EUDRACT) Number:	N/A
Project website:	N/A

A66. Other key investigators/collaborators (all grant co-applicants should be listed)

i Title: Prof. First Name/Initials: Richard Glynn Last Name: Owens
 Post: Head of Forensic Psychology
 Qualifications: Bachelor of Technology (Psychology), Doctor of Philosophy, Diploma in Clinical Psychology
 Organisation: University of Wales - Bangor
 Address: School of Psychology, University of Wales - Bangor, Telephone: 01248 388210
 College Road, Bangor, Gwynedd, Fax: 01248 682146
 Postcode: LL57 2DG Email: g.owens@bangor.ac.uk

ii Title: First Name/Initials: Last Name:
 Post:
 Qualifications:
 Organisation:
 Address: Telephone:
 Fax:
 Postcode: Email:

iii Title: First Name/Initials: Last Name:
 Post:
 Qualifications:
 Organisation:
 Address: Telephone:
 Fax:
 Postcode: Email:

iv Title: First Name/Initials: Last Name:
 Post:
 Qualifications:
 Organisation:
 Address: Telephone:
 Fax:
 Postcode: Email:

v Title: First Name/Initials: Last Name:
 Post:
 Qualifications:
 Organisation:
 Address: Telephone:
 Fax:
 Postcode: Email:

If there are more than 5 collaborators, please enter at end of section or attach a further sheet.

A67. If the research involves a specific intervention, (e.g. a drug, medical device, dietary manipulation, lifestyle change, etc.), what arrangements are being made for continued provision of this for the participant (if appropriate) once the research has finished?

Not applicable.

Summary of Ethical Issues

A68. What do you consider to be the main ethical issues or problems which may arise with the proposed study, and what steps will be taken to address these?

Confidentiality: This research project will ensure that the participants confidentiality and anonymity is maintained at all times. Completed postal research packs will be kept under secure conditions (e.g., locked filing cabinet) at the University of Wales - Bangor.

Anonymity: Participants will not be requested to provide their names. Each postal research pack will include a 'code number card' which the participants will be advised to retain for future reference. The researcher will place a code number card inside every postal research pack and will write the corresponding code number onto the top right hand corner of the front page of the questionnaire booklet for each postal research pack. The completed questionnaires and assessment measures will be scored and entered onto a spreadsheet using the code number. If a participant contacts the researcher at a later date and requests that their data is removed from the research project, they will be asked to provide their individual code number, so that their data can be removed.

Consent: Written consent will not be obtained from the participants. Implicit consent will be provided by the participants completing the necessary questionnaires and assessment measures and returning them to the researcher. It is hoped that this will increase the participants confidentiality and reduce the possibility of a poor response rate.

Data Storage: The raw data and the electronic data analysis file will be kept under secure conditions (e.g., locked filing cabinet). The raw data and electronic data analysis file will be kept in the researcher's supervisor's office at the School of Psychology, University of Wales - Bangor until the research project has been submitted and officially passed by the 'Board of Examiners'.

Risks & Hazards: Although no significant risks or hazards are anticipated. In the unlikely event that the participants find completing the necessary items in the postal research pack distressing or offensive they will be free to discontinue their participation at any time. To help deal with this eventuality participants will be made aware of this possibility in the information sheet and will be provided with appropriate contact numbers for support services available within their organisations (e.g., Occupational Health and/or Counselling Services).

A69. Do you need to add further information about certain questions in Part A?

YES

NO

Student Page**A70. Give details of the educational course or degree for which this research is being undertaken:**

Name and level of course/degree:

Doctorate in Clinical Psychology

Name of educational establishment:

North Wales Clinical Psychology Programme (NWCPP)
 School of Psychology
 University of Wales - Bangor
 College Road
 Bangor, Gwynedd, LL57 2DG

Name and contact details of education supervisor:

Professor Richard G. Owens
 Head of Forensic Clinical Psychology
 School of Psychology,
 University of Wales - Bangor,
 College Road,
 Bangor,
 Gwynedd,
 LL57 2DG.
 Tel.: 01248 388210
 E-mail: g.owens@bangor.ac.uk

A71. Declaration of Supervisor

I have read and approved both the research proposal and this application for ethical review. I undertake to fulfil the responsibilities of a supervisor as set out in the Research Governance Framework for Health and Social Care. I have delegated authority to sign on behalf of my academic institution that any necessary indemnity or insurance arrangements are in place.

Signature:

Date:

31/05/2004

Print Name:

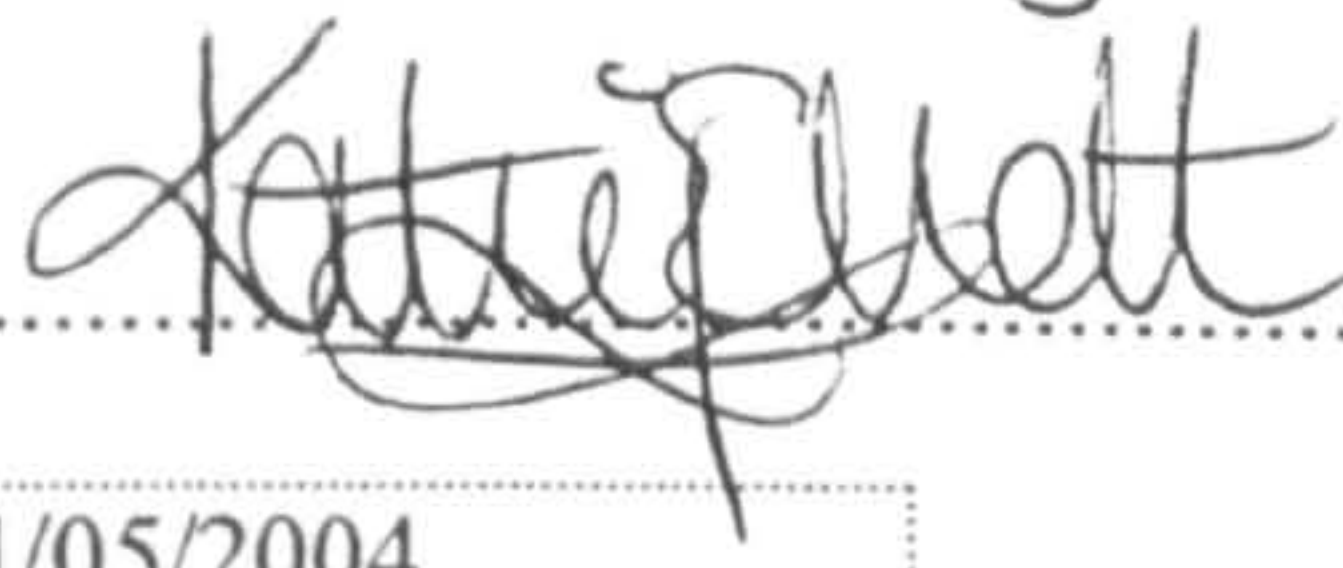
Professor Richard G. Owens

A one-page summary of the supervisor's CV should be submitted with the application

PART B: Section 7 - Declaration

- The information in this form is accurate to the best of my knowledge and belief and I take full responsibility for it.
- I undertake to abide by the ethical principles underlying the Declaration of Helsinki, and Good Practice Guidelines on the proper conduct of research.
- If the research is approved I undertake to adhere to the study protocol without unagreed deviation and to comply with any conditions set out in the letter sent by the NHS Research Ethics Committee notifying me of this.
- I undertake to inform the NHS Research Ethics Committee of any changes in the protocol, and to submit annual reports setting out the progress of the research.
- I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of patient or other personal data, including the need to register when necessary with the appropriate Data Protection Officer.
- I understand that research records/data may be subject to inspection for audit purposes if required in future.
- I understand that personal data about me as a researcher in this application will be held by the Research Ethics Committee and its operational managers, and that this will be managed according to the principles established in the Data Protection Act.

Signature of the Chief Investigator:



Date:

31/05/2004

Print Name:

Miss. Katie Ann Elliott

1. Do you need to add further information about certain questions in Part B?

YES NO

ENSURE THAT YOU COMPLETE AND SIGN THE FORM, AND ENCLOSE ALL RELEVANT ADDITIONAL DOCUMENTS.

Appendix A

Research Protocol

North Wales Clinical Psychology Programme (NWCPP)
Large Scale Research Project (LSRP)
Research Protocol

Title: **Stress, coping and psychological well-being amongst health care professionals employed within forensic in-patient settings**

Trainee: Miss. Katie Ann Elliott
Clinical Psychologist in Training
NWCPP, School of Psychology, UOW, Bangor, Gwynedd, LL57 2DG

Supervisor: Professor. Richard Glynn Owens
Head of Forensic Psychology
Ty Llewelyn, Bryn y Neuadd Hospital, Llanfairfechan, LL30 0HH and
School of Psychology, UOW, Bangor, Gwynedd, LL57 2DG

Research Objectives:

The overall objective of this research project is to investigate the psychological well-being of health care professionals employed within forensic in-patient settings. The research project aims to examine stress and psychological burnout experienced amongst health care professionals employed within forensic in-patient settings. The research project also aims to identify and explore the types of coping mechanisms employed by health care professionals within forensic in-patient settings.

Background:

Stress experienced within the workplace is argued to be the greatest occupational health problem in the United Kingdom (UK) and is estimated to cost organizations £4 billion annually, in associated sickness and absentee costs (Gray, 2000). Occupational stress can cause extensive personal consequences for the employee (e.g., physical illness, mental health problems and psychological burnout), as well as vast practical and financial implications for employers (e.g., absenteeism, poor morale, high staff turnover and reduced efficiency), (Sutherland & Cooper, 1990).

A review of the relevant literature revealed that the majority of psychological research into occupational stress has been based upon the 'transactional model of stress' (Cohen & Kessler, 1995). Within the transactional model, the concept of stress is closely linked with an individual's ability to cope with external pressures which are argued to depend upon their cognitive appraisal of the stressor and available coping strategies. Thus stress has been defined as the 'emotional and physiological reactions to an excess of demands over the individuals ability to meet them' (Atkinson, 1988) and is perceived in relation to an individuals previous experiences, success and/or failures of dealing with similar situations, and familiarity with the situation (Lazarus & Folkman, 1984).

Stress, Burnout & Health Care Professionals

Due to the nature of their work, health care professionals are particularly vulnerable to experiencing occupational stress and the detrimental effects associated with stress related conditions. Research evidence has suggested that health care professionals, especially mental health care professionals, have higher rates of absence and sickness when compared with staff from other occupational sectors (Nuffield Trust, 1998). Occupational stress has also been causally linked to recruitment and retention difficulties, which are commonly found within the National Health Service (Seecombe & Ball, 1992). In addition to the effects upon the individual and the organization, stress experienced amongst health care professionals inevitably has a detrimental impact upon patient care (e.g., continuity of care, inexperienced staff and poor engagement with clients).

Extensive research attention has focused upon the nursing professions experiences of stress because nursing is generally regarded as an inherently stressful, emotionally demanding and physically challenging occupation (Majomi, Brown & Crawford, 2003). In comparison to the general population, evidence suggests that nurses experience higher rates of stress related diseases, mortality, suicide, psychiatric admissions and general physical illnesses (Harris, 1989). Research has identified numerous primary sources of stress within nursing, which have included: work overload, death and separation experiences, inadequate staffing, shift work, overwhelming responsibility, feelings of incompetence, patient's challenging behaviour, limited managerial support, interpersonal conflicts, poor communication and social support, emotional demands of patients and families and constantly changing working environments.

The concept of 'psychological burnout' has also received considerable research attention within the nursing field. Originally the term 'burnout' was employed to describe the

emotional exhaustion commonly exhibited amongst public sector workers (Happel, Pinikahana & Martin, 2003). Among the first researchers to explore the concept of 'psychological burnout' were Maslach and colleagues (1996) who described this phenomenon as a three-dimensional syndrome consisting of emotional exhaustion, depersonalisation and reduced personal accomplishment. Psychological burnout is regarded as a particularly serious feature of chronic stress, which can often have long-term negative implications for the individual's psychological well-being.

Furthermore, numerous research investigations have been carried out, which have specifically examined stress and burnout within mental health nursing, however sample sizes have tended to be small and are almost exclusively based upon NHS Trusts within England (Edwards, et. al., 2001). The relevant literature suggests that all branches of nursing are subjected to high levels of stress, however mental health nursing is argued to be increasingly stressful, especially community based work (Kipping, 2000). Mental health nurses have been found to be at greater risk of experiencing burnout and poor psychological well-being, when compared with other health professionals (Reid, et. al. 1999). Interestingly, Carson and colleagues (1997) survey found that mental health nurses in Wales reported higher levels of stress than those based in England.

Coping, Well-being & Health Care Professionals

Although a number of studies have investigated stress and its negative impact (e.g., burnout, psychological and physical health problems) upon health care professionals, far less research attention has been paid to exploring this population's psychological well-being or coping strategies. The limited research literature that exists has identified a range of coping strategies employed by health care professionals which included: social support, supervision, stable inter-personal relationships, non-work interests, recognising limitations, optimal fitness levels, good home life, instantly addressing problems, peers support and personal strategies (Tilley & Chambers, 2003).

Researchers have separated the identified coping strategies into two distinct categories, emotion-focused strategies (e.g., address the emotional distress and avoid confronting the problem) and problem-focused strategies (e.g., address the problem directly). A range of factors have also been identified in relation to the use of adaptive coping strategies amongst health care professionals which included: being female, being older, work setting, secure position, more professional experience and enhanced social support networks (Edwards & Burnard, 2003).

Stress, Coping & Well-being within Forensic Settings

Forensic settings are frequently cited within the relevant literature as particularly stressful areas for health care professionals to work, due to the frequent exposure to disturbing social issues (e.g., sexual and violent offending) and challenging behaviour (Kirby & Pollack, 1995). Although there is little evidence to suggest that the incidence of violence is higher within forensic settings, the potential for clients to exhibit more extreme levels of aggressive behaviour is arguably greater. Research evidence has suggested that direct involvement in actual physical violence and/or the perceived threat of physical violence, significantly contributed to increased levels of stress amongst health care professionals in forensic settings (Sullivan, 1993).

Although there is a growing body of literature on stress experienced by health care professionals, very little research has been conducted with those employed within forensic services in the UK. The few published studies that do exist have focused upon forensic mental health nurses based within community teams. For example Coffey (1999) investigated stress levels amongst 104 forensic community mental health nurses (FCMHN) in England and Wales. 44% were found to be suffering from high levels of burnout, particularly emotional exhaustion, identified stresses included lack of facilities and office interruptions. Coffey and Coleman (2001) further investigated the relationship between stress and support mechanisms in FCMHN and found that a number experienced clinically significant levels of burnout, which were argued to be causally related to large caseload sizes.

Research investigating stress and burnout incidence in health care professionals employed within forensic in-patient settings is also surprisingly sparse. For example, Kirby & Pollack (1995) investigated the relationship between stress in 38 forensic nurses employed within a Medium Secure Unit (MSU) and their perceptions of the ward environment, although no statistically significant correlation were found. Chadler and Nolan (2000) employed the Mental Health Professional Stress Scale (MHPSS) to compare stress levels experienced by 23 forensic nurses based within an in-patient forensic unit with 15 mental health nurses based within an acute in-patient setting. The findings suggested that both groups of nurses experienced high stress levels in relation to different aspects of their working environments, although no significant differences were found between the groups. Finally, Happel, Pinikahana & Martin (2003) measured stress and burnout levels in 51 nurses employed in various types of forensic in-patient services in Australia and found lower than expected levels of stress and burnout.

Even less research attention has been paid to investigating the psychological well-being or coping mechanisms employed by health care professionals employed within forensic in-patient settings. For example, Whittington and Wykes (1994) investigated the coping strategies employed by 24 mental health care professionals after being severely physically assaulted by a client awaiting transfer to a forensic in-patient unit. Results suggested that a third of staff employed either escape/avoidance or confrontative coping strategies and raised general anxiety levels were reported. Ewers, Bradshaw, McGovern and Ewers (2001) found a significant reduction in burnout rates when a group of forensic mental health nurses employed within an MSU attended a psychosocial intervention training course.

Research Rationale:

Although it is widely accepted that forensic settings can be highly stressful environments, there has been a surprising lack of research into the phenomena of stress, coping and/or psychological well-being of health care professionals working within such settings, particularly in-patient settings. Psychological research investigating stress, coping and well-being of health care professionals employed within forensic in-patient settings, is duly warranted for the following reasons:

- Elevated levels of occupational stress are often experienced amongst health care professionals, especially nurses, when compared with other sectors. Occupational stress can have significant detrimental effects upon health care professionals: physical health, psychological well-being and increase their risk of suffering from psychological burnout.
- Occupational stress can have a negative impact upon service users (e.g., limited continuity, inexperienced staff and poor engagement). Elevated stress levels, poor psychological well-being and associated coping strategies will inevitably impact upon staff's behaviour and attitudes towards their patients, thus influencing the quality of care provided.
- Occupational stress can also have far reaching financial and practical implications for the National Health Service (e.g., absenteeism, poor moral, reduced efficiency, retention and recruitment difficulties).

Research Questions:

This research project therefore aims to address the following six questions:

- What stressors do health care professionals employed within forensic in-patient settings identify?

- Do health care professionals employed within forensic in-patient settings experience significant levels of psychological burnout?
- What coping strategies are utilized by health care professionals employed within forensic in-patient settings?
- Do health care professionals employed within forensic in-patient settings demonstrate good levels of psychological well-being?
- What recommendations can be made to help health care professionals employed within forensic in-patient settings reduce identified stressors?
- What recommendations can be made to increase health care professionals employed within forensic in-patient settings psychological well-being and adaptive coping strategies?

Research Design:

The overall research design employed by this project is essentially a quantitative study, which will involve the application of a cross-sectional survey method of data collection. The cross-sectional survey will be administered through the distribution of a customized postal research pack (e.g., demographic questionnaire and five assessment measures).

Participants:

The participants will include any health care professional (e.g., nursing assistant, nurses, psychologists, psychiatrists or occupational therapists) employed within a forensic in-patient setting, irrespective of speciality (e.g., mental health and learning disability) level of security (e.g., high, medium or low secure forensic units) or locality (e.g., local and non-local). In total, 100 health care professionals will be needed to participate in the research project. Due to the problem of poor response rates commonly found in postal surveys, the research project will aim to distribute the postal questionnaire to at least 250 potential participants.

Recruitment:

Participant recruitment and access will ultimately depend upon service manager's willingness to allow their staff teams to participate in the research project. Preliminary contact with service managers from four forensic in-patient services has been made in an attempt to discuss the general aims, feasibility and willingness to allow staff teams to participate in the research project. Access to the following forensic in-patient staff teams has been agreed in principle, pending appropriate ethical approval (please see enclosed letters):

1. Ty Llewelyn MSU, Bryn y Neuadd Hospital, Llanfairfechan, LL30 0HH.
2. Evenlode MSU, The Oxford Clinic, Littlemore, Oxford, OX4 4XN.
3. The Bracton Centre MSU, Leyton Cross Road, Dartford, DA2 7AF.
4. Forensic Services, Northgate Hospital, Morpeth, Northumberland, NE61 3BP.

Procedures:

The procedures employed by this research project will involve the following:

- Due to data protection issues the appropriate service managers will be responsible for distributing the research packs amongst their entire clinical staff team (e.g., placing address labels onto envelopes and posting to all staff via their internal mail system).
- The participants will read an information sheet that will explain the purpose of the research project, give assurances regarding confidentiality, contact numbers and general instructions.
- The participants will be asked to carefully complete the necessary questionnaires and assessment measures.
- Each participant will receive an individual 'code number card' inside their research pack, which they will be advised to retain for future reference (i.e., should they later require that their data is removed from the research).
- The participants will return the completed postal research packs in the provided S.A.E.
- A summary of the research findings and recommendations will be sent to the service managers to distribute amongst their entire staff team.

Assessment Measures:

The research project will employ a customized postal research pack, which will consist of the following questionnaires and assessment measures:

Demographic Information

A demographic questionnaire has been created to collect the necessary background information relating to the participant and the forensic in-patient unit where they are employed (please see enclosed copy). Background information collected includes age, gender, marital status, dependants, ethnicity, occupation, time in present post, time in forensic services, sickness days and working hours. Forensic Unit information includes the type of forensic unit/ward, level of security and access to supervision.

Stress, Burnout & Psychological Well-being

The following three assessment measures will be employed to establish the participant's experiences of occupational stress, burnout and well-being (please see enclosed copies):

- The Maslach Burnout Inventory – Human Services Survey (MBI-HSS) is a 22-item scale designed to measure levels of psychological burnout across the following three subscales: emotional exhaustion (e.g., limited emotional resources for work); depersonalization (e.g., feeling cut off from emotions) and personal accomplishment (e.g., perceive self as under-achieving at work), (Maslach, Jackson & Litter, 1996). The MBI-HSS has widely been employed by researchers investigating occupational stress and is considered to be a well validated measure (Maslach & Jackson, 1981).
- The Staff Stressor Questionnaire (SSQ) is a 33-item self-report measure originally designed to assess work stressors experienced amongst health care professionals employed within learning disability services (Hatton, et. al., 1999). At present, the SSQ remains to be rigorously assessed in terms of validity, reliability and clinical utility, although preliminary tests have shown promise in terms of face, construct and criterion validity. Furthermore, the wording on the SSQ has been amended by the researcher to increase the measures applicability for participants involved in this research project (e.g., mental health and learning disability health care professionals).
- The General Health Questionnaire (GHQ) will be employed to establish the participants overall level of psychological well-being. The 12-item GHQ (GHQ-12) will be used as it is the shortest available version which is regarded as a quick and versatile measure of psychological distress that is often used to indicate the likeliness of psychiatric case-ness (Goldberg & Williams, 1988). The GHQ is regarded as a well validated measure which has commonly been used by researchers investigating psychological well-being and stress (Coffey & Coleman, 2001).

Coping and Support

The following two assessment measures will be employed to explore various aspects associated with the participants coping mechanisms (please see enclosed copies):

- The Brief COPE will be employed, as it is a multi-dimensional 28-item questionnaire designed to quickly measure and assess a broad range of individual coping reactions (Carver, 1997). The Brief COPE is the shortest available version of the COPE Inventory (COPE) which was designed to assess situational or dispositional coping mechanisms and is generally considered to be a good theoretically based assessment of individual coping (Weinman, Wright & Johnston, 1995).

- The Staff Support & Satisfaction Questionnaire (3SQ) was developed by Rose and Harris (2002) to measure health care professional's perceptions of support in their working environments. This measure was originally designed for staff working with learning disabled client groups and consists of the following five sub-scales: job satisfaction, supportive people, risk factors, role clarity and coping resources. The wording on this measure has been amended by the researcher to increase its applicability for participants involved in this research project (e.g., mental health and learning disability health care professionals).

Data Analysis:

Once the researcher has checked for outlying data points and data distributions the data analysis will include the following:

- **Internal consistency:** The ratings from the research sample will be used to estimate Cronbach's alpha coefficient for all total scores and sub-scale scores on the assessment measures. Some measures have fewer psychometric data currently available (i.e., Staff Stressor Questionnaire (SSQ) and Staff Support & Satisfaction Questionnaire (3SQ)). If internal consistency is poor for these measures, it may prove necessary to revisit their factor structures using data from the present sample and other staff-based research.
- **Descriptive data:** Scores for the sample on all four-assessment measures will be presented. Where possible, the data will be sub-divided by context/patient categories.
- **Group comparison tests:** Will be used to explore any differences between work context/client group focus.
- **Associations between main outcome measures:** Correlation's will be used to explore associations between the outcome measures. If these are moderate, regression analyses will be carried out on each assessment measure separately. This would be preferable because existing studies typically focus on only one outcome measure and so comparisons with other findings could be facilitated. Which may prove easier to interpret the psychological meaning of the findings. However, if the associations are substantial, the researcher will consider creating a latent variable via a principal components analysis of the outcome measures and using this in the regression analysis.
- **Univariate analysis of correlates of well-being:** Appropriate univariate tests will be used to explore associations between potential psychological (i.e., coping and social support) and background (i.e., age and sex) variables and the outcome measures. Variables with statistically significant associations at the univariate level will be identified for inclusion in the regression analyses.

- **Exploratory regression analysis:** By selecting potential predictors from the univariate analyses, the researcher hopes to remain within the boundaries of the power estimate given above (i.e., roughly 8-10 predictor variables). It is difficult to be precise here, but the researcher is interested in predictors that have theoretical interest and also clinical meaning. We feel that clinical meaning is best represented by at least medium effects within the present research project. The regression analysis would be hierarchical in nature. Specifically, exploring whether psychological variables (i.e., support and coping) add anything to the prediction of well-being once other correlates have been controlled. For example, if working context were found to be important a set of dummy codes would be entered into the analysis with other 'control' variables. Although Type I errors are a potential problem within the approach to analysis of analysing outcomes separately, care will be taken to qualify the findings and we do not want to apply stringent experiment-wise error rate conditions on the analyses because of the dangers of making Type II errors. Thus the researcher recognises that these analyses are best described as exploratory in nature.

Statistical Support: Dr. Richard Hastings
Research Director
North Wales Clinical Psychology Programme (NWCPP), School of
Psychology, University of Wales, Bangor, Gwynedd, LL57 2DG

Ethical Issues:

Appropriate ethical approval is deemed necessary for the research project and will be sought from the following two committees:

- School of Psychology's REC, UOW Bangor (see enclosed approval letter)
- Multi-Site Research and Ethics Committee (MREC)

The research project will ensure that the participant's confidentiality is maintained at all times by securing all completed research packs in a locked filing cabinet. The research project will ensure that the participant's anonymity is maintained by not requesting that participants provide their names or other unnecessary identifiers on the completed questionnaires. Consent will not be obtained from the participants. The participants will provide implicit consent by completing the necessary questionnaires and assessment measures and returning them to the researcher. It is hoped that this will increase the participant's confidentiality and reduce the possibility of a poor response rate. Each postal research pack will include a 'code number card' which the participants will be advised to retain for future reference. The

researcher will place a code number card inside every postal research pack and will write the corresponding code number onto the top right hand corner of the front page of the questionnaire booklet for each postal research pack. The completed questionnaires and assessment measures will be scored and entered onto a spreadsheet using the code number. If a participant contacts the researcher at a later date and requests that their data is removed from the research project, they will be asked to provide their individual code number, so that their data can be removed.

Data Storage:

The raw data collected in the research project (e.g., completed postal research packs) and the electronic data analysis file will be securely stored in a locked filing cabinet in the researcher's supervisor's office at the School of Psychology, University of Wales – Bangor. The researcher's supervisor will be responsible for the custodial arrangements of the data once the research has been completed and is submitted to the Board of Examiners, School of Psychology, University of Wales – Bangor.

Feedback:

Arrangements for providing the research participants with feedback regarding the overall findings from the research project will involve:

- **Presentations:** All potential research participants will be invited by the researcher to attend a presentation of the research findings. Presentations will be facilitated at the participants local work base at a mutually convenient time.
- **Postal Feedback:** A summary of the research findings will be mailed to the managers of all the forensic in-patient units used in the research project. The relevant managers will be asked to distribute the summary of the research findings to all health care professionals employed within their forensic in-patient unit.

Risk Assessment:

No significant risks or hazards are anticipated to either the participants or the researcher involved in the research project due to the cross-sectional survey design and data collection method which will be facilitated through a postal survey. In the unlikely event that the participants find completing the necessary psychometric assessment measures and questionnaires distressing or offensive they will be free to discontinue their participation. The participants will be forewarned that this is a possibility in the 'Information Sheet' before

agreeing to participate in the research project. The participants will also be provided with a list of appropriate contact numbers for support services available to staff members within their organisation (e.g., occupational health and/or counselling services) and will be advised to contact these services if they wish to discuss their individual concerns regarding occupational stress.

Materials & Costs:

It is envisaged that the research project will necessitate the following costs and materials:

- Photocopying – 250 postal questionnaire packs
- Postage – 250 questionnaire packs and 250 pre-paid return envelopes
- Envelopes – 500 large brown envelopes
- Address Labels – 500 printed address labels
- General Stationary – 500 staples and paper-clips
- Travel Expenses – To attend necessary meetings with relevant service managers
- The Maslach Burnout Inventory (MBI) - 250 assessment sheets will need to be ordered (www.cpp-db.com) and will cost \$300

Timetable:

December 2003	<ul style="list-style-type: none"> • Draft LSRP Protocol • 12/12/03 LSRP Protocol Deadline
January 2004	<ul style="list-style-type: none"> • Amend LSRP protocol • Recruit necessary forensic in-patient units • Draft Ethics Application and necessary forms
February 2004	<ul style="list-style-type: none"> • Submit Ethics Application (School of Psychology) • 27/02/04 LSRP Ethics Deadline
March 2004	<ul style="list-style-type: none"> • Submit Ethics Application (MREC)
April 2004	<ul style="list-style-type: none"> • Literature Review and order relevant publications
May 2004	<ul style="list-style-type: none"> • Attend MREC meeting 06/05/04 • Ethics application – Amendments and resubmission
June 2004	<ul style="list-style-type: none"> • Prepare for data collection • Await outcome and approval from MREC • 25/06/04 LSRP Progress Report 1 Deadline
July 2004	<ul style="list-style-type: none"> • Data Collection, scoring assessments & collating scores • Literature Review – draft

August 2004	<ul style="list-style-type: none"> • Data Collection, scoring assessments & collating scores • Literature Review – draft
September 2004	<ul style="list-style-type: none"> • Data analysis • Literature Review – draft
October 2004	<ul style="list-style-type: none"> • Research Paper – draft • 29/10/04 LSRP Progress Report 2 Deadline
November 2004	<ul style="list-style-type: none"> • Research Paper – draft • 15/11/04 LSRP Draft for Supervisor’s Feedback
December 2004	<ul style="list-style-type: none"> • Critical Review – draft • Suggested Amendments • Compile Appendix, References & Abstract
January 2005	<ul style="list-style-type: none"> • Final amendments • Send for binding • 28/01/05 LSRP FINAL SUBMISSION DEADLINE

References:

Atkinson, J. (1988). Coping with stress at work. Thorsons, Wellingborough.

Carson, J., Wood, M., White, H. & Thomas, B. (1997). Stress in mental health nursing: findings from the Mental Health Care Survey. *Mental Health Care*, 1, 11-14.

Carver, C.S. (1997). You want to measure coping but your protocol’s too long: Consider the Brief COPE. *International Journal of Behavioural Medicine*, 4, 1, 92-100.

Chadler, G. & Nolan, P.W. (2000). A comparative study of stress among forensic and acute mental health nurses. *The British Journal of Forensic Practice*, 2, 3, 24-29.

Coffey, M. (1999). Stress and burnout in Forensic Community Mental Health Nurses (FCMHN). *Journal of Psychiatric & Mental Health Nursing*, 6, 433-444.

Coffey, M. & Coleman, M. (2001). The relationship between support and stress in forensic community mental health nursing. *Journal of Advanced Nursing*, 34, 397-407.

Cohen, S. & Kessler, R.C. (1995). Strategies of measuring stress in studies of psychiatric and physical disorders. In S. Cohen, R.C. Kessler & L.G. Gordon (Eds.). Measuring Stress: A guide for health & social scientists. Oxford University Press, New York.

Edwards, D., Burnard, P., Coyle, D., Fothergill, A. & Hannigan, B. (2001). A stepwise multivariate analysis of factors that contribute to stress for mental health nurses working in the community. *Journal of Advanced Nursing*, 36, 6, 805-813.

Edwards, D. & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Journal of Advanced Nursing*, 42, 2, 169-200.

Ewers, P. Bradshaw, T. McGovern, J. & Ewers, B. (2002). Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing*, 37, 470.

Goldberg, D. & Williams, P. (1988). The General Health Questionnaire – A User's Guide to the GHQ. NFER-NELSON.

Gray, P. (2000). Mental Health in the Workplace: Tackling the Effects of Stress. Mental Health Foundation, London.

Happel, B., Pinikahana, J. & Martin, T. (2003). Stress & burnout in forensic psychiatric nursing. *Stress & Health*, 19, 63-68.

Harris, R.B. (1989). Reviewing nursing stress according to the proposed coping-adaptation framework. *Advances in Nursing Science*, 11, 12-28.

Harris, P. & Rose, J. (2002). Measuring staff support in services for people with intellectual disabilities: the staff support and satisfaction questionnaire – version two. *Journal of Intellectual Disability Research* 46, 2, 151-157.

Hatton, C., Rivers, M., Mason, H., Kiernan, C., Emerson, E., Alborz, A. & Reeves, D. (1999). Staff stressors & staff outcomes in services for adults with intellectual disabilities: The staff stressor questionnaire. *Research in Developmental Disabilities*, 20, 4, 269-285.

Kipping, C.J. (2000). Stress in mental health nursing. *International Nursing Studies*, 37, 207.

Kirby, S. & Pollack, P.H. (1995). The relationship between a medium secure environment and occupational stress in forensic psychiatric nursing. *Journal of Advanced Nursing*, 22, 862-67.

Lazarus, R.S. & Folkman, S. (1984). Stress, Appraisal & Coping. Springer, New York.

Majomi, P., Brown, B. & Crawford, P. (2003). Sacrificing the personal to the professional: Community mental health nurses. *Journal of Advanced Nursing*, 42, 5, 527-538.

Maslach, C. & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 99-113.

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). Maslach Burnout Inventory Manual (2nd Edition). Palo Alto: Consulting Psychologists Press.

Nuffield Trust. (1998). Improving the health of the NHS Workforce. The Nuffield Trust, London.

Reid, Y., Johnson, S., Morant, N., Kuipers, E., Szmukler, G., Bebbington P., Thornicroft, G. & Prosser, D. (1999). Improving support for mental health staff: A qualitative study. *Social Psychiatry & Psychiatric Epidemiology*, 34, 309-315.

Seecombe, I. & Ball, J. (1992). Motivation, Morale & Mobility: a profile of qualified nurses in the 1990's. Institute of Manpower Studies, University of Sussex, Brighton.

Sullivan, P.J. (1993). Occupational stress in psychiatric nursing. *Journal of Advanced Nursing*, 18, 591-602.

Sutherland, V. & Cooper, C. (1990). Understanding Stress: A psychological perspective for health care professionals. Chapman & Hall, London.

Tilley, S. & Chambers, M. (2003). A systematic review of the effectiveness of stress-management interventions for mental health professionals. *Journal of Psychiatric & Mental Health Nursing*, 10, 370-1.

Weinman, J., Wright, S. & Johnston, M. (1995). Measures in Health Psychology: A User's Portfolio. NFER-NELSON

Whittington, R. & Wykes, T. (1994). Going in strong: Confrontative coping by staff. *Journal of Forensic Psychiatry*, 5, 3, 609-614.

Signatures:

Trainee's:

Supervisor's:

Date:

31st May 2004

Appendix B

Participant Information Sheet

(English and Welsh versions)

Participant Information Sheet

1. Study title

Stress, coping and psychological well-being amongst health care professionals employed within forensic in-patient settings

2. Invitation to participate

You are being invited to take part in a research study. As a member of staff you are the most important resource in the service. However, we know very little about how staff think and feel about their work. In light of this, the study described below is focused on you and is interested in your views about what you do and your feelings about work.

Before you decide whether to take part, or not, it is important for you to understand why this research is being done and what it will involve. Please take time to read the following information carefully and discuss it with friends, relatives or people at work, if you wish. Please contact me if there is anything that you are not clear about, or if you would like more information. Take time to decide whether or not you wish to take part.

3. What is the purpose of this study?

Although it is widely accepted that forensic settings can at times be highly stressful environments, there has been a surprising lack of research into the phenomena of stress, coping and psychological well-being of health care professionals who work within such settings in the UK. The few studies that do exist have mainly focused upon the experiences of forensic community mental health nurses (FCMHN) and very little attention has been paid to health care professionals employed within in-patient units.

I am interested in looking at stress, coping and the psychological well-being of health care professionals employed within forensic in-patient settings. Working within forensic in-patient settings may affect well-being and I am interested in whether people experience states such as stress or burnout. I am also interested in identifying factors that may affect well-being in both a positive and negative sense, such as the ways staff use to cope with the stresses at work and the role of support by colleagues. This study

will contribute to the body of knowledge around staff well-being and how services might seek to promote well-being in their staff.

4. Why have I been chosen?

You have been invited to take part in this study because you work within a forensic in-patient setting. All health care professionals (e.g., nurses, nursing assistants, occupational therapists, psychologists, psychiatrists) employed within your forensic in-patient service have been invited to participate. Staff teams from several other forensic in-patient services across the UK have also been invited to participate in the study.

5. Do I have to take part?

It is entirely up to you to decide whether or not to take part. If you decide to take part you will be given this Information Sheet to keep. If you do decide to take part you are still free to withdraw from the research at any time and without giving a reason.

6. What will happen to me if I take part?

If you agree to take part you will need to carefully read the enclosed Instructions Sheet, complete the questionnaire booklet and return all of the completed forms to me in the S.A.E. provided. This will take approximately half an hour of your time to complete and time permitting you will be able to complete the questionnaire in work time.

If you agree to take part in the study, there is a copy of the Information Sheet and individual Code Number Card for you to keep for your own records.

If your preferred language is Welsh, I would like to apologize for the fact that the questionnaires are in English only. It is not possible to translate them into Welsh, due to potential problems in losing important aspects of their meaning.

7. What are the risks in taking part?

It is possible, that some staff may become upset as a result of thinking about some of the stresses they experience at their work place. However, this has proved to be a rare outcome in previous research. To account for this unlikely outcome, contact numbers

are provided on the enclosed Contacts Sheet, regarding access to appropriate services that are provided by your employers. Also, if for any reason, you are concerned about your own well-being, you are advised to seek the advice of your GP.

8. What are the benefits of taking part?

We hope to be able to use the information gathered in this study to increase service awareness of staff well-being and to help design programmes that may be geared to supporting staff. Although you are unlikely to benefit personally simply by completing the questionnaires, it is hoped that the information you give will help improve staff support within your forensic in-patient service and will hopefully help you and other staff in the future.

9. What if I have a complaint?

If you wish to complain about how the research has been conducted or how you have been treated then the normal National Health Service complaints mechanisms are available to you. If we cannot resolve any complaint that you may have, then you have the right to address your concerns to:

Mr. Gren Kershaw

Chief Executive

Conwy & Denbighshire NHS Trust

Glan Clwyd Hospital

Rhyl

Denbighshire

LL185UJ

Professor Fergus Lowe

Head of School

School of Psychology

University of Wales - Bangor

Bangor

Gwynedd

LL57 2DG

10. Will my taking part in this study be kept confidential?

All of the information which is collected about you during the course of the research will be kept strictly confidential. The organization where you work will at no time have access to any of the questionnaires completed by individuals. You are not asked to provide your name on any of the completed forms that you return to us. Every research pack includes an anonymous Code Number Card which you are advised to keep for future reference. This code number has been entered onto the front page of the questionnaire booklet by the researcher. Your code number is anonymous and only

known to you. The code number will allow the researcher to be able to remove your data from the study, if you request this to happen at a later date.

In the research, the information you provide will be collated and subject to statistical analysis; individuals will not be identified in the report. The researcher's supervisor, Professor Glynn Owens, may need to access the collated data during the course of the research for verification purposes.

11. What will happen to the results of the research study?

The results of the study will add to the body of knowledge regarding staff well-being and provide a unique insight into the experiences of health care professionals employed within forensic in-patient services across the UK. A summary of the research findings will be made available to you after January 2005. All staff will be sent a copy of the summary results via their service manager. You will also be invited to attend a presentation of the research findings at your work place sometime after January 2005. It is hoped that the study will be published in a peer reviewed research journal.

12. Who is organizing and funding the research?

The study will form the final research project of Miss. Katie Ann Elliott who is working towards a Doctorate in Clinical Psychology with the North Wales Clinical Psychology Programme (NWCPP) at the University of Wales, Bangor. The study is being supervised by Professor Richard Glynn Owens, Head of Forensic Psychology, School of Psychology, University of Wales, Bangor.

13. Who has reviewed the study?

All research that involves NHS patients or staff, information from NHS medical records or uses NHS premises or facilities must be approved by a NHS Research and Ethics Committee before it goes ahead. Approval does not guarantee that you will not come to any harm if you take part. However approval does mean that the Committee are satisfied that your rights will be respected, that any risks have been reduced to a minimum and balanced against possible benefits and that you have been given sufficient information on which to make an informed decision to take part or not.

The study has been approved by the NHS Multi-site Research and Ethics Committee (MREC) and the School of Psychology Research and Ethics Committee, School of Psychology, University of Wales, Bangor.

14. Contact for further information

If you have any questions, or would like more information about this study then please do not hesitate to contact either myself or my supervisor at the following:

Miss. Katie Ann Elliott
Clinical Psychologist in Training
North Wales Clinical Psychology Programme
School of Psychology
University of Wales – Bangor
College Road
Bangor
Gwynedd
LL57 2DG

Tel: 07960 309062

Fax: 01248 383 718

Email: katieannelliott@hotmail.com

Professor Richard G. Owens
Head of Forensic Psychology
School of Psychology
University of Wales – Bangor
College Road
Bangor
Gwynedd
LL57 2DG

01248 388 210

01248 682 146

g.owens@bangor.ac.uk

Finally, I would like to thank you for taking the time to read this information sheet and for considering to participate in the research study.

Best Wishes

Miss. Katie Ann Elliott
Clinical Psychologist in Training

Taflen Wybodaeth i Gyfranogwyr

1. Teitl yr astudiaeth

Straen, ymdopi a lles seicolegol ymysg gweithwyr iechyd proffesiynol a gyflogir mewn sefyllfaoedd fforensig gyda chleifion mewn ysbytai

2. Gwahoddiad i gymryd rhan

Fe'ch gwahoddir i gymryd rhan mewn astudiaeth ymchwil. Fel aelod o staff, chwi yw adnodd pwysicaf y gwasanaeth. Fodd bynnag, ychydig a wyddom am beth mae'r staff yn feddwl ac yn deimlo am eu gwaith. Yng ngoleuni hyn, mae'r astudiaeth a ddisgrifir isod yn canolbwyntio arnoch chwi ac yn ymddiddori yn eich barn am yr hyn a wnewch a'ch teimladau am eich gwaith. Cyn i chwi benderfynu cymryd rhan ai peidio, mae'n bwysig eich bod yn deall pam fod yr ymchwil yn cael ei wneud a beth fydd yn olygu. Cymerwch eich amser i ddarllen y wybodaeth a ganlyn yn ofalus, a'i drafod gyda'ch ffrindiau, eich perthnasau neu bobl yn y gwaith os mynnwch. Cofiwch gysylltu â mi os nad ydych yn glir am unrhyw beth, neu os carech fwy o wybodaeth. Cymerwch eich amser i benderfynu a ydych am gymryd rhan ai peidio.

3. Beth yw diben yr astudiaeth hon?

Er bod pawb yn derbyn y gall sefyllfaoedd fforensig ar adegau fod yn straenllyd iawn, mae'n syndod na wnaed llawer o ymchwil i ffenomena straen, ymdopi a lles seicolegol y gweithwyr iechyd proffesiynol sy'n gweithio dan y fath amgylchiadau yn y DG. Mae'r ychydig astudiaethau a wnaed wedi canolbwyntio yn bennaf ar brofiadau nyrsys cymunedol iechyd meddwl fforensig (NCIMFf) ac ni roddwyd fawr ddim sylw i weithwyr iechyd proffesiynol sy'n gweithio mewn unedau yn yr ysbytai.

Mae gennyf ddiddordeb mewn edrych ar edrych ar straen, ymdopi a lles seicolegol gweithwyr iechyd proffesiynol a gyflogir mewn unedau fforensig gyda chleifion mewn ysbytai. Gall gweithio mewn unedau fforensig gyda chleifion mewn ysbytai effeithio ar les rhywun, ac y mae gen i ddiddordeb mewn gwybod a yw pobl yn profi straen neu yn 'llosgi allan'. Mae gennyf ddiddordeb hefyd mewn nodi ffactorau a all effeithio ar les mewn ystyr negyddol a chadarnhaol, megis y ffyrdd a ddefnyddir gan staff i ymdopi gyda straen yn y gwaith, a'r rhan a chwaraeir gan gefnogaeth cydweithwyr. Bydd yr astudiaeth hon yn

cyfrannu at gorff y wybodaeth am les staff a sut y gall gwasanaethau hybu lles ymysg eu staff.

4. Pam cefais i fy newis?

Fe'ch gwahoddwyd i gymryd rhan yn yr astudiaeth hon am eich bod yn gweithio yn fforensig gyda chleifion mewn ysbyty. Gwahoddwyd yr holl weithwyr proffesiynol (e.e., nyrsys, cymorthyddion nyrsio, therapyddion galwedigaethol, seicolegwyr, seiciatryddion) a gyflogir yn eich gwasanaeth fforensig i gleifion i gymryd rhan. Gwahoddwyd timau staff o lawer o wasanaethau fforensig tebyg ledled y DG i gymryd rhan yn yr astudiaeth hefyd

5. Oes rhaid i mi gymryd rhan?

Mater i chwi yn llwyr yw penderfynu a ddylech gymryd rhan ai peidio. Os penderfynwch gymryd rhan, fe gewch y daflen wybodaeth hon i'w chadw. Os byddwch yn penderfynu cymryd rhan, byddwch yn dal yn rhydd i dynnu'n ôl o'r ymchwil unrhyw adeg heb roi rheswm.

6. Beth fydd yn digwydd i mi os cymera'i ran?

Os cytunwch i gymryd rhan, bydd rhaid i chwi ddarllen y Daflen Gyfarwyddiadau amgaaedig yn ofalus, llenwi'r dudalen holiadur a dychwelwyd yr hol ffurflenni ataf i yn yr amlen a ddarperir. Bydd hyn yn cymryd rhyw hanner awr o'ch amser, a dylai fod gennych ddigon o amser i'w wneud yn ystod amser gwaith.

Os cytunwch i gymryd rhan yn yr astudiaeth, mae copi o'r Daflen Gyfarwyddiadau a Cherdyn Rhif Cod unigol i chwi ei gadw ar gyfer eich cofnodion eich hun.

Os mai Cymraeg yw eich dewis iaith, carwn ymddiheuro am y ffaith mai yn Saesneg y mae'r holiaduron. Nid oes modd eu cyfieithu i'r Gymraeg, oherwydd y gall agweddau pwysig o'u hystyr fynd ar goll.

7. Beth yw peryglon cymryd rhan?

Gall rhai aelodau o staff boeni o ganlyniad i feddwl am y straen yn eu gwaith. Fodd bynnag, anaml y digwyddodd hyn mewn ymchwil blaenorol. Rhag iddo ddigwydd, mae rhifau cyswllt

ar y Daflen Gyswilt, am y gwasanaethau priodol a ddarperir gan eich cyflogwyr. Hefyd, os ydych yn pryderu am eich lles eich hun am unrhyw reswm, cynghorir chwi i geisio cyngor eich meddyg teulu.

8. Beth yw manteision cymryd rhan?

Gobeithiwn fedru defnyddio'r wybodaeth a gesglir yn yr astudiaeth i gynyddu ymwybyddiaeth o les y staff ac i helpu i gynllunio rhaglenni i'w cefnogi. Er nad ydych yn debyg o elwa yn bersonol trwy lenwi'r holiaduron, y gobaith yw y bydd y wybodaeth a rowch yn helpu i wella'r gefnogaeth i staff yn eich gwasanaeth ffforensig i gleifion, ac yn eich helpu chwi ac aelodau eraill o staff yn y dyfodol.

9. Beth os oes gen i g_yn?

Os ydych am gwyno am y ffordd y gwnaed yr ymchwil neu sut y cawsoch eich trin, yna mae mecanwaith gwyno'r Gwasanaeth Iechyd Gwladol ar gael i chwi. Os na fedrwn ddatrys unrhyw g_yn sydd gennych, yna mae gennych hawl i fynd â'ch pryderon at:

Mr. Gren Kershaw

Prif Weithredwr

Ymddiriedolaeth GIG Conwy &

Sir Ddinbych

Ysbyty Glan Clwyd

Y Rhyl

Sir Ddinbych

LL185UJ

Yr Athro Fergus Lowe

Pennaeth Ysgol

Ysgol Seicoleg

Prifysgol Cymru - Bangor

Bangor

Gwynedd

LL57 2DG

10. A fydd fy rhan yn yr astudiaeth yn cael ei gadw'n gyfrinachol?

Cedwir yr holl wybodaeth a gesglir amdanoch yn ystod yr ymchwil yn hollol gyfrinachol. Ni fydd gan y sefydliad yr ydych yn gweithio iddo hawl i fynd at yr holiaduron a lenwir gan unigolion. Fydd dim rhaid i chwi roi eich enw ar y ffurflenni y byddwch yn eu dychwelyd atom. Mae pob pecyn ymchwil yn cynnwys Cerdyn Rhif Cod dienw i chwi ei gadw. Mae'r rhif cod hwn wedi ei roi ar dudalen flaen llyfryn yr holiadur gan yr ymchwilydd. Mae eich rhif cod yn ddiennw a dim ond chwi sy'n gwybod beth yw. Bydd y rhif cod yn caniatáu i'r ymchwilydd dynnu eich data o'r astudiaeth, os ydych am i hyn ddigwydd yn nes ymlaen.

Yn yr ymchwil, caiff y wybodaeth a rowch ei gasglu a'i ddadansoddi yn ystadegol; ni nodir unigolion yn yr adroddiad. Efallai y bydd yn rhaid i oruchwyliwr yr ymchwilydd, yr Athro Glynn Owens, fynd at y data a gasglwyd ynghyd yn ystod yr ymchwil at ddibenion dilysu.

11. Beth fydd yn digwydd i ganlyniadau'r astudiaeth ymchwil?

Bydd canlyniadau'r astudiaeth yn ychwanegu at gorff y wybodaeth am les staff ac yn rhoi golwg unigryw i brofiadau gweithwyr iechyd proffesiynol a gyflogir mewn gwasanaethau fforensig i gleifion mewn ysbytai ledled y DG. Cewch grynodedb o ganfyddiadau'r ymchwil wedi mis Ionawr 2005. Caiff yr holl staff gopi o'r canlyniadau trwy eu rheolwr gwasanaeth. Fe'ch gwahoddir hefyd i ddod i gyflwyniad o'r canfyddiadau yn eich man gwaith rhywbryd wedi Ionawr 2005. Y gobaith yw y cyhoeddir yr astudiaeth mewn cyfnodolyn ymchwil a adolygir gan gymheiriaid.

12. Pwy sy'n trefnu'r ymchwil ac yn talu amdano?

Bydd yr astudiaeth yn rhan o brosiect ymchwil terfynol Miss Katie Ann Elliott sydd yn gweithio tuag at Ddoethuriaeth mewn Seicoleg Glinigol ar Raglen Seicoleg Glinigol Gogledd Cymru (RhSCGC) ym Mhrifysgol Cymru, Bangor. Goruchwylir yr astudiaeth gan yr Athro Richard Glynn Owens, Pennaeth Seicoleg Fforensig, Ysgol Seicoleg, Prifysgol Cymru, Bangor.

13. Pwy sydd wedi adolygu'r astudiaeth?

Rhaid i bob ymchwil gyda chleifion neu staff GIG, gwybodaeth o gofnodion meddygol GIG neu sy'n defnyddio adeiladau neu gyfleusterau'r GIG gael ei gymeradwyo gan Bwyllgor Ymchwil a Moeseg GIG cyn bwrw ymlaen. Nid yw'r ffaith iddo gael ei gymeradwyo yn gwarantu na ddaw niwed i'ch rhan os cymerwch ran. Fodd bynnag, y mae cymeradwyo yn golygu fod y Pwyllgor yn fodlon y perchir eich hawliau, y bydd unrhyw risg wedi ei chadw i'r isafswm a'u cydbwyso yn erbyn manteision posibl, a'ch bod wedi cael digon o wybodaeth i chwi wneud penderfyniad deallus i gymryd rhan neu beidio.

Cymeradwywyd yr astudiaeth gan y Pwyllgor Ymchwil a Moeseg Aml-Safle (PYMAS) a Phwyllgor Ymchwil a Moeseg Ysgol Seicoleg Prifysgol Cymru, Bangor.

14. Cyswllt am fwy o wybodaeth

Os oes gennych unrhyw gwestiynau, neu os carech fwy o wybodaeth am yr astudiaeth hon, yna cofiwch fod croeso i chwi gysylltu â mi neu fy ngoruchwyliwr isod:

Miss Katie Ann Elliott
 Seicolegydd Clinigol dan Hyfforddiant
 Rhaglen Seicoleg Glinigol Gogledd Cymru
 Ysgol Seicoleg
 Prifysgol Cymru – Bangor
 Ffordd y Coleg
 Bangor
 Gwynedd
 LL57 2DG
 Tel: 07960 309062
 Ffacs: 01248 383 718
 E-bost: katieannelliott@hotmail.com

Yr Athro Richard G. Owens
 Pennaeth Seicoleg Fforensig
 Ysgol Seicoleg
 Prifysgol Cymru – Bangor
 Ffordd y Coleg
 Bangor
 Gwynedd
 LL57 2DG
 01248 388 210
 01248 682 146
g.owens@bangor.ac.uk

Yn olaf, carwn ddiolch i chwi am gymryd yr amser i ddarllen y daflen hon ac am ystyried cymryd rhan yn yr astudiaeth ymchwil.

Dymuniadau gorau

Miss Katie Ann Elliott
 Seicolegydd Clinigol dan Hyfforddiant

Appendix C

Instructions Sheet

(English and Welsh versions)

Instructions Sheet

1. Participant Information Sheet

Please ensure that you carefully read the 'Participant Information Sheet' and take time to decide whether or not you wish to participate in the research project before completing the questionnaire. The Participant Information Sheet is for you to keep.

2. Participant Code Number Card

Please ensure that you retain the 'Participant Code Number Card' for future reference. The individual code number is anonymous and only known to you. The researcher has entered the code number onto the top right hand corner of the front page of the questionnaire booklet. The code number will allow the researcher to remove your data from the study, should you request this to happen at a later date.

3. Instructions Sheet

Please ensure that you carefully read and follow the advice provided in the 'Instructions Sheet' before completing the questionnaire.

4. Survey and Questionnaires

Please read each question *carefully*. This is not a test. There are no right or wrong answers. Please give your *immediate* response by *drawing a circle* around the number or answer that best matches your view. Please ensure that you complete *every questionnaire* and answer *all of the questions* as openly and honestly as possible. All of the information that you give will be kept *strictly confidential*. Your organisation will *at no time* have access to any of the returned questionnaire booklets.

5. S.A.E.

Your completed questionnaire will be a valuable contribution to this research project. Once you have completed the questionnaire, please secure the questionnaire booklet in the enclosed pre-paid self-addressed envelope and return it to me within 14 days.

6. Contacts Sheet

If you are concerned about your own well-being after completing the questionnaire, you are advised to contact your GP. In addition, the enclosed 'Contacts Sheet' provides the numbers for appropriate support services provided by your employers.

Now that you have read the Instructions Sheet please begin the questionnaire

Thank-you

Taflen Gyfarwyddiadau

1. Taflen Wybodaeth i Gyfranogwyr

Gofalwch eich bod yn darllen y 'Daflen Wybodaeth i Gyfranogwyr' yn drylwyr ac yn cymryd amser i benderfynu a ydych am gymryd rhan yn y prosiect ymchwil cyn cwblhau'r arolwg. Cewch gadw'r Daflen Wybodaeth i Gyfranogwyr.

2. Cerdyn Rhif Cod Cyfranogwr

Gofalwch eich bod yn cadw'r 'Cerdyn Rhif Cod Cyfranogwr' i gyfeirio ato yn y dyfodol. Mae'r rhif cod unigol yn ddiennw a dim ond chwi sy'n ei wybod. Mae'r ymchwilydd wedi rhoi rhif y cod yng nghornel dde uchaf tudalen flaen llyfryn yr holiadur. Bydd y rhif cod yn caniatáu i'r ymchwilydd dynnu eich data o'r astudiaeth, petaech am i hyn ddigwydd yn nes ymlaen.

3. Taflen Gyfarwyddiadau

Gofalwch eich bod yn darllen ac yn dilyn y cyngor yn y 'Daflen Gyfarwyddiadau' cyn cwblhau'r arolwg.

4. Llyfryn yr Holiadur

Darllenwch bob cwestiwn *yn ofalus*. Nid prawf yw hwn. 'Does dim atebion cywir neu anghywir. Rhowch eich ymateb *yn syth* trwy *dynnu cylch* o gwmpas y rhif neu'r ateb sy'n cyfateb orau i'ch barn. Gofalwch eich bod yn llenwi *pob holiadur* ac yn ateb *yr holl gwestiynau* mor agored a gonest ag sydd modd. Cedwir yr holl wybodaeth a rowch *yn hollol gyfrinachol*. Ni fydd eich sefydliad yn medru gweld unrhyw rai o'r llyfrynnau holiadur a ddychwelir *o gwbl*.

5. Amlen

Bydd eich ateb i'r arolwg yn gyfraniad gwerthfawr i'r prosiect ymchwil hwn. Unwaith i chwi gwblhau'r arolwg, rhowch lyfryn yr holiadur yn yr amlen amgaaedig, a'i dychwelyd ataf ymhen 14 diwrnod.

6. Taflen Gyswllt

Os ydych yn pryderu am eich lles wedi cwblhau'r arolwg, cynghorir chwi i gysylltu â'ch meddyg teulu. Hefyd, mae'r 'Daflen Gyswllt' amgaaedig yn rhoi rhifau cyswllt i'r gwasanaethau cefnogi priodol a ddarperir gan eich cyflogwyr.

Yn awr eich bod wedi darllen y Daflen Gyfarwyddiadau, cychwynnwch yr arolwg

Diolch

Appendix D

Questionnaire Booklet Cover

(English and Welsh versions)

Participant Code Number:

Questionnaire

Booklet

Rhif Cod y Cyfranogwr:

Llyfryn yr Holiadur

Appendix E

Background Information Questionnaire

(English and Welsh versions)

Background Information Questionnaire

It is particularly important that we gather background information about you, the work that you do and the service that you work in. This will allow us to compare the views of different groups of staff and analyse differences between forensic in-patient services.

About You:

1. **Age:** _____ (years)

2. **Gender:**

Male	<input type="checkbox"/>
Female	<input type="checkbox"/>

3. **Marital Status:**

Single	<input type="checkbox"/>
Married	<input type="checkbox"/>
Living with partner	<input type="checkbox"/>
Divorced	<input type="checkbox"/>
Widowed	<input type="checkbox"/>
Separated	<input type="checkbox"/>

4. **Do you have dependent children living with you?**

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

5. **Do you have other dependants living with you?**

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

6. **Ethnic Origin:**

Asian (Indian origin)	<input type="checkbox"/>
Asian (Pakistani origin)	<input type="checkbox"/>
Asian (Bangladeshi origin)	<input type="checkbox"/>
Asian (East African origin)	<input type="checkbox"/>
Asian (Chinese origin)	<input type="checkbox"/>
Asian (Other)	<input type="checkbox"/>
Black (Caribbean origin)	<input type="checkbox"/>
Black (African origin)	<input type="checkbox"/>
Black (Other)	<input type="checkbox"/>
White (please specify)	<input type="checkbox"/> _____
Other group (please specify)	<input type="checkbox"/> _____

7. **Smoking:**

On average, how many cigarettes do you smoke per day? _____

On average, how many cigars do you smoke per day? _____

On average, how many roll-ups do you smoke per day? _____

8. **Alcohol:**

On average, how many units of alcohol do you drink per day? _____

(e.g., 1 Unit = _ pt larger or 1 small glass of wine or 1 measure of spirit)

9. **Caffeine:**

On average, how many cups of caffeinated coffee do you drink per day? _____

On average, how many cups of caffeinated tea do you drink per day? _____

On average, how many cups of caffeinated cola do you drink per day? _____

10. **Life Events:**

Have any major changes happened to you in the past 6 months (i.e., marriage, moved house, bereavement, serious illness)?

Yes

No

About Your Job:

1. **Occupation:** Your current job title: _____
(e.g., staff nurse)

Your current grade: _____
(e.g., A, B, C, D, E)

Your specialism(s): _____
(e.g., Forensic, Learning Disability, Mental Health, General)

2. **Length of time employed in forensic in-patient services:** _____ (years)

3. Length of time employed in current forensic in-patient service: _____ (years)

4. How many hours are you contracted to work per week?

- 15 hours or less
- 16 to 25 hours
- 26 to 35 hours
- 36 to 45 hours
- 45 hours or more
- Not applicable

4a. In your last full working week, how many hours did you actually work?

- 15 hours or less
- 16 to 25 hours
- 26 to 35 hours
- 36 to 45 hours
- 45 hours or more
- Not applicable

4b. If you worked additional hours in your last full working week:

How many additional hours were paid? _____ (hours)

How many additional hours were un-paid? _____ (hours)

How many additional hours will be taken as time in lieu? _____ (hours)

How much notice do you usually get, when you work extra hours?

- Less than 24 hours
- 24 hours to 1 week
- More that 1 week

Can you usually choose whether or not to work these extra hours?

- Yes
- No

5. Do you work shift hours? Yes

No

6. Annual Leave:

How long is it since you last had a holiday of at least one week? _____ (months)

Holiadur Gwybodaeth Gefndir

Mae'n arbennig o bwysig ein bod yn casglu gwybodaeth gefndir amdanoch chi, eich gwaith a'r gwasanaeth yr ydych yn gweithio ynddo. Bydd hyn yn caniatáu i ni gymharu barn gwahanol grwpiau o staff a dadansoddi'r gwahaniaethau rhwng gwasanaethau ffforensig i gleifion mewn ysbytai.

Amdanoch chi:

1. Oedran: _____ (blynyddoedd)

2. Rhyw:

Gwryw	<input type="checkbox"/>
Benyw	<input type="checkbox"/>

3. Statws Priodasol:

Sengl	<input type="checkbox"/>
Priod	<input type="checkbox"/>
Byw gyda chymar	<input type="checkbox"/>
Wedi ysgaru	<input type="checkbox"/>
Gweddw	<input type="checkbox"/>
Wedi gwahanu	<input type="checkbox"/>

4. Oes gennych chi blant dibynnol yn byw gyda chi?

Oes	<input type="checkbox"/>
Nac oes	<input type="checkbox"/>

5. Oes pobl eraill ddibynnol yn byw gyda chi?

Oes	<input type="checkbox"/>
Nac oes	<input type="checkbox"/>

6. Tarddiad Ethnig:

Asiaidd (tarddiad Indiaidd)	<input type="checkbox"/>
Asiaidd (tarddiad Pacistanaidd)	<input type="checkbox"/>
Asiaidd (tarddiad Bangladeshi)	<input type="checkbox"/>
Asiaidd (tarddu o Ddwyrain Affrica)	<input type="checkbox"/>
Asiaidd (tarddiad Tsineaidd)	<input type="checkbox"/>
Asiaidd (Arall)	<input type="checkbox"/>
Du (tarddiad Caribiaidd)	<input type="checkbox"/>
Du (tarddiad Affricanaidd)	<input type="checkbox"/>
Du (Arall)	<input type="checkbox"/>
Gwyn (nodwch)	<input type="checkbox"/> _____
Gr_p arall (nodwch)	<input type="checkbox"/> _____

7. Ysmygu:

Ar gyfartaledd, faint o sigarennau fyddwch chi'n smocio y dydd? _____

Ar gyfartaledd, faint o sigârs fyddwch chi'n smocio y dydd? _____

Ar gyfartaledd, faint o sigarennau rowlio fyddwch chi'n smocio y dydd? _____

8. Alcohol:

Ar gyfartaledd, faint o unedau o alcohol fyddwch chi'n yfed y dydd? _____

(e.e., 1 Ued = _ pt larger neu 1 lasiad bychan o win neu 1 mesur o wirod)

9. Caffein:

Ar gyfartaledd, sawl cwpanaid o goffi caffein fyddwch chi'n yfed y dydd? _____

Ar gyfartaledd, sawl cwpanaid o de caffein fyddwch chi'n yfed y dydd? _____

Ar gyfartaledd, sawl cwpanaid o cola caffein fyddwch chi'n yfed y dydd? _____

10. Digwyddiadau Bywyd:

A ddigwyddodd unrhyw newidiadau mawr i chwi yn ystod y 6 mis diwethaf (e.e., priodi, symud t_, profedigaeth, salwch difrifol)?

Do

Naddo

Am eich swydd:

1. Galwedigaeth: Teitl eich swydd bresennol: _____

(e.e., nyrs staff)

Eich graddfa bresennol: _____

(e.e., A, B, C, D, E)

Eich arbenigedd(au): _____

(e.e., Fforensig, Anabledd Dysgu, Iechyd Meddwl, Cyffredinol)

3. Amser y buoch yn gweithio mewn gwasanaethau fforensig i gleifion mewn ysbyty:
 _____ (blynyddoedd)

3. Amser y buoch yn gweithio yn y gwasanaeth cyfredol fforensig i gleifion mewn ysbyty: _____ (blynyddoedd)

4. Sawl awr sydd yn eich contract i weithio yr wythnos?

- 15 awr neu lai
- 16 i 25 awr
- 26 i 35 awr
- 36 i 45 awr
- 45 awr neu fwy
- Ddim yn gymwys

4a. Yn eich wythnos waith lawn diwethaf, faint o oriau fuoch chi'n gweithio mewn gwirionedd?

- 15 awr neu lai
- 16 i 25 awr
- 26 i 35 awr
- 36 i 45 awr
- 45 awr neu fwy
- Ddim yn gymwys

4b. Os buoch yn gweithio oriau ychwanegol yn eich wythnos waith lawn diwethaf:

Sawl awr ychwanegol oedd yn daledig? _____ (awr)

Sawl awr ychwanegol oedd yn ddi-dâl? _____ (awr)

Sawl awr ychwanegol a gymerir fel amser yn lle? _____ (awr)

Faint o rybudd gewch chi fel arfer, pan fyddwch yn gweithio oriau ychwanegol?

- Llai na 24 awr
- 24 awr i 1 wythnos
- Mwy nac 1 wythnos

A fedrwch ddewis fel arfer i weithio'r oriau ychwanegol hyn neu beidio?

Medraf

Na

5. Fyddwch chi'n gweithio oriau shifft? Byddaf

Na

6. Gwyliau Blynyddol:

Faint sydd ers i chwi gael gwyliau o wythnos o leiaf? _____ (mis)

8. Absenoldeb Salwch:

Fuoch chi'n absennol o'r gwaith oherwydd salwch yn ystod y 6 mis diwethaf?

Do

Na

Os felly, sawl diwrnod o absenoldeb salwch gawsoch chi yn y 6 mis diwethaf?

_____ (diwrnod)

Am eich man gwaith:

- 1. Gwasanaeth Fforensig:**
- | | |
|------------------------------------|--------------------------|
| Evenlode MSU, Rhydychen | <input type="checkbox"/> |
| The Bracton Centre, Caint | <input type="checkbox"/> |
| T_ Llywelyn MSU, Gwynedd | <input type="checkbox"/> |
| Northgate Hospital, Northumberland | <input type="checkbox"/> |

- 2. Ym mha fath o ward/uned fforensig y'ch cyflogir chwi yn bennaf i weithio ynddi?**

Llym/Derbyn

Tymor-hir/Adsefydlu

Arall (nodwch) _____

- 3. Goruchwyliaeth:**

Ar gyfartaledd, sawl awr o oruchwyliaeth gewch chi y mis? _____ (awr)

Ydych chi'n teimlo eich bod yn cael digon o oruchwyliaeth? Ydw

Na

Sylwadau ychwanegol:

Defnyddiwch y gofod isod ar gyfer unrhyw sylwadau ychwanegol y carech wneud am eich swydd, eich sefydliad, yr arolwg neu'r prosiect ymchwil.

Appendix F

The Staff Support & Satisfaction Questionnaire (3SQ)

The Staff Support & Satisfaction Questionnaire (3SQ)

The following questions are concerned with how supported you feel at work and how satisfied you are in your job. Please read each question carefully and give your opinion about your own support needs. For each question you are asked to draw a circle around the number that best fits your view or experience.

1. How clear are you about the main objectives you should be working towards in your job?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

2. How clear are you about what your direct line manager expects from you?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

3. How clear are you about the limits of your responsibility in your present position?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

4. How clear are you about how satisfied your direct line manager is with what you do?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

5. Is there somebody you can talk to at work if you are experiencing difficulty in your job?

Always	5	4	3	2	1	Never
--------	---	---	---	---	---	-------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

6. If you were unable to cope with a situation at work, is there anybody that you can call on for practical help?

Always	5	4	3	2	1	Never
--------	---	---	---	---	---	-------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

7. How clearly have personal risk situations been identified at your work place (i.e., situations that may threaten your personal safety)?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

8. How clear are the procedures about what to do if something goes wrong at work?

Very Clear	5	4	3	2	1	Very Unclear
------------	---	---	---	---	---	--------------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

9. How often do you turn to the following people for support when you are experiencing difficulty at work?

- Direct Line Manager

Always	5	4	3	2	1	Never
--------	---	---	---	---	---	-------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

- Colleagues

Always	5	4	3	2	1	Never
--------	---	---	---	---	---	-------

How satisfied are you with this?

Very Satisfied	5	4	3	2	1	Very Unsatisfied
----------------	---	---	---	---	---	------------------

10. Please read the following statements and indicate how strongly you agree or disagree with each:

	Strongly Agrees	Agree	Not Sure	Disagree	Strongly Disagree
I am satisfied with my present situation at work	5	4	3	2	1
I feel I belong to a valued staff group	5	4	3	2	1
I am satisfied with my present level of involvement in decision making at work	5	4	3	2	1
I often think about finding another job	5	4	3	2	1
Overall, I am satisfied with the degree of support I receive in my job	5	4	3	2	1

Appendix G

The Staff Stressor Questionnaire (SSQ)

The Staff Stressor Questionnaire (SSQ)

The following statements are concerned with possible sources of stress in your job. Please read each statement carefully and decide how stressful you find each potential source of stress. For each statement you are asked to draw a circle around the response that best fits your view or experience. If you have never found an item stressful, draw a circle around the '0' (zero) next to the statement. If you have found an item stressful, indicate how stressful you find this, by drawing a circle around the number that best describes how much stress you feel.

	Not at all stressful	Just a little	Moderate amount	Quite a lot	A great deal
The physical working conditions	0	1	2	3	4
The work load	0	1	2	3	4
Lack of sufficient staff & resources	0	1	2	3	4
Low levels of patients mobility	0	1	2	3	4
Doing domestic tasks	0	1	2	3	4
Low levels of patients self-care skills	0	1	2	3	4
Uncertainty about what the job involves	0	1	2	3	4
Paperwork and administration	0	1	2	3	4
Lack of / slow progress of patients	0	1	2	3	4
Lack of support from outside work	0	1	2	3	4
Patients behaviour causing injury to others	0	1	2	3	4
Lack of support from management	0	1	2	3	4
Patients poor communication skills	0	1	2	3	4
Physical strength of patients	0	1	2	3	4
The hours of the job	0	1	2	3	4
Low levels of patients domestic skills & abilities	0	1	2	3	4
Lack of job security	0	1	2	3	4
Patients self injurious behaviour	0	1	2	3	4
Lack of procedures for effectively dealing with patients challenging behaviour	0	1	2	3	4
The pay	0	1	2	3	4

	Not at all stressful	Just a little	Moderate amount	Quite a lot	A great deal
The organisations rules and regulations	0	1	2	3	4
Patients destruction of property	0	1	2	3	4
The emotional impact of the job	0	1	2	3	4
Patients stereotyped and/or bizarre behaviour	0	1	2	3	4
Lack of training opportunities	0	1	2	3	4
Unpredictable patients behaviour	0	1	2	3	4
Lack of support form colleagues	0	1	2	3	4
Patients inappropriate sexual behaviour	0	1	2	3	4
The routine of the working day	0	1	2	3	4
Lack of promotional prospects	0	1	2	3	4
Patients personal care levels	0	1	2	3	4
Lack of support from immediate supervisor	0	1	2	3	4
Conflicts between work and home commitments	0	1	2	3	4

Appendix H

The Brief Cope Inventory (BCI)

The Brief COPE Inventory

There are lots of ways to deal with stress. This questionnaire asks you to indicate what you generally do and feel when you experience stressful events at work. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

For each of the following items you are asked to draw a circle around the appropriate number on the right. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true for you as you can. You will probably notice that some of the statements are similar to others, but they are actually different. When answering, do not concern yourself with previous statements, only the one at hand.

	Don't do this at all	Do this a little bit	Do this quite a lot	Do this a lot
I turn to work to take my mind off things	1	2	3	4
I concentrate my efforts on doing something about it	1	2	3	4
I say to myself "this isn't real"	1	2	3	4
I use alcohol or drugs to make myself feel better	1	2	3	4
I try to get emotional support from others	1	2	3	4
I give up trying to deal with it	1	2	3	4
I take additional action to try and get rid of the problem and make the situation better	1	2	3	4
I refuse to believe that it has happened	1	2	3	4
I say things to let my unpleasant feelings escape	1	2	3	4
I get help and advice from others	1	2	3	4
I use alcohol or drugs to help me get through it	1	2	3	4
I try to see it in a different light, to make it seem more positive	1	2	3	4
I criticize myself	1	2	3	4
I try to come up with a strategy about what to do	1	2	3	4
I get sympathy and understanding from someone	1	2	3	4
I give up trying to cope with it	1	2	3	4
I look for something good in what has happened	1	2	3	4
I make jokes about what has happened	1	2	3	4
I go to the movies or watch TV, to think about it less	1	2	3	4

	Don't do this at all	Do this a little bit	Do this quite a lot	Do this a lot
I accept the reality of the fact that it happened	1	2	3	4
I feel a lot of emotional distress and find myself expressing those feelings a lot	1	2	3	4
I try to find comfort in my religion or spiritual beliefs	1	2	3	4
I try to get advice or help from others	1	2	3	4
I learn to live with it	1	2	3	4
I think hard about what steps to take	1	2	3	4
I blame myself for what happened	1	2	3	4
I pray or meditate more than usual	1	2	3	4
I make fun out of the situation	1	2	3	4

Appendix I

The General Health Questionnaire (GHO-12)

The General Health Questionnaire (GHQ-12)

The following questions are concerned with how your health has been in general, over the past month. Please read all of the questions carefully and draw a circle around the answer that you think most closely applies to you. Remember to concentrate on present and recent complaints, not those that you have had in the distant past.

1. Have you recently been able to concentrate on whatever you're doing?

Better than usual	Same as usual	Less than usual	Much less than usual
-------------------	---------------	-----------------	----------------------

2. Have you recently lost much sleep over worry?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

3. Have you recently felt that you are playing a useful part in things?

More so than usual	Same as usual	Less useful than usual	Much less useful
--------------------	---------------	------------------------	------------------

4. Have you recently felt capable of making decisions about things?

More so than usual	Same as usual	Less so than usual	Much less than usual
--------------------	---------------	--------------------	----------------------

5. Have you recently felt constantly under strain?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

6. Have you recently felt that you couldn't overcome your difficulties?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

7. Have you recently been able to enjoy your normal day-to-day activities?

More so than usual	Same as usual	Less so than usual	Much less than usual
--------------------	---------------	--------------------	----------------------

8. Have you recently been able to face up to your problems?

More so than usual	Same as usual	Less so than usual	Much less able
--------------------	---------------	--------------------	----------------

9. Have you recently been feeling unhappy and depressed?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

10. Have you recently been loosing confidence in yourself?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

11. Have you recently been thinking of yourself as a worthless person?

Not at all	No more than usual	Rather more than usual	Much more than usual
------------	--------------------	------------------------	----------------------

12. Have you recently been feeling reasonably happy, all things considered?

More so than usual	About same as usual	Less so than usual	Much less than usual
--------------------	---------------------	--------------------	----------------------

Appendix J

The Maslach Burnout Inventory (MBI) – Human Services Survey

The Maslach Burnout Inventory (MBI) – Human Services Survey

The following statements are concerned with your feelings about your job. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, draw a circle around the '0' (zero) next to the statement. If you have had this feeling, indicate how often you feel it, by drawing a circle around the number (from 1 to 6) that best describes how frequently you feel that way.

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I feel emotionally drained from my work	0	1	2	3	4	5	6
I feel used up at the end of the working day	0	1	2	3	4	5	6
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
I can easily understand how my patients feel about things	0	1	2	3	4	5	6
I feel I treat some patients as if they were impersonal objects	0	1	2	3	4	5	6
Working with people all day is really a strain for me	0	1	2	3	4	5	6
I deal very effectively with the problems of my patients	0	1	2	3	4	5	6
I feel burned out from my work	0	1	2	3	4	5	6
I feel I am positively influencing other people's lives through my work	0	1	2	3	4	5	6
I have become more callous toward people since I took this job	0	1	2	3	4	5	6
I worry that this job is hardening me emotionally	0	1	2	3	4	5	6

	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I feel very energetic	0	1	2	3	4	5	6
I feel frustrated by my job	0	1	2	3	4	5	6
I feel I am working too hard on my job	0	1	2	3	4	5	6
I do not really care what happens to some patients	0	1	2	3	4	5	6
Working with people directly puts too much stress on me	0	1	2	3	4	5	6
I can easily create a relaxed atmosphere with my patients	0	1	2	3	4	5	6
I feel exhilarated after working closely with my patients	0	1	2	3	4	5	6
I have accomplished many worthwhile things in this job	0	1	2	3	4	5	6
I feel like I am at the end of my tether	0	1	2	3	4	5	6
In my work, I deal with emotional problems very calmly	0	1	2	3	4	5	6
I feel patients blame me for some of their problems	0	1	2	3	4	5	6

Thank-you for taking the time to complete the questionnaire.

Please return the completed questionnaire booklet to me in the enclosed pre-paid self-addressed envelope A.S.A.P.

Appendix K

Contacts Sheet

(English and Welsh versions)

Contacts Sheet (BC)

It is possible, that some staff may become upset as a result of thinking about some of the stresses they experience at their work place. If for any reason, you are concerned about your own health or well-being after completing this survey, you are advised to contact your GP as soon as possible. In addition, your employers provide access to the following support services for all employees:

Name: Occupational Health Service
Address: Queen Mary's Hospital
Frognaal Avenue
Sidcup
Kent
DA14 6LT
Telephone: 0208 302 2678

Name: The Employee Assistance Project
Address: Salomons
Southborough
Tunbridge Wells
Telephone: 01892 507 672
Email: practice.consultancy@salomons.org.uk

Contacts Sheet (NG)

It is possible, that some staff may become upset as a result of thinking about some of the stresses they experience at their work place. If for any reason, you are concerned about your own health or well-being after completing this survey, you are advised to contact your GP as soon as possible. In addition, your employers provide access to the following support services for all employees:

Name: Occupational Health Department

Address: East Wing
Wansbeck General Hospital
Woodhorn Lane
Ashington
Northumberland
NE63 9JJ

Telephone: 01670 562 270

Name: Neil Campbell

Address: Counselling Services
3rd Floor Suite
20 Portland Terrace
Jesmond
Newcastle upon Tyne
NE2 1QQ

Telephone: 0191 281 4334

Contacts Sheet (OX)

It is possible, that some staff may become upset as a result of thinking about some of the stresses they experience at their work place. If for any reason, you are concerned about your own health or well-being after completing this survey, you are advised to contact your GP as soon as possible. In addition, your employers provide access to the following support services for all employees:

Name: Occupational Health Department

Address: OMHT

Sandford Road

Littlemore Hospital

Oxford

OX4 4XN

Telephone: 01865 223 370

Name: Counselling Services

Address: 17 Wolvercote Green

Oxford

OX2 8BD

Telephone: 01865 457 771

Contacts Sheet (TL)

It is possible, that some staff may become upset as a result of thinking about some of the stresses they experience at their work place. If for any reason, you are concerned about your own health or well-being after completing this survey, you are advised to contact your GP as soon as possible. In addition, your employers provide access to the following support services for all employees:

Name: Occupational Health Department

Address: Mountain View

Penrhos Road

Bangor

Gwynedd

Telephone: 01248 351 127

Name: Medra

Address: Cornelyn

Ffrodd Pentraeth

Menai Bridge

Ynys Mon

Telephone: 01248 712 865

Taflen Gyswilt (TL)

Fe all rhai aelodau o'r staff deimlo loes o ganlyniad i feddwl am y straen ddaw i'w rhan yn eu gwaith. Os ydych am unrhyw reswm yn pryderu am eich iechyd neu eich lles wedi gorffen yr arolwg hwn, cynghorir chwi i gysylltu â'ch meddyg teulu cyn gynted ag y bo modd. Hefyd, mae eich cyflogwr yn darparu'r gwasanaethau cefnogi canlynol i'w holl weithwyr:

Enw: Adran Iechyd Galwedigaethol

Cyfeiriad: Mountain View
Ffordd Penrhos
Bangor
Gwynedd

Teliffon: 01248 351 127

Enw: Medra

Cyfeiriad: Cornelyn
Ffordd Pentraeth
Porthaethwy
Ynys Môn

Teliffon: 01248 712 865

Appendix L

MREC Approval Letter



Trent Multi-centre Research Ethics Committee

Chairman: Dr Robert Bing
Administrator: Jill Marshall

Derwent Shared Services
Laurie House
Colyear Street
Derby
DE1 1LJ

Your Ref: Telephone: 01332 868905
Fax: 01332 868930
Email: Jill.Marshall@derwentsharedservices.nhs.uk

16 June 2004

Miss Katie Ann Elliott
Clinical Psychologist in Training
North Wales Clinical Psychology
Programme
North Wales Clinical Psychology
Programme, School of
Psychology, University of Wales - Bangor,
College Road
Bangor, Gwynedd
LL57 2DG

Dear Miss Elliott

Full title of study: Stress, coping and psychological well-being amongst health care professionals employed within forensic in-patient settings
REC reference number: 04/MRE04/21
Protocol number: Designated Version 1

Thank you for your letter of 31 May 2004, responding to the Committee's request for further information on the above research.

The further information has been considered on behalf of the Committee by the Chairman and statistician member.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation. I confirm that it falls under the No Local Investigator category.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document Type: Application
Version:
Dated: 31/05/2004
Date Received: 10/06/2004

Document Type: Investigator CV
Version: Academic Supervisor CV - Prof R G Owens
Dated: 06/04/2004
Date Received: 06/04/2004

Document Type: Investigator CV
Version: CV - Chief Investigator Miss Katie Elliott
Dated: 06/04/2004
Date Received: 06/04/2004

Document Type: Protocol
Version: Designated Version 1
Dated: 31/03/2004
Date Received: 01/04/2004

Document Type: Covering Letter
Version:
Dated: 31/03/2004
Date Received: 01/03/2004

Document Type: Covering Letter
Version:
Dated: 06/04/2004
Date Received: 06/04/2004

Document Type: Summary/Synopsis
Version:
Dated: 06/04/2004
Date Received: 06/04/2004

Document Type: Peer Review
Version: Letter from Bangor School of Psychology REC
Dated: 18/03/2004
Date Received: 01/04/2004

Document Type: Peer Review
Version: Letter from N Wales Clinical Psychology Course
Dated: 27/01/2004
Date Received: 01/04/2004

Document Type: Participant Information Sheet
Version: 2
Dated: 09/06/2004
Date Received: 10/06/2004

Document Type: Participant Consent Form
Version: Version 1
Dated: 26/03/2004
Date Received: 01/04/2004

Document Type: Response to Request for Further Information
Version: Letter from CI
Dated: 31/05/2004
Date Received: 10/06/2004

Document Type: Other
Version: Version 2 - Instructions sheet for questionnaires
Dated: 09/06/2004
Date Received: 10/06/2004

Document Type: Other
Version: Letter from Oxlea NHS Trust
Dated: 27/02/2004
Date Received: 01/04/2004

Document Type: Other
Version: Letter from N Wales Forensic Psychiatry Service
Dated: 08/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Letter from Oxfordshire Learning Disability NHS Tr
Dated: 26/02/2004
Date Received: 01/04/2004

Document Type: Other
Version: Letter from Northgate and Prudhoe NHS Trust
Dated: 15/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Designated Version 1Background Information Questio
Dated: 31/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Des Version 1Staff Stressor Questionnaire
Dated: 31/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Des Version 1Brief COPE Inventory
Dated: 31/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Designated Version 1The General Health Questionnai
Dated: 31/03/2004
Date Received: 01/04/2004

Document Type: Other
Version: Designated Version 1MBI Human Services Survey
Dated: 31/03/2004
Date Received: 01/04/2004

Management approval

You should arrange for all relevant host organisations to be notified that the research will be taking place, and provide a copy of the REC application, the protocol and this letter.

All researchers and research collaborators who will be participating in the research must obtain management approval from the relevant host organisation before commencing any research procedures. Where a substantive contract is not held with the host organisation, it may be necessary for an honorary contract to be issued before approval for the research can be given.

Notification of other bodies

We shall notify the research sponsor that the study has a favourable ethical opinion.

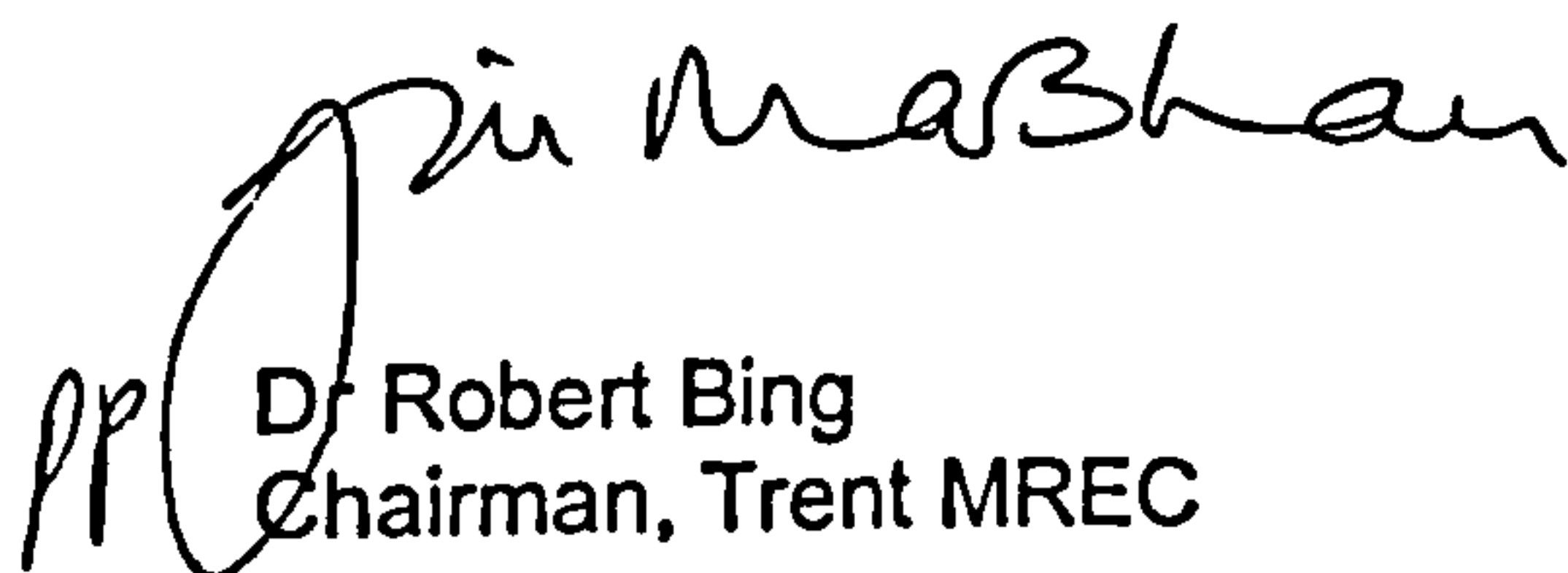
Statement of compliance (from 1 May 2004)

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

REC reference number: 04/MRE04/21

Please quote this number on all correspondence

Yours sincerely



Dr Robert Bing
Chairman, Trent MREC

Enc: Standard approval conditions [SL-AC2]

Appendix M

School of Psychology REC, UOW, Bangor Approval Letter

Ysgol Section 2
Prifysgol Cymru, Bangor

Adeilad Brigantia, Ffordd Penrallt
Bangor, Gwynedd LL57 2AS

Ffôn: (01248) 382211 - Ffacs: (01248) 382599
e-bost: psychology@bangor.ac.uk
www.psychology.bangor.ac.uk

• PRIFYSGOL CYMRU •
UNIVERSITY OF WALES
BANGOR



School of Psychology
University of Wales, Bangor

Adeilad Brigantia, Penrallt Road
Bangor, Gwynedd LL57 2AS

Tel: (01248) 382211 - Fax: (01248) 382599
e-mail: psychology@bangor.ac.uk
www.psychology.bangor.ac.uk

March 18, 2004

Professor Glyn Owens, Katie Elliott
School of Psychology
University of Wales
Bangor
Gwynedd LL57 2DG

Dear Colleagues

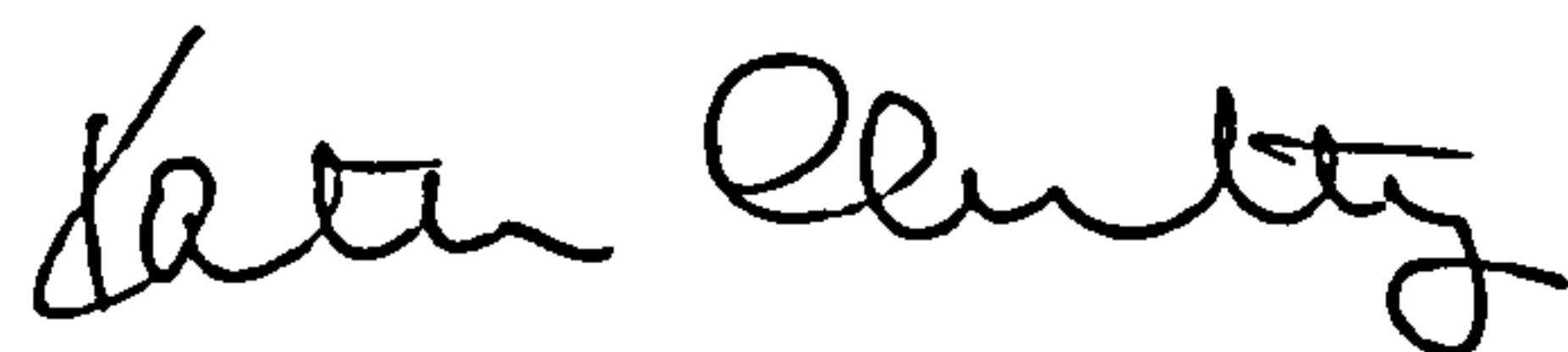
Staff stress and coping within forensic in-patient settings

Your research proposal (referred to above and on the attached sheet) has been reviewed by the School of Psychology Research Ethics Committee and they are satisfied that the research proposed accords with the relevant ethical guidelines. If you wish to make any substantial modifications to the research project please inform the committee in writing before proceeding. Please also inform the committee as soon as possible if research participants experience any unanticipated harm as a result of participating in your research. The reviewer has provided additional feedback on the attached sheet.

You should now forward the proposal to the appropriate Research Ethics Committees of the North Wales Health Authority. They expect one of the investigators to make an oral presentation in support of the proposal at their meeting. You will be contacted by their committee with details as to the date and place of the meeting at which your proposal will be considered.

You may not proceed with the research project until you are notified of the approval of the NWA research ethics committee.

Yours sincerely



Kath Chitty
Coordinator - School of Psychology Research Ethics Committee

Appendix N

Management Approval Letters



Ymddiriedolaeth GIG
Gogledd Orllewin Cymru

North West Wales
NHS Trust

19th april 2004

Katie Ann Elliott
North West Wales Clinical Psychology Programme
School of Psychology
University of Wales
Bangor
LL57 2DG

Dear Katie,

Thank you for sending me a copy of your proposed research project. I feel it need not be submitted for full ethical approval, but will note the fact that you are undertaking the project and will keep this information on the file as a Trust record.

Wishing you a successful outcome

Yours sincerely

D. Williams

PP

Dr. K.D. Griffiths,
Consultant Biochemist / Chairman, Research & Development Committee

Section 2

Ethics Proposal - 99 -



katieannelliott@hotmail.com

Printed: 08 July 2004 09:37:13

From : Keene, Nick <nick.keene@oldt.nhs.uk>
Sent : 08 July 2004 09:33:10
To : "pspa15@bangor.ac.uk" <pspa15@bangor.ac.uk>
Subject : FW: research proposal

OK Kate here you go!

-----Original Message-----

From: Turnbull, John
Sent: 07 July 2004 14:19
To: Keene, Nick
Cc: Winton, Clare
Subject: research proposal

Re: Study by Katie Ann Elliott - 'Stress, coping and psychological well being amongst health care professionals employed within forensic in-patient settings'.

Nick,

Thank-you for letting me have a copy of the proposal and ethics committee approval for Miss Elliott's proposed study. Given that the Trust's Research and Development Committee will not meet again until September I am happy to approve the proposal on their behalf. I am satisfied that the proposal has the necessary ethical approval and peer review and that there are systems in place to supervise her research in the Trust.

On the issue of indemnity I now understand that this is provided by Miss Elliott's employing authority and, therefore, she will not require a letter from our Chief Executive.

John Turnbull

Director of Nursing and Performance

Northgate and Prudhoe 
NHS Trust

Your Ref:

Our Ref: GO/jg

FORENSIC SERVICES

Gregory O'Brien MB ChB MA (Cantab) FRCPsych FRCPCH MD

Professor of Developmental Psychiatry - Lead Clinician

Dr P C S Rajan MD BS MRCPsych DPM Consultant Forensic Psychiatrist of Learning Disability

Dr T Howard BM BS MRCPsych Consultant Psychiatrist in Learning Disability

Dr G S Bell MRCPsych MB ChB DRCOG Locum Consultant Psychiatrist

Northgate Hospital

Morpeth

Northumberland

NE61 3BP

Tel: 01670-394199

Fax: 01670-394011

e-mail: jenny.graham@nap.nhs.uk

Chief Executive: Joe Kewin

Chairman: Dr Patrick Lavery

20 July 2004

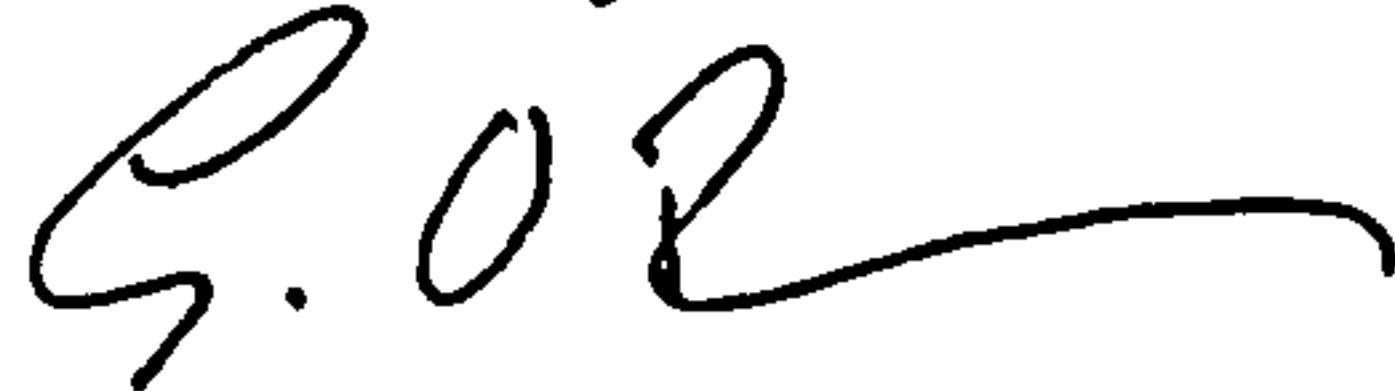
Miss Katie A Elliott
Clinical Psychologist in Training
North Wales Clinical Psychology Programme
School of Psychology
University of Wales
College Road
Bangor
Gwynedd LL57 2DG

Dear Miss Elliott

Ref: 04/MRE04/21 Staff stress and coping within forensic inpatient settings

Following receipt of your MREC form, the R&D Learning Disability Committee have now looked at the locality issues and are happy to approve your project.

Yours sincerely



Gregory O'Brien
Professor in Developmental Psychiatry



PS Ref:

Section 2

MREC APPROVAL

REF. NO: 04/MRE04/21

Ethics Oxleas 101
NHS Trust



Oxleas NHS Trust Research and Development Management Approval Form

A requirement of the Department of Health's Research Governance Framework¹ is that all research involving the NHS must be approved by the host institution prior to the research being undertaken.

This form indicates if the research named below has been approved by Oxleas NHS Trust's Research and Development Office:

Investigator name: KATIE ANN ELLIOTT
Title: STAFF STRESS AND COPING WITHIN FORENSIC
IN-PATIENT SERVICES.

If the research has been approved, the Chief or Principal Investigator should now contact the relevant Research Ethics Committee to arrange ethical review. RECs will not approve any research that does not have R&D management approval.

If the research has not been approved, the reasons are given below. Resubmission can follow once these reasons are addressed.

Project approval

This project is:

- Approved
 Not approved

This project has not been approved because:

(i)

(ii)

(iii)

(iv)

(v)

On behalf of Oxleas NHS Trust Research and Development Office

Signature:

Date: 7/7/04.

Kala Ratnajothy, Head of Research and Development
Oxleas NHS Trust, Pinewood House, Pinewood Place, Dartford,
Kent DA2 7WG; tel 01322 625756; fax: 01322 625711;
Email: kala.ratnajothy@oxleas.nhs.uk

Section Three

Literature Review

Burnout amongst forensic healthcare professionals:

A review of the literature

Katie Ann Elliott

NWCPP, School of Psychology, University of Wales, Bangor, Gwynedd, LL57 2DG

Address for Correspondence: Katie Ann Elliott, North Wales Clinical Psychology Programme (NWCPP), School of Psychology, University of Wales, Bangor, Gwynedd, LL57 2DG (e-mail: katieannelliott@hotmail.com)

Abstract

There is mounting evidence to suggest that burnout influences a significant proportion of forensic healthcare professionals and can result in a range of detrimental consequences for the individual, their organization and clients. Although forensic services are often considered to be inherently stressful, challenging and emotionally demanding environments, relatively few studies have investigated the phenomenon of burnout amongst professionals employed within such services. This article reviews the small body of research evidence that has examined burnout amongst forensic healthcare professionals. Methodological limitations are explored and questions regarding the generalisability and rigor of the available research findings are raised. Implications for clinical practice are discussed and future research efforts aimed at developing appropriate interventions to alleviate burnout and promote psychological wellbeing amongst forensic healthcare professionals are called for.

Introduction

Extensive research attention has focused upon the issue of occupational stress amongst healthcare professionals. The healthcare professions are generally regarded as inherently stressful, challenging and emotionally demanding occupations. Research suggests that health care professionals, especially mental healthcare professionals, exhibit higher rates of absence and sickness when compared with staff groups from other occupational sectors (Nuffield Trust, 1998). In addition to the effects upon the individual (e.g. physical illness, burnout and mental health problems) and the organization (e.g. absenteeism, poor morale, high staff turnover and reduced efficiency), occupational stress experienced amongst healthcare professionals inevitably has a detrimental impact upon client care (e.g. lack of continuity and poor engagement with clients) (Sutherland & Cooper, 1990).

Burnout and Healthcare Professionals

The term 'burnout' was originally coined by Freudenberger (1974), who described a set of symptoms often observed among public service professionals (e.g. teachers, nurses and social-workers), which included frustration, emotional exhaustion and physical fatigue. Since that time, almost three thousand publications (including papers, books, chapters and dissertations) have appeared on the topic. A vast number of these have investigated burnout amongst various groups of healthcare professionals (e.g. nurses, doctors, occupational therapists and psychologists) employed across a wide range of settings, including mental health (Edwards *et al*, 2001), geriatric (Cocco *et al*, 2003) and learning disability services (Cheung & Corbett, 1998);

oncology (Escot *et al*, 2001); palliative care (Lopez-Castillo *et al*, 1999); general (Winstanley & Whittington, 2002) and emergency medicine (Leiter *et al*, 2001).

Definitions of Burnout

The possibility of achieving a definitive and accurate definition of burnout appears to be a contentious area of debate in the relevant literature. The most frequently cited definition is provided by Maslach and Jackson (1986) who described burnout as “a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do people work” (p.1).

At present, no agreed or standard definition exists and those that have been put forward are often criticized for being too vague, contradictory or over-inclusive (Freudenberger, 1989). Although, definitional issues remain a key area of concern, Maslach and Schaufeli (1993) argued there is some consensus amongst available definitions:

“First, there is a predominance of dysphoric symptoms such as mental or emotional exhaustion, fatigue, and depression. Second, the accent is on mental and behavioural symptoms rather than on physical symptoms, although some authors mention atypical physical complaints as well. Third, burnout symptoms are work-related. Fourth, the symptoms manifest themselves in ‘normal’ persons who did not suffer from psychopathology before. Fifth, decreased effectiveness and work performance occur because of negative attitudes and behaviours” (p. 15).

Antecedents of Burnout

Research has identified multiple risk factors and predictors of burnout relevant to healthcare professionals, these include organizational (e.g. excessive work pressure, role conflict, job dissatisfaction, role ambiguity, case-load size, level of autonomy, work-home conflicts and unsupportive management), individual (e.g. age, length of work experience, external locus of control, limited social support networks, unrealistic expectations of clients' rehabilitation, personality traits and coping styles) and client (e.g. 'difficult' client groups, intensive contact with clients and lack of reciprocity in client relationships) related factors (for detailed reviews see Melchior *et al*, 1997; Duquette *et al*, 1994; Maslach *et al*, 1996).

Consequences of Burnout

Burnout has numerous implications for healthcare professionals, which often result in negative consequences for the individual, their employers and their clients.

In terms of individual consequences, burnout can manifest in multiple psychological (e.g. anxiety, irritability, depression and chronic stress), physical (e.g. somatic symptoms) and behavioural (e.g. alcohol and drug misuse) reactions (Duquette, Kerovac, Sandu & Beaudt, 1994). Although burnout is not considered an illness *per se*, it is generally accepted that individuals who suffer from burnout over an extended period of time are more vulnerable to developing both physical and mental health problems (Maslach *et al*, 1996).

Undesirable organizational consequences associated with burnout include, negative work attitudes, low morale, absenteeism, high staff turnover rates and reduced work performance (Felton, 1998). Negative consequences for clients include less effective interventions and poor interactions with professionals (Carson, Wood, White, & Thomas, 1997). Research also suggests that burnout exhibited amongst nurses can lead to the development of a harmful therapeutic milieu, which has been coined 'the dark-side of nursing' and is argued to involve uncaring and controlling attitudes, disengagement, limited empathy, manipulation, stereotyping, avoidance and minimizing clients problems (Corley & Goren, 1998).

Theoretical Models of Burnout

Despite the wealth of research activity, there is an apparent lack of consensus amongst researchers with regards to a definitive model of burnout within major psychological theories (Maslach, Jackson & Leiter, 1996). Maslach (1981) argued that the sheer volume of research and literature, has led to considerable confusion amongst researchers, which risked rendering the burnout concept meaningless. However, numerous models of burnout have been developed in an attempt to explain the complexities of this phenomenon from a range of theoretical perspectives.

Many models have concentrated upon the role of intrinsic organizational factors, including social support (Cronin-Stubbs & Brophy, 1985), excessive workload (Cherniss, 1993), lack of reciprocity (van Yperen, Bunnk & Schaufeli, 1992), autonomy and decision-making (Leiter, 1991), working environment (Kirby & Pollock, 1995) and job satisfaction and role conflict (Melchior *et al*, 1997). Other

models have focused upon the role of pertinent individual factors, including dispositional qualities (Thompson *et al*, 1996), personality traits (Zellers *et al*, 2000), hardiness (Keane *et al*, 1985), coping styles (Sherwin *et al*, 1992) and buffering mechanisms (Duquette, Kerovac, Sandhu & Beauatt, 1994). Other researchers have developed models attempting to integrate a combination of organizational and individual factors (Maslach, Jackson & Leiter, 1996).

The most often cited theoretical model stems from the research efforts of Maslach and colleagues (Maslach, Jackson & Leiter, 1996). The authors created the 'Structural Model of Burnout' (Figure One) to depict the influence of key burnout predictors upon the three core components of burnout, namely emotional exhaustion, depersonalization and personal accomplishment.

[Insert Figure One]

Maslach, Jackson and Leiter (1996) argued that emotional exhaustion resulted from drained emotional resources and was often characterized by tension, anxiety, fatigue, insomnia and feeling unable to 'give oneself' to clients. They described depersonalization as a defence mechanism to reduce the emotional energy needed to work with others that involved the development of cynical attitudes about work and clients, and often led to individuals feeling that their clients deserved their problems. They argued that reduced personal accomplishment resulted from low self-esteem and self-efficacy and often involved individuals viewing their abilities at work and their contributions towards client care in a negative light.

Assessment of Burnout

The most frequently employed assessment measure is the Maslach Burnout Inventory (MBI), which was originally designed to assess the three core dimensions of burnout (Maslach & Jackson, 1981). The current version of the MBI consists of 22-items which are grouped into three separate subscales, emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA), and conceptualizes burnout as a continuous variable (Maslach, Jackson & Leiter, 1996). A high level of burnout is reflected in high emotional exhaustion (≥ 27) and depersonalization (≥ 13) subscale scores and a low personal accomplishment subscale (≤ 31) score.

Extensive research has demonstrated that the MBI offers a validated and reliable measure of burnout (Maslach, Jackson & Leiter, 1996). The authors reported modest inter-correlations between the three subscales; the emotional exhaustion and depersonalization subscales showed the strongest association (.52), whilst the personal accomplishment subscale correlated with the emotional exhaustion (-.22) and depersonalization (-.26) subscales at a much weaker level. The factorial validity of the three-dimensional structure of the MBI has been confirmed in exploratory and confirmatory factor analyses (Maslach & Jackson, 1981). Varied reliability estimates using Cronbach's coefficient alpha (EE = 0.90; DP = 0.79; PA = 0.71) and test-retest stability (EE = 0.82; DP = 0.60; PA = 0.82) have been demonstrated.

Although the MBI is recognized as the leading measure of burnout, it is important to note that it has been subjected to numerous criticisms, namely for being oversensitive (Dolan, 1987); the dominant role of the emotional exhaustion subscale (Leiter, 1991);

the irrelevance of the depersonalization and personal accomplishment subscales (Shirom, 1989); and the need to measure and conceptualize burnout as a one-dimensional syndrome (Buunk *et al.* 2001).

Focus of Literature Review

No literature review has yet considered the body of research on burnout within forensic services. The purpose of the current literature review was to consider the existing empirical knowledge with regards to the nature and extent of burnout experienced amongst forensic healthcare professionals.

The adopted search strategy involved searching computerized databases, namely Medline and Psycinfo, and reviewing the reference lists cited in relevant articles. Various search terms (e.g. forensic, medium secure units, nurses, healthcare professionals) were combined with the key term, burnout. Fourteen potentially relevant articles were identified. On closer inspection three had looked at burnout amongst prison guards (Savicki, Cooley & Gjesvold, 2003; Hurst & Hurst, 1997; Carlson, Anson & Thomas, 2003), one had a combined sample of health and non-health professionals (Thorpe, Righthand & Kubik, 2001) and one involved healthcare professionals employed within 'high-risk' psychiatric services (Crabbe *et al.*, 2002); these studies were excluded from the review. Nine articles that had specifically investigated burnout amongst forensic healthcare professionals were identified.

Although, the phenomenon of burnout has been extensively investigated amongst certain groups of healthcare professionals, relatively few studies appear to have

investigated burnout amongst healthcare professionals employed within forensic services (e.g. prisons, secure units and special hospitals). Forensic services are generally regarded as inherently stressful, challenging and emotionally demanding environments. Although there is little evidence to suggest that the incidence of violence is higher within forensic services, the potential for clients to exhibit extreme levels of aggressive behaviour is arguably greater. Research suggests that actual physical violence, or the perceived threat of physical violence, significantly contributes towards increased levels of stress and burnout (Fernandes *et al*, 1999). Healthcare professionals employed within forensic services are often assumed to be at greater risk of burnout due to their constant exposure to disturbing social issues, challenging behaviour, and clients with severe and enduring mental health problems (Thorpe, Righthand & Kubick, 2001).

All of the research studies that have specifically investigated burnout amongst forensic healthcare professionals employed the Maslach Burnout Inventory (MBI). This allowed for direct comparisons to be made with regards to reported burnout levels from a range of forensic healthcare professionals; the results are summarized below in Table One.

[Insert Table One]

Forensic Mental Health Nurses

In contrast to the vast research efforts that have investigated the phenomenon of burnout amongst nurses, only three research publications have focused upon Forensic Mental Health Nurses (FMHN) experiences of burnout.

Ewers, Bradshaw, McGovern and Ewers (2002) employed a randomized controlled trial to evaluate the impact of Psychosocial Intervention Training (PSI) upon two groups of FMHN levels of burnout, knowledge about serious mental illness and attitudes towards clients. Thirty-three FMHN employed within a UK Regional Secure Unit (RSU) met the inclusion criteria (i.e. qualified nurses, 35+ hours worked per week and no previous PSI training). Twenty volunteered to participate and were randomly allocated to either the experimental (PSI training) or the control (waiting-list) group. Both groups completed three measures at pre and post-intervention: a 30-item multiple-choice knowledge assessment (Lancashire *et al*, 1997); a scenario-based attitude questionnaire developed for the study; and the MBI. Over six months, the experimental group received twenty days PSI training, which aimed to develop a more empathic framework to conceptualize clients' difficulties and promote effective clinical interventions. The combined sample's average age was 42.55 years, 70% were male and the average length of forensic experience was 11.85 years.

No significant differences were found between the experimental and control groups mean baseline MBI scores. Significant positive changes were observed among the experimental group's post-intervention burnout scores, whilst limited change was noted for the control group. In comparison to the control group, the experimental group also demonstrated positive improvements in relation to their post-intervention knowledge and attitudes. The authors concluded that PSI training significantly helped reduce FMHN levels of burnout and held great promise for future staff interventions. However, methodological limitations were apparent: the small sample size prevented definitive conclusions; the specialist sample prevented predictions about implications for other healthcare professions; only one validated assessment measure was utilized;

the self-selected nature of the sample raised questions regarding the motivation and attitudes of those who volunteered to attend and those who did not; and the PSI group facilitator worked within the RSU which raised questions about potential bias.

A study by Happell, Pinikhana and Martin (2003) investigated stress and burnout amongst 51 FMHN employed within a variety of forensic services (e.g. prisons, secure hospitals and community programmes) in Australia. The postal survey included two assessment measures: the MBI and the Nursing Stress Scale (NSS; Gray-Toft & Anderson, 1981). Overall, the mean MBI scores suggested low burnout levels in relation to emotional exhaustion and personal accomplishment, and moderate burnout levels in terms of depersonalization. High burnout levels were found amongst 17.6% of the sample in terms of low personal accomplishment scores and a further 15.6% demonstrated high burnout levels in terms of elevated emotional exhaustion and depersonalization scores, respectively. The authors concluded that FMHN did not experience high levels of stress and burnout, which they argued was 'at variance with the popular misconception that forensic psychiatry is a more stressful area of practice'. Although, the findings are valuable in terms of the contribution they make to the limited field of research, the small sample size, lack of demographic details reported and the wide range of forensic services, prevents any authoritative conclusions being made about burnout experienced amongst FMHN.

In a further publication Happell, Martin and Pinikhana (2003) compared the above sample of FMHN with 78 Mental Health Nurses (MHN), employed within a range of psychiatric settings in Australia. This survey reported several additional assessment measures used to investigate the impact of clinical supervision and job satisfaction,

and included: the Job Satisfaction Scale (JSS) from the Nursing Stress Index (Harris, Hingley & Cooper 1998); and the Satisfaction with Nursing Care and Work (SNCW; Hallberg, Welander, & Axelsson, 1994).

Comparing the MBI mean scores suggested that although the MHN experienced greater levels of burnout in terms of emotional exhaustion than the FMHN, similar levels of depersonalization and personal accomplishment were observed. More MHN experienced high levels of burnout (EE = 35.8%, DP = 24.3%, PA = 23%) in comparison to the FMHN (EE = 15.6%, DP = 15.6%, PA = 17.6%). Although no statistically significant differences were identified, the authors concluded that the MHN exhibited lower levels of job satisfaction and higher levels of burnout, in terms of emotional exhaustion and depersonalization, than the FMHN.

Forensic Community Mental Health Nurses

Only two research publications have reported burnout levels experienced amongst Forensic Community Mental Health Nurses (FCMHN), both of which stem from the findings of a large UK census that investigated the relationship between support, stress and burnout (Coffey, 1999; Coffey & Coleman, 2001). The authors distributed a postal survey to all FCMHN attached to twenty-six Medium Secure Units (MSU) in the UK. Four FCMHN who worked with the authors were excluded from the research. 80 FCMHN completed the survey, which incorporated: a demographic questionnaire; the MBI; the General Health Questionnaire 28 (GHQ-28; Goldberg & Williams, 1988); and the Community Psychiatric Nurse Questionnaire – Revised

(CPNQ-R; Carson *et al*, 1991). The sample's mean age was 37.8 years, 54% were male and average length of forensic experience was 15 years.

In relation to burnout, almost half of the sample reported high levels of emotional exhaustion, whilst a quarter reported high levels of depersonalization and reduced personal accomplishment, respectively. Overall, the mean MBI scores suggested moderate burnout levels in relation to emotional exhaustion, depersonalization and personal accomplishment. Statistically significant differences were observed between those FCMHN who exhibited high and low levels of emotional exhaustion, in relation to alcohol consumption levels and caseload size. Excessive alcohol consumption levels (i.e. 3+ units per day) were significantly associated with higher emotional exhaustion and GHQ-28 scores.

The authors argued that the findings supported previous research concerning burnout levels exhibited amongst mental healthcare professionals and that a significant relationship between FCMHN caseload size, negative coping mechanisms and psychological well-being had been demonstrated. Although, this research is based upon a relatively small sample, it is the only published empirical investigation of burnout amongst FCMHN and the achieved sample almost represented the entire population of FCMHN employed within MSU in the UK at that time.

Forensic Therapists

Two research studies have investigated the phenomenon of burnout amongst Forensic Therapists (FT) employed within forensic healthcare services in The Netherlands.

The first study by van Dierendonck, Schaufeli and Buunk (1996) reported the impact of inequity on burnout in two groups of Dutch healthcare professionals, 112 were employed in a forensic psychiatric centre and 189 were employed in a learning disability service. The authors examined two types of inequity, namely interpersonal equity (i.e. relationships with clients) and organizational equity (i.e. relationship with employer). Measures employed included: the MBI, the Austin Measure (Austin, 1972) to assess contentment and distress levels and a measure to investigate perceptions of equity created for the study. The mean age of the FT was 37.4 years, 64% were male and the average work experience at the forensic service was 6.9 years.

The mean MBI scores suggested moderate burnout levels in relation to emotional exhaustion and depersonalization, and high levels of burnout in terms of personal accomplishment. Statistically significant differences were observed on all three burnout domains between the FT average MBI scores and those of the sample employed within the learning disability service. Significant associations were found between emotional exhaustion and interpersonal and organizational equity. The results suggested, that FT who perceived their relationships as more equitable with their clients (i.e. clients appreciated their efforts) experienced less emotional exhaustion. Whilst FT who felt under-benefited in their relationships with the organization (i.e. employers provided insufficient rewards for their efforts) experienced significantly greater levels of emotional exhaustion. No significant gender differences were observed. The authors concluded that burnout levels were higher amongst FT and that equity theory provided a pertinent theoretical framework for future investigations into the etiology of burnout among healthcare professionals.

The second study by Buunk, Ybema, Gibbons and Ipenburg (2001) investigated the affective consequences of social comparison in relation to burnout levels and individual social comparison orientation, amongst 103 Forensic Sociotherapists (FST) employed within a Dutch Forensic Psychiatric Clinic. The MBI and the Iowa-Netherlands Comparison Orientation Measure (INCOM; Gibbons & Buunk, 1999) were completed. The FST then read a vignette that presented either upwards (e.g., successful professional) or downwards (e.g., unsuccessful professional) social comparison information. Affect caused from exposure to the social comparison information, was measured by indicating possible feelings from a list of 38-adjectives. Identification with the social comparison vignette was then rated on a 5-point Likert Scale. The mean age of the sample was 39, almost two-thirds were male (73%) and 9 years was the average length of experience at the clinic.

The three MBI subscales were summed to provide a total burnout score. The authors stated that burnout should be conceptualized as a syndrome and that the reliability of the total burnout score proved acceptable ($\alpha = 0.87$). Overall, the results suggested that high levels of burnout were associated with less positive affect in response to upward social comparison. High levels of burnout appeared to evoke more negative affect when exposed to downward social comparison. In addition, high levels of burnout were associated with greater levels of identification with downward social comparison and lower levels of identification with upward social comparison. The authors concluded that FST with high burnout levels exhibited less positive affect when confronted by well-performing colleagues, viewed themselves as less similar to such colleagues and responded with negative feelings when confronted by poor-performing colleagues.

Sex Offender Treatment Providers

One study specifically investigated the phenomena of burnout experienced amongst healthcare professionals who treated sex offenders in the United States of America (USA). Shelby, Stoddart and Taylor (2001) examined burnout levels amongst 86 Sex Offender Treatment Providers (SOTP), 43% worked for inpatient facilities (e.g. prisons or secure hospitals), 51% worked in outpatient programmes and 6% worked in both settings. The postal survey involved an information questionnaire (e.g. demographic and occupation details) and the MBI. Of the sample, 53.5% were male, the average length of time working with sex offenders was 8.8 years and 44% worked with offenders in individual therapy sessions.

The average MBI scores suggested that the SOTP experienced high levels of burnout in terms of depersonalization, medium levels of burnout in relation to emotional exhaustion and low levels of burnout in terms of personal accomplishment. Thus despite elevated emotional exhaustion and depersonalization scores, on average the SOTP appeared to have a positive sense of personal accomplishment and feel effective in their work. No significant differences in burnout levels were observed by gender or length of work experience. However, SOTP employed within inpatient forensic services experienced marginally higher levels of emotional exhaustion and significantly higher levels of burnout in terms of depersonalization and personal accomplishment, than those SOTP employed in outpatient services. The authors concluded that SOTP experienced higher levels of burnout when compared with samples of non-forensic healthcare professionals, especially SOTP employed within inpatient facilities. Methodological limitations included: the small sample size, the

response rate and the limited demographic information collected. Therefore, only tentative conclusions about burnout experienced amongst SOTP can be drawn from the research findings.

Forensic Doctors

The final study, by van der Ploeg, Dorresteyn and Kleber (2003), investigated the relationship between acute and chronic stressors with the self-reported health symptoms of a sample of 84 Forensic Doctors in the Netherlands. The postal survey included: a demographic questionnaire; the Dutch MBI version (Schaufeli & van Dierendock, 2000); the Impact of Event Scales (IES; Horowitz, Wilner & Alvarez, 1979); the Checklist of Individual Strengths (CIS; Vercoulen *et al*, 1994); and the Questionnaire of Experience and Assessment of Work (QEAW; van Veldhoven, Meijman, Broersen & Fortuin, 1997). The sample's mean age was 42.2 years, 68% were male and average forensic experience was 8.8 years.

In relation to burnout, almost half the sample experienced high levels of burnout in terms of depersonalization and almost a quarter had high levels of burnout in relation to emotional exhaustion and personal accomplishment. A fifth of the sample met the criteria for clinical burnout (21.4%). Overall the mean MBI scores were found to be similar to the average scores of a reference group of Dutch employees (Schaufeli & van Dierendock, 2000). All three burnout dimensions were found to be significantly associated with acute and chronic stressors. The authors examined the interaction between acute and chronic stressors in relation to emotional exhaustion, post-traumatic responses and fatigue. The results suggested an interaction between acute

and chronic stressors in relation to post-traumatic symptoms, although no direct relationship was found between the number of critical incidents experienced and fatigue or burnout levels. A direct relationship was found between levels of fatigue and burnout with chronic work stressors.

The authors concluded that the consequences of acute stressors and chronic stressors were two mutually dependent processes, and that clinical levels of post-traumatic distress were not necessarily associated with burnout or chronic fatigue levels. Although this research is based upon a relatively small population and employed a different version of the MBI, it is the only published empirical investigation of burnout amongst forensic doctors.

Discussion

Available research evidence suggested that many forensic healthcare professionals exhibited high levels of burnout, ranging from 15.6% to 44.3% on the emotional exhaustion scale, 15.6% to 40.5% on the depersonalization scale and 17.6% to 26.5 % on the personal accomplishment scale. Emotional exhaustion mean scores ranged from 12.9 to 19.62, depersonalization scores ranged between 4.7 to 8.21 and personal accomplishment scores from 26.1 to 38.92. With the exception of Happell, Martin and Pinikhana (2003) findings, the research evidence largely appeared to support the assertion that forensic healthcare professionals often experienced high levels of burnout, particularly in relation to emotional exhaustion and depersonalization. Forensic healthcare professionals were also found to exhibit comparable levels of

burnout when compared with similar groups of healthcare professionals (Coffey, 1999; van Dierendonck, Schaufeli & Buunk, 1996).

Methodological Limitations

The available research appeared to be weakened by various methodological problems, which raises questions regarding the generalisability and rigor of the current empirical research findings.

Extensive research has demonstrated that the MBI offers a validated and reliable measure of burnout (Maslach & Jackson, 1981; Maslach, Jackson & Leiter, 1996), however it is important to note that the assessment has been subjected to various criticisms. Although other burnout measures exist, namely the Burnout Measure (BM; Pines *et al*, 1981), the Meier Burnout Assessment (MBA; Meier, 1984), and the Staff Burnout Scale for Health Professionals (BS-HP; Jones, 1980), all of the studies investigating burnout amongst forensic healthcare professionals employed the MBI.

The MBI was the only assessment measure used in one study. Two of the studies designed their own questionnaires, whilst the remaining studies employed a wide range of assessment tools. However, limited information was provided in terms of reliability and validity levels on the majority of additional assessment measures used, which raised questions regarding potential measurement bias and over/under sensitivity of the unknown assessment tools. The wide range of additional assessment tools also prevented the overall findings and conclusions from the research studies being directly compared with one another in any great depth.

The research area is further hindered by a different version of the MBI being used in one study (e.g. Dutch version) and apparent inconsistencies in terms of the scoring (e.g. summing the three dimensions to provide a total score) and reporting (e.g. means, percentages and varied interpretations of the personal accomplishment scale) of the remaining MBI results.

Maslach, Jackson and Leiter (1996) argued that future burnout research would necessitate complex statistical analysis techniques, like structural equation modeling, to further the theoretical understanding of burnout and the interrelation between the three core components. However, the statistical analysis methods employed by the majority of the reviewed investigations generally involved simple descriptive statistics (e.g. percentages and means). Only three of the studies utilized advanced statistical tests, (e.g. regression or path analysis), to investigate potential causal relationships and predictors associated with the three burnout dimensions.

There was a large variation in sample sizes ranging from 20 to 114. All of the samples proved to be relatively small, which in turn increased the risk of obtaining less accurate results and a non-representative sample (LoBiondo-Woods & Haber, 1997). Ideally, a power calculation should be undertaken before data collection, to prevent researchers assuming non-significant findings are due to incorrect hypotheses (Burns & Grove, 2001). Only one study reported effect size.

Further concerns relate to the researchers generally selecting their samples on the basis of convenient access. Only two of the studies used random sampling, which raised further questions in terms of the representativeness of the sample compared to

the forensic healthcare professionals population as a whole, although good response rates, ranging from 54% to 76.9%, were largely achieved by the studies that employed survey designs. There was a marked absence of information about those forensic healthcare professionals who had refused to participate in the research studies, which further restricts any generalizations being made on the basis of the findings and prevents the accuracy of the results being fully determined.

Future Research and Clinical Implications

There is gathering evidence to suggest that burnout affects a significant number of healthcare professionals employed within a variety of forensic services. In order to maintain this specialist workforce, reduce the negative impact upon professionals and increase the quality and efficacy of client intervention and care, further investigation into the causal factors and consequences of burnout amongst forensic healthcare professionals is urgently called for.

Future research aimed at developing appropriate staff training programmes and clinical support mechanisms, will prove essential if forensic services hope to reduce the negative impact of burnout upon professionals, organizations and clients. To date, only one study has tested the impact of a stress management intervention upon the burnout levels exhibited amongst a group of forensic healthcare professionals. No research has yet investigated the implications of high burnout levels amongst forensic healthcare professionals upon the wellbeing of their clients.

Furthermore, the majority of studies so far have examined burnout amongst forensic healthcare professionals using a cross-sectional design and only one study has measured burnout at two separate points in time. Maslach, Jackson and Leiter (1996) argued that future longitudinal and experimental research designs are required to fully understand the complex underlying processes associated with the development and duration of burnout amongst healthcare professionals.

Although there is a growing body of research that has examined burnout amongst forensic healthcare professionals, only three studies investigated this phenomenon in UK forensic services. All three publications focused exclusively upon the experiences of qualified nurses employed by forensic services. No research has yet investigated the prevalence or implications of burnout experienced amongst other groups of healthcare professionals (e.g. forensic support workers, psychologists and psychiatrists) employed within forensic services in the UK.

References

Burns, N. & Grove, S. (2001) *The Practice of Nursing Research, Conduct, Critique and Utilization*. (4th edition). Toronto: W.B. Saunders

Buunk, B.P., Ybema, J.F., Gibbons, F.X. & Ipenburg, M. (2001) The affective consequences of social comparison as related to professional burnout and social comparison orientation. *European Journal of Social Psychology* 31 337-351.

Carlson, J.R., Anson, R.H. & Thomas, G. (2003) Correctional officer burnout and stress: Does gender matter? *The Prison Journal* 83 (3) 277-288.

Carson, J., Bartlett, H. & Croucher, P. (1991) Stress in community psychiatric nursing: A preliminary investigation. *Community Psychiatric Nursing Journal* 12 8-12

Carson, J., Wood, M., White, H. & Thomas, B. (1997) Stress in mental health nursing: findings from the Mental Health Care Survey. *Mental Health Care* 1 11-14.

Cherniss, C. (1980) *Professional Burnout in Human Service Organizations*. New York: Praeger.

Cherniss, C. (1993) Role of professional self-efficacy in the etiology and amelioration of burnout. In: W.B. Schaufeli, C. Maslach & T. Marek (Eds) *Professional Burnout:*

Recent Developments in Theory and Research (pp135-149) Washington, DC: Taylor & Francis.

Cheung, C.M. & 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 56-64.

Cocco, E., Gatti, M., Lima, C.A. & Camus, V. (2003) A comparative study of stress and burnout among staff caregivers in nursing homes and acute geriatric wards. *International Journal of Geriatric Psychiatry* 18 78-85.

Coffey, M. (1999) Stress and burnout in forensic community mental health nurses (FCMHN): An investigation of its causes and effects. *Journal of Psychiatric & Mental Health Nursing* 6 433-444.

Coffey, M. & Coleman, M. (2001) The relationship between support and stress in forensic community mental health nursing. *Journal of Advanced Nursing* 34 397-407.

Corley, M.C. & Goren, S.G. (1998). The dark side of nursing: Impact of stigmatizing responses on patients. *Scholarly Inquiry for Nursing Practice: An International Journal* 12 (2) 99-118.

Crabbe, J., Alexander, D.A., Klien, S., Walker, S. & Sinclair, J. (2002). Dealing with violent and aggressive patients: At what cost to nurses? *Irish Journal of Psychological Medicine* 19 (4) 121-124.

Cronin-Stubbs, D. & Brophy, E.B. (1985) Burnout: can social support save the psychiatric nurse? *Journal of Psychosocial Nursing in Mental Health Services* **23** 8-13

Dolan, N. (1987) The relationship between burnout and job satisfaction in nurses. *Journal of Advanced Nursing*, **22** 3-12.

Duquette, A., Kerovac, S., Sandhu, B.K. & Beauatt, L. (1994) Factors related to nursing burnout: A review of empirical knowledge. *Issues in Mental Health Nursing* **15** 337-358.

Edwards, D., Burnard, P., Coyle, D., Fothergill, A. & Hannigan, B. (2001) A stepwise multivariate analysis of factors that contribute to stress for mental health nurses working in the community. *Journal of Advanced Nursing* **36** (6) 805-813.

Escot, C., Artero, C., Ganubert, C., Boulenger, J.P. & Ritchie, K. (2001) Stress levels in nursing staff working in oncology. *Stress & Health* **17** 273-279.

Ewers, P., Bradshaw, T., McGovern, J. & Ewers, B. (2002) Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing* **37** (5) 470-476.

Felton, J.S. (1998) Burnout as a clinical entity – its importance in health care workers. *Occupational Medicine* **48** 237-250

Fernandes, C., Bouthillette, F., Rabound, J., Bullock, L., Moore, C.F., Christenson, J.M., Rae, S., Ouellet, L., Gillrie, C. & Way, M. (1999) Violence in the emergency department: a survey of healthcare workers. *Canadian Medical Association Journal* 161 (10) 1245-1248.

Freudenberger, H.J. (1974) Staff burnout. *Journal of Social Issues* 30 159-165.

Freudenberger, H.J. (1989) Burnout: past, present and future concerns. *Loss, Grief & Care* 1-2 (3) 51-57.

Gibbons, F.X. & Buunk, B.P. (1999) Individual differences in social comparison: The development of a measure of social comparison orientation. *Journal of Personality & Social Psychology* 76 129-142.

Goldberg, D. & Williams, P. (1988) *A Users Guide to The General Health Questionnaire*. Windsor, UK: NFER-Nelson.

Gray-Toft, P. & Anderson, J.G. (1981) Stress among hospital nursing staff: It's cause and effects. *Social Science & Medicine* 15 639-647.

Hallberg, I.R., Welander, U. & Axelsson, K. (1994) Satisfaction with nursing care and work during a year of clinical supervision and individualized care. *Journal of Nursing Management* 1 297-307.

Happel, B., Martin, T. & Pinikahana, J. (2003) Burnout and job satisfaction: A comparative study of psychiatric nurses from forensic and a mainstream mental health service. *International Journal of Mental Health Nursing* 12 39-47.

Happel, B., Pinikahana, J. & Martin, T. (2003) Stress and burnout in forensic psychiatric nursing. *Stress & Health* 19 63-68.

Harris, P.E., Hingley, P. & Cooper, C.L. (1998) *Nurse Stress Index*. Harrogate, North Yorkshire: Resource & Assessment Ltd.

Horowitz, M.J., Wilner, N. & Alvarez, W. (1979) The impact of event scale: A measure of subjective stress. *Psychosomatic Medicine* 41 209-218.

Hurst, T.E. & Hurst, M.M. (1997) Gender difference in mediation of severe occupational stress among correctional officers. *American Journal of Criminal Justice* 22 (1) 121-137.

Jones, W. (1980) *Preliminary Test Manual: The Staff Burnout Scale for Healthcare Professionals (SBS-HCP)*. Park Ridge: London House Press.

Keane, A., Ducette, J. & Adler, D.C. (1985) Stress in ICU and non-ICU nurses. *Nursing Research* 34 231-236.

Kirby, S. & Pollack, P.H. (1995) The relationship between a medium secure environment and occupational stress in forensic psychiatric nursing. *Journal of Advanced Nursing* 22 862-867.

Lancashire, S., Haddock, G., Tarrier, N., Butterworth, C.A. & Baguley, I. (1997) Training community psychiatric nurses in Psychosocial Interventions in serious mental illness: The Thorne Nurse Initiative. *Clinician* 12 45-48.

Leiter, M.P. (1991) Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *Journal of Organizational Behaviour* 12 123-144.

Leiter, M.P., Frizzell, C., Harvie, P. & Churchill, L. (2001) Abusive interactions and burnout: Examining occupation, gender, and the mediating role of community. *Psychology & Health* 16 547-563.

LoBiondo-Woods, G. & Haber, J. (1997) *Nursing Research Methods, Critical Appraisal and Utilization*. (4th edition). Missouri: Mosby.

Lopez-Castillo, J., Gurpegui, M., Ayuso-Mateos, J.L., Luna, J.D. and Catalan, J. (1999) Emotional distress and occupational burnout in health care professionals serving HIV-infected patients: A comparison with oncology and internal medicine services. *Psychotherapy & Psychosomatics* 68 348-356.

Maslach, C. (1976) Burned-out. *Human Behaviour* 5 (9) 16-22.

Maslach, C. & Jackson, S.E. (1981) *Maslach Burnout Inventory Manual* (1st edition). Palo Alto, CA: Consulting Psychologists Press, Inc.

Maslach, C. & Jackson, S.E. (1986) *Maslach Burnout Inventory Manual* (2nd edition). Palo Alto, CA: Consulting Psychologists Press, Inc.

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996) *Maslach Burnout Inventory Manual* (3rd edition). Palo Alto: Consulting Psychologists Press, Inc.

Maslach, C. & Leiter, M.P. (1997) *The Truth about Burnout: How Organizations Cause Personal Stress and what to do about it*. San Francisco: Jossey-Bass.

Maslach, C. & Schaufeli, W.B. (1993) Historical and conceptual development of burnout. In: W.B. Schaufeli, C. Maslach & T. Marek (Eds) *Professional Burnout: Recent Development in Theory and Research* (pp1-16) Washington, DC: Taylor & Francis.

Meier, S.T. (1984) The construct validity of burnout. *Journal of Occupational Psychology* 57 211-219.

Melchior, M., Bours, G., Schmitz, P. & Wittich, Y. (1997) Burnout in psychiatric nursing: a meta-analysis of related variables. *Journal of Psychiatric and Mental Health Nursing* 4 193-201.

Nuffield Trust. (1998) *Improving the Health of the NHS Workforce*. London: The Nuffield Trust.

Pines, A., Aronson, E. & Kafry, D. (1981) *Burnout from Tedium to Personal Growth*. New York: The Free Press.

Savicki, V., Cooley, E. & Gjesvold, J. (2003) Harassment as a predictor of job burnout in correctional officers. *Criminal Justice & Behaviour* 30 (5) 602-619.

Schaufeli, W. & van Dierendock, D. (2000) *UBOS: Utrechtse Burnout Schaal & MDASH Manual*. Lisse, The Netherlands: Swets & Zeitlinger.

Sherwin, E.D., Elliott, T.R., Rybarczyk, B.D., Frank, R.G., Hanson, S. & Hoffman, J. (1992) Negotiating the reality of care giving: Hope, burnout and nursing. *Journal of Social & Clinical Psychology* 11 129-139.

Shelby, R.A, Stoddart, R.M. & Taylor, K.L. (2001) Factors contributing to levels of burnout among sex offender treatment providers. *Journal of Interpersonal Violence* 16 (11) 1205-1217.

Shirom, A. (1989) Burnout in work organizations. In: C.L. Cooper & I. Robertson (Eds) *International Review of Industrial and Organizational Psychology* (pp25-48) New York: John Wiley & Sons.

Sullivan, P.J. (1993) Occupational stress in psychiatric nursing. *Journal of Advanced Nursing* 18 591-602.

Sutherland, V. & Cooper, C. (1990). *Understanding Stress: A Psychological Perspective for Health Care Professionals*. London: Chapman & Hall.

Thompson, N., Stradling, S., Murphy, M. & O'Neill, P. (1996) Stress and organizational culture. *British Journal of Social Work* 26 247-265.

Thorpe, G.L., Righthand, S. & Kubick, E.K. (2001) Brief report: Dimensions of burnout in professionals working with sex offenders. *Sexual Abuse: A Journal of Research & Treatment* 13 (3) 197-203.

van der Ploeg, E., Dorresteyn, S.M. & Kleber, R.J. (2003) Critical incidents and chronic stressors at work: Their impact on forensic doctors. *Journal of Occupational Health Psychology* 8 (2) 157-166.

van Dierendonck, D., Schaufeli, W.B. & Buunk, B.P. (1996) Inequity among human service professionals: Measurement and relation to burnout. *Basic & Applied Social Psychology* 18 (4) 429-451.

van Veldhoven, M., Meijman, T.F., Broersen, J.P.J. & Fortuin, R.J. (1997). *Manual of the QEAW: Research on Evaluation of Psychosocial Work strain and Job Stress using the Questionnaire on the Experience of Assessment at Work*. Amsterdam: SKB.

van Yperen, N.W., Bunnk, B.P. & Schaufeli, W.B. (1992) Communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology* 22 (4) 173-189.

Vercoulen, J.H.M.M., Swanninck, C.M.A., Fennis, J.F.M., Galama, J.M.D., van der Meer, J.W.M. & Bleijenberg, G. (1994). Dimensional assessment of chronic fatigue syndrome. *Journal of Psychosomatic Research* 5 383-392.

Winstanley, S. & Whittington, R. (2002) Anxiety, burnout and coping styles in general hospital staff exposed to workplace aggression: a cyclical model of burnout and vulnerability to aggression. *Work & Stress* 16 (4) 302-315.

Zellers, K.L., Perrewe, P.L. & Hochwarter, W.A. (2000) Burnout in healthcare: The role of five factors of personality. *Journal of Applied Psychology* 30 1570-1598.

Figure One:

The 'Structural Model of Burnout' (Maslach, Jackson & Leiter, 1996)

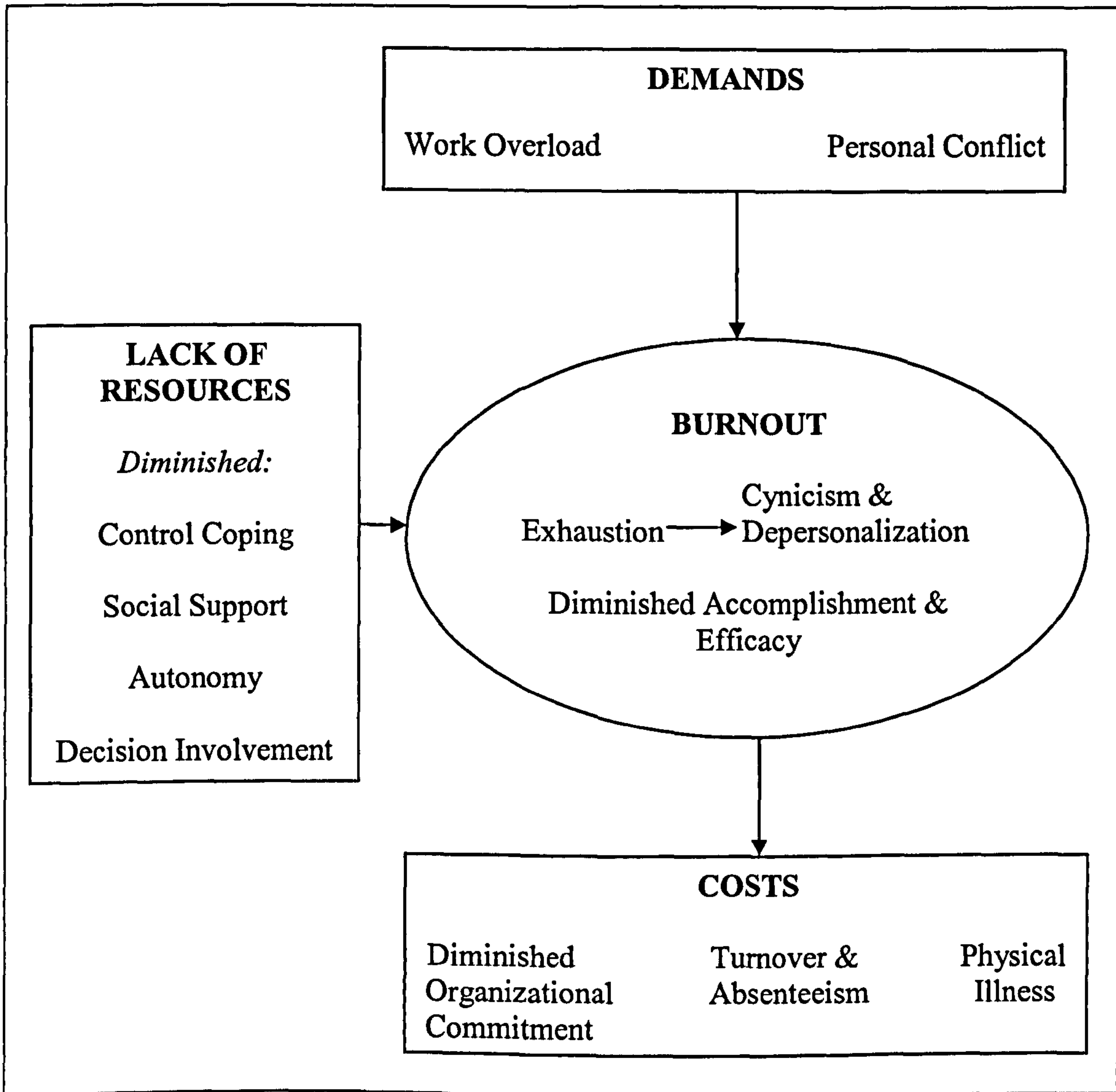


Figure One: The Structural Model of Burnout. Reproduced from Maslach, Jackson & Leiter (1996) (pp 36).

Table One:**Summary of published research using the MBI to investigate burnout among forensic healthcare professionals**

Research Publications	Forensic Settings	Population	Research Aims	Response Rate	Sample Size	Mean Burnout (SD)			High Burnout Range Percentage (Number)		
						EE	DP	PA	EE	DP	PA
van Dierendonck, Schaufeli & Buunk (1996)	Forensic Psychiatric Centre (Inpatient)	Forensic Therapists	Investigate the impact of work inequity on burnout	67%	112	14.1 (6.4)	7.8 (4.2)	26.1 (5.2)	NR	NR	NR
Coffey (1999) and Coffey & Coleman (2000)	Medium Secure Units (Outpatient Services)	FCMHN	Investigate occupational stress and burnout levels	76.9%	79	19.34 (10.13)	5.65 (4.31)	33.0 (6.22)	44.3% (35)	26.5% (21)	26.5% (21)
Buunk, Ybema, Gibbons & Ipenburg (2001)	Forensic Psychiatric Clinic (Inpatient)	Forensic Socio-therapists	Investigate the affective consequences of social comparison	71%	103	NR	NR	NR	NR	NR	NR
Shelby, Stoddart & Taylor (2001)	Prisons and Forensic Psychiatric Services (Inpatient & Outpatient)	Sex Offender Therapists	Examination of burnout levels	57.3%	86	19.62 (9.53)	8.21 (7.0)	38.92 (7.41)	NR	NR	NR
Ewers, Bradshaw, McGovern & Ewers (2002)	Medium Secure Unit (Inpatient Service)	FMHN	Evaluate the impact of Psychosocial Training on burnout levels	NR	10♣ 10♣	18.82* 18.91^ 13.53* 10.51^	5.74* 5.96^ 6.02* 2.04^	33.81* 32.21^ 35.37* 39.64^	NR	NR	NR
Happell, Martin & Pinikhana (2003) and Happell, Pinikhana & Martin (2003)	Prisons & Forensic Psychiatric Services (Inpatient & Outpatient)	FMHN	Investigate occupational stress and burnout levels	54%	51	12.9 (7.5)	4.7 (6.0)	34.5 (7.9)	15.6% (8)	15.6% (8)	17.6% (9)
van der Ploeg, Dorresteijn & Kleber (2003)	Variety of Public Health Institutions	Forensic Doctors	Relationship between acute and chronic stressors on health symptoms	56.8%	84	1.6§ (0.97)	1.6§ (1.08)	4.2§ (0.89)	25% (21)	40.5% (34)	20.2% (17)

Note: NR = Not Reported in Publication ♣ = Control Group ♠ = Experimental Group * = Pre-Intervention ^ = Post-Intervention § = MBI Dutch Version

Appendix O

British Journal of Forensic Practice - Guidelines for Contributors

British Journal of Forensic Practice

Guidelines for contributors

Introduction

We welcome contributions to the journal from all managers, researchers and practitioners in the forensic field. The BJFP is a refereed journal and is both multi-agency and multidisciplinary in its outlook. In addition to refereed articles, the editors also welcome papers giving viewpoints and perspectives from practitioners and commentators on/in the Criminal and Civil Justice System. All submissions will be acknowledged and may subsequently be subject to requests for amendment etc in the light of referees' comments.

Content

Our aim in this journal is to establish a high quality source of information and intelligence for policy makers, practitioners, researchers and managers across a range of forensic settings. **Our intention is to link theory to practice.** We aim to make the journal accessible, readable and challenging. When you write for us, therefore, please make sure that your work is:

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- non-sexist and anti-discriminatory on the basis of age, gender, ethnicity, disability and sexuality, using respectful language
- rooted in current research
- encouraging of reflection on attitudes and practice.

Submission of papers

Papers which fit in to any of these three broad categories are invited:

- **An account of original research with a practice focus.** Research must be the author's own and the general and specific relevance of the work must be made explicit. Any conflict of interest must be declared.
- **A review of relevant literature in a key area of forensic practice.** This category of paper should be written for an intelligent lay-person or professional new to the reviewed area. A general statement of the practice-based relevance of the area under review should be included.
- **Practice-based papers.** A key area of practice from a relevant agency or discipline giving a description of the activity. Such papers may highlight practice-based difficulties and/or also give guidance for good practice. It is anticipated that such commentaries will be constructive but not lacking in critical bite where appropriate.

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Bullet points

It will greatly aid accessibility and ease of use if you make full use of bulleted lists in your article containing, for example:

- key points of a document
- practical steps worth highlighting

- relevant issues from recent legislation
- conclusions.

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References

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In the text we use the Harvard system for preference: ie, refer to references by name and date in brackets; for example: (Smith, 1994) or (Emerson *et al*, 1992) with a comma between name and date. Where there is more than one reference by the same author, a, b, or c should distinguish them: (Smith, 1994a).

Where there is more than one reference within brackets, these are separated with a semi-colon: (Brown, 1996; Grey 1995).

Books

Pickard, J. (1998) *Getting Older, Getting Wiser*. London: Pentonville Press.

Pickard, J. (1998) *Getting Older, Getting Wiser* (2nd edition). London: Pentonville Press.

Multi-author/editor books

Emerson, E., McGill, P. & Mansell, J. (Eds) (1994) *Severe Learning Disabilities and Challenging Behaviours: Designing High Quality Services*. London: Chapman and Hall.

Book chapters

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Emerson, E., Beasley, F., Offord, G. & Mansell, J. (1992) An evaluation of hospital-based staffed housing for people with seriously challenging behaviours. *Journal of Intellectual Disability Research* **36** (3) 291–307.

Where you do not have an issue number (ie the number in brackets above), just leave a space between emboldened volume number and normal text of page numbers:

...*Managing Community Care* **8** 45–51.

Newspaper articles

The minimum information is the name of the paper and the date. Put any other information available in the following formats. So:

The Times, 24 March 2000.

OR

Julian Smith, 'Why Pavilion won the day', *The Times*, 24 March 2000.

OR

'Parker's legacy', *Evening Argus*, 16 April 2000, p14.

OR

Chris Parker, 'Simply the best Albion book ever', review of *Albion: 100 years* by Bill Brookes, *Football Today*, 29 October 1999, p31.

Government papers etc

Cmnd. 4298

OR

Cd. 873 etc

Court cases

The following illustrate the styles usually followed:

Moorgate Mercantile Co. Ltd v. Twitchings [1975] 3 All ER 314.

R. v Secretary of State for the Home Department, ex parte Benewell (1985) 128 Sol Jo 703.

Re F (wardship: adoption) (1984) 13 Fam Law 259, CA.

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Section Four

Research Paper

**Stress, coping and psychological well-being amongst healthcare professionals
employed within forensic inpatient settings**

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Gwynedd, LL57 2DG (e-mail: katieannelliott@hotmail.com)

Abstract

Purpose: Although forensic services are often regarded as highly stressful environments, there has been a surprising lack of research into the phenomena of occupational stress amongst forensic healthcare professionals in the United Kingdom (UK). This study investigated stress, coping and psychological well-being amongst forensic healthcare professionals employed within inpatient settings.

Methods: One hundred and thirty-five forensic healthcare professionals were recruited from four Medium Secure Units (MSU) in the UK. A postal research pack was used to collect background information and measures of psychological well-being, burnout, occupational stress, work satisfaction and coping.

Results: The study found that a substantial proportion of forensic healthcare professionals experienced elevated levels of occupational stress and psychological distress, whilst moderate levels of burnout were demonstrated in terms of emotional exhaustion, depersonalization and personal accomplishment. The findings confirmed that forensic healthcare professionals utilized a range of problem-focused (e.g. positive), emotion-focused (e.g. religious, negative and supported) and palliative coping strategies (e.g. heavy smoking and excessive alcohol consumption).

Conclusions: The results appeared to support the commonly held assertion that forensic services are an inherently stressful and dangerous working environment, which can cause forensic healthcare professionals to experience marked levels of psychological distress, burnout and occupational stress.

Introduction

Stress experienced within the workplace is argued to be the greatest occupational health problem in the UK and is estimated to cost organizations four billion pounds annually in associated sickness and absentee costs (Gray, 2000). Occupational stress is an increasing problem that, according to the Health and Safety Commission (2000), frequently results in detrimental consequences for individuals (e.g. physical illness, burnout and mental health problems) and organizations (e.g. absenteeism, poor morale, high staff turnover and reduced efficiency).

Due to the nature of their work, healthcare professionals are often perceived to be particularly vulnerable to occupational stress and the detrimental effects often associated with stress related conditions (Edwards & Burnard, 2003). Research evidence suggests that healthcare professionals have higher rates of absence and sickness when compared with staff from other occupational sectors (Nuffield Trust, 1998) and high stress levels have been causally linked to recruitment and retention difficulties commonly found within the National Health Service (NHS), (Seecombe & Ball, 1992). In addition to the effects upon individuals and organizations, stress experienced amongst healthcare professionals is likely to have a detrimental impact upon client care (e.g. lack of continuity of care, inexperienced staff and poor levels of engagement with clients), (Sutherland & Cooper, 1990).

Although, the phenomenon of stress has been extensively investigated amongst certain groups of healthcare professionals (Fagin, et al., 1995; Sweeny & Nichols, 1996; Cushway & Tyler, 1999; Kipping, 2000; Escot, et al., 2001; Tyson, et al., 2001;

Akroyd, Caison & Adams, 2002; Luce, 2002; Edwards & Burnard, 2003), very few studies have investigated stress, coping or well-being amongst healthcare professionals employed within forensic services (e.g. prisons, secure units and special hospitals), especially in the UK.

Forensic services are widely acknowledged to be stressful, dangerous and emotionally demanding environments. Although there is little evidence to suggest that the incidence of violence is higher within forensic services, the potential for clients to exhibit extreme levels of aggressive behaviour is arguably greater. Research suggests that actual physical violence, or the perceived threat of physical violence, significantly contributes towards increased levels of stress amongst healthcare professionals (Sullivan, 1993). Thus, forensic healthcare professionals are often assumed to be at greater risk of stress due to their constant exposure to disturbing social issues (e.g. sexual and violent offending), challenging behaviour, and severe mental health problems (Thorpe, Righthand & Kubick, 2001).

The number of studies that have examined stress experienced amongst forensic healthcare professionals in the UK is surprisingly sparse. For example, Jones, Janman, Payne and Rick (1987) examined levels of stress amongst 349 Forensic Mental Health Nurses (FMHN) employed within a Special Hospital. High scores were found on the 12-item General Health Questionnaire (GHQ12; Goldberg, 1972) and the supplementary anxiety and depression scales (Goldberg & Hillier, 1979). The researchers argued that the FMHN experienced high levels of stress and similar levels of anxiety and depression, when compared with other healthcare professionals.

Kirby and Pollack (1995) examined possible relationships between stress levels and perceptions of ward environment for 38 FMHN employed in a Medium Secure Unit (MSU). The researchers used the Occupational Stress Indicator (OSI; Cooper, et al., 1988) and the results suggested that FMHN experienced higher stress levels on three of the subscales (e.g. broad view of control, satisfaction and Type A behaviour), than a group of mental health workers. The Mental Health Professional Stress Scale (MHPSS; Cushway, 1992), was employed by Chalder and Nolan (2000) to compare stress levels amongst 23 FMHN from an in-patient service and 15 Mental Health Nurses (MHN) from an acute in-patient setting. The findings suggested that both groups experienced high stress levels in relation to different aspects of their work environments and no significant differences were found between the two groups.

A further study examined the impact of a brief psycho-educational intervention upon the distress levels of 45 FMHN employed within an MSU (Nhiwatiwa, 2003). The FMHN were randomly allocated to either an experimental (reading a trauma and coping handout) or control group (no intervention). The FMHN completed the 28-item GHQ (GHQ28; Goldberg & Williams, 1988) and the Impact of Events Scale (IES; Horowitz, Wilner & Alvarez, 1979) shortly after being physically or verbally assaulted by a client, and again 3-months after the incident. The results surprisingly demonstrated that the control group showed better adjustment and the experimental group's average follow-up scores indicated reduced well-being. The author claimed the results may have been influenced by the small sample size and suggested that such interventions may be beneficial 'pre-trauma briefing methods'.

Several studies have investigated the effects of burnout and stress amongst forensic healthcare professionals. Three have been conducted in the Netherlands. The first by van Dierendonck, Schaufeli and Buunk (1996) reported the impact of inequity on burnout in 112 Dutch forensic healthcare professionals. The authors utilized the Maslach Burnout Inventory (MBI; Maslach, Jackson & Leiter, 1996) and found that forensic healthcare professionals experienced moderate levels of burnout in terms of emotional exhaustion and depersonalization and high levels in relation to personal accomplishment. Statistically significant differences were observed between the forensic healthcare professionals' scores on all three burnout dimensions, when compared with a group of healthcare professionals from a learning disability service.

The second study investigated the affective consequences of social comparison in relation to burnout and individual social comparison orientation, amongst 103 Forensic Sociotherapists (FST) employed within a Forensic Psychiatric Clinic (Buunk, Ybema, Gibbons & Ipenburg, 2001). The results suggested that FST with high burnout levels exhibited less positive affect when confronted by well-performing colleagues, viewed themselves as less similar to such colleagues and responded with negative feelings when confronted by poor-performing colleagues. The third by van der Ploeg, Dorresteyn and Kleber (2003) investigated the relationship between stressors and self-reported symptoms of a sample of 84 Forensic Doctors. The Dutch version of the MBI (Schaufeli & van Dierendock, 2000) showed that 40.5% of the sample experienced high levels of burnout in terms of depersonalization, almost a quarter had high levels of burnout in relation to emotional exhaustion and personal accomplishment, and 21.4% met the criteria for clinical burnout. All three burnout dimensions were found to be significantly associated with acute and chronic stressors.

Two investigations have examined burnout amongst forensic healthcare professionals in the USA. Thorpe, Righthand and Kubik (2001) devised the Professional Impact Questionnaire to measure burnout amongst 70 professionals (e.g. clinicians, jurists and caseworkers) who worked with sex offenders. They found that negative emotional reactions were related to an impaired sense of work performance and that clinicians demonstrated moderate levels of burnout compared with jurists and caseworkers. Shelby, Stoddart and Taylor (2001) used the MBI to examine burnout amongst 86 Sex Offender Treatment Providers (SOTP). Overall the results suggested that despite elevated levels of burnout in terms of emotional exhaustion and depersonalization, the SOTP had a positive sense of personal accomplishment.

A further two studies have been conducted in the UK. The first involved a large census which examined the relationships between support, stress and burnout amongst 80 Forensic Community Mental Health Nurses (FCMHN) using the MBI and the GHQ28 (Coffey, 1999; Coffey & Coleman, 2001). The results indicated that 44% of the sample had high levels of burnout in relation to emotional exhaustion and 31.2% demonstrated high levels of psychological distress. Significant associations were found between higher levels of stress and emotional exhaustion with excessive caseload sizes and alcohol consumption levels. The second study adopted a quasi-experimental design with 20 FMHN to evaluate the impact of Psychosocial Intervention Training (PSI) upon burnout levels, knowledge about serious mental illness and attitudes towards clients (Ewers, Bradshaw, McGovern & Ewers, 2002). Significant post-intervention change was observed among the experimental group's (PSI training) emotional exhaustion, depersonalization and personal accomplishment scores, whilst minimal change was found for the control group (no PSI training).

In contrast with the above findings, two studies that investigated stress and burnout amongst FMHN in Australia produced markedly different results. Happel, Pinikahana and Martin (2003) administered the MBI and the Nursing Stress Scale (NSS; Gray-Toft & Anderson, 1981) to 51 FMHN employed within a variety of forensic services (e.g. prisons, special hospitals and community programmes). Overall, the mean MBI scores suggested low burnout levels in relation to emotional exhaustion and personal accomplishment, and moderate levels of burnout in terms of depersonalization. Low levels of personal accomplishment were found amongst 17.6% of the sample and 15.6% had high emotional exhaustion and depersonalization scores. Lower than expected levels of stress were reported and the greatest perceived stressor involved excessive workloads. In a further publication the above sample were compared with 78 MHN (Happell, Martin & Pinikahana, 2003). Although no statistically significant differences were found, the MHN experienced greater levels of burnout in terms of emotional exhaustion, whilst similar levels of depersonalization and personal accomplishment were observed. Overall, more MHN had higher levels of burnout compared to the FMHN. The authors concluded that the results may have been at variance with other research findings due to the studies small sample size.

Although it is widely accepted that forensic settings are highly stressful environments, there has been a surprising lack of research into the phenomena of stress, coping and psychological well-being of healthcare professionals working within such services. The available research findings indicated that forensic healthcare professionals generally reported high to moderate levels of stress, with one study finding much lower than expected levels. When compared with other groups of healthcare professionals (e.g. acute mental health services) the forensic healthcare professionals

generally achieved comparable levels of stress. In relation to burnout, many forensic healthcare professionals exhibited high levels, ranging from 15.6% to 44.3% on the emotional exhaustion scale, 15.6% to 40.5% on the depersonalization scale and 17.6% to 26.5 % on the personal accomplishment scale.

However, the research that has investigated the phenomena of stress amongst forensic healthcare professionals in the UK has exclusively focused upon the experiences of nurses employed within forensic mental health services. To date no research has included other groups of forensic healthcare professionals (e.g. psychologists, psychiatrists and support-workers) or those employed within forensic learning disability services. Two of the studies exclusively focused upon FCMHN, whilst the remaining study examined a very small group of FMHN in one forensic in-patient service. Overall the available research findings have generally been based upon small sample sizes, which have utilized only one or two assessment measures. In addition, the two studies that investigated the impact of an intervention upon forensic healthcare professionals stress and burnout levels, produced mixed results and did not examine coping strategies in any depth.

The current study aimed to investigate stress, coping and psychological well-being amongst forensic healthcare professionals employed within inpatient settings. Based on the findings of previous research, it was predicted that forensic healthcare professionals would have reduced psychological well-being and elevated levels of stress and burnout. It was also predicted that forensic healthcare professionals would identify a range of work stressors and utilise a range of problem-focused and emotion-focused coping strategies.

Method

Participants

Postal research packs were distributed to 422 forensic healthcare professionals employed within 4 Medium Secure Units (MSU) in the UK, of which two were forensic mental health services and two were forensic learning disability services. One hundred and thirty-five research packs were returned, giving a response rate of 32%. The demographic and health related characteristics of the final sample are summarized below in Table One.

[Insert Table One]

Overall, the sample consisted of 64 men and 71 women. The mean age was 40.05 years (Standard deviation (SD) = 10.31) and ranged between 22 and 66 years. Almost a third of the sample smoked. The average number of alcohol units consumed per week was 8.61 (SD = 10.00) and ranged between 0 to 40 units. The number of caffeinated drinks consumed on a daily basis ranged from 0 to 20 and the mean was 4.87 (SD = 3.43). The average length of experience at current forensic services was 4.75 years (SD = 4.78) and ranged from 6 months to 27 years. Of the sample, 45.2% had been on sick leave over the last 6 months; the mean number of sick days was 3.99 (SD = 11.59) and ranged from 0 to 90 days. On average 1.52 hours of supervision was received per month and 68.1% of the sample felt that the level of supervision they received was adequate.

Measures

For the purpose of this study, a postal research pack was distributed to all potential participants, which incorporated a background questionnaire and five assessment measures. The background questionnaire provided information relating to the individual (e.g., age, gender, marital status, children, dependants, ethnicity); their occupation (e.g., profession, grade, specialism, forensic unit, time in present post, time in forensic services, working hours and supervision); and health-related factors (e.g., smoking, alcohol and caffeine levels, life events, annual leave and sick days).

The Maslach Burnout Inventory – Human Services Survey (MBI)

The MBI is a 22-item questionnaire designed to assess the three core dimensions of burnout; emotional exhaustion (EE; range 0-36); depersonalization (DP; range 0-30) and reduced personal accomplishment (PA; range 0-48), (Maslach, Jackson & Lieter, 1996). Each item on the MBI is rated on a seven-point Likert 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). No total score is calculated; instead the MBI yields scores for each of the subscales. The MBI cut-off scores in terms of burnout levels are presented below in Table Two. The authors found varied reliability estimates using Cronbach's coefficient alpha (EE = 0.90; DP = 0.79; PA = 0.71) and low to moderately high test-retest stability (EE = 0.82; DP = 0.60; PA = 0.82).

[Insert Table Two]

The Staff Stressor Questionnaire (SSQ)

The SSQ is a 33-item self-report measure originally designed to assess work stressors experienced amongst healthcare professionals employed within learning disability services (Hatton, et al., 1999). Each item on the SSQ represents a potential stressor and is rated on a five-point Likert scale (0 = not at all stressful, 1 = just a little, 2 = moderate amount, 3 = quite a lot, 4 = a great deal). A total score (TS; range 0-132) and 7 subscale scores are provided: client's challenging behaviour (9-items, range 0-36); client's poor skills (7-items, range 0-28); lack of staff support (3-items, range 0-12); lack of resources (3-items, range 0-12); low job status (5-items, range 0-20); bureaucracy (3-items, range 0-12); work-home conflicts (3-items, range 0-12). Higher SSQ scores are indicative of higher stress levels. The SSQ remains to be rigorously assessed in terms of reliability and clinical utility, although preliminary tests have shown promise in relation to face, construct and criterion validity.

The General Health Questionnaire 12-Item (GHQ12)

The GHQ12 is a brief measure of mental health and psychological distress that has been extensively used to evaluate the likeliness of psychiatric case-ness in a number of different settings (Goldberg & Williams, 1988). Each item on the GHQ12 is rated on a four-point Likert scale (i.e. less than usual, no more than usual, more than usual, much more than usual). It yields a total score of 12 based on the bimodal scoring method (e.g. 0-0-1-1) and a score of 2 or above, is the threshold for determining psychiatric case-ness in terms of psychological distress. Goldberg (1972) examined construct validity on the GHQ12 in two health settings, namely medical outpatients

($\alpha = 0.72$) and primary-care ($\alpha = 0.77$), whilst test-retest stability was reported at 0.73. Tait, French and Hulse (2003) examined the validity and psychometric properties of the GHQ12 with a sample of 336 adolescents and reported good levels of internal consistency ($\alpha = 0.88$) and construct validity.

The Brief Cope Inventory (BCI)

The BCI is a multi-dimensional 28-item questionnaire designed to measure and assess a broad range of individual coping strategies (Carver, 1997). Each item on the BCI is rated on a four-point Likert scale (1 = don't do this at all, 2 = do this a little bit, 3 = do this quite a lot and 4 = do this a lot). No total score is provided, instead the BCI yields 14 subscale scores (2 items each): self-distraction, active coping, denial, substance use, emotional support, instrumental support, behavioural disengagement, venting, positive reframing, humour, acceptance, religion and self-blame. Carver (1989) argued that each sub-scale should be considered separately in relation to each of the other variables and that researchers should employ second-order factor analysis to determine the composition of higher-order factors. Although good internal reliability levels have been reported, the BCI remains to be rigorously assessed in terms of validity and clinical utility (Carver, 1997).

The Staff Support & Satisfaction Questionnaire (3SQ)

The 3SQ is a 21-item self-report measure, originally designed to assess perceptions of support in the working environments of healthcare professionals from learning disability services (Harris & Rose, 2002). Each item on the 3SQ is rated on a five-

point Likert scale. A total 3SQ score is provided (TS; range 21-105) and yields 5 subscale scores: role clarity (4-items, range 4-20); coping resources (4-items, range 4-20); risk factors (4-items, range 4-20); supportive people (4-items, range 4-20); job satisfaction (5-items, range 5-25). Higher 3SQ scores are indicative of higher perceived levels of support. At present, the psychometric properties of the 3SQ remain to be rigorously examined, although preliminary tests have shown promise in terms of test-retest stability (0.82) and internal reliability (Harris & Rose, 2002).

Procedure

Ethical approval was sought and granted from the School of Psychology, University of Wales Bangor and the NHS Multi-centre Research and Ethics Committee (MREC). Participant recruitment and access was ultimately dependant upon service managers' willingness to allow their staff teams to participate in the research project. Due to data protection issues the service managers were responsible for distributing the research packs amongst their entire clinical staff teams.

The research packs included an information sheet, which explained the purpose of the project, gave assurances regarding confidentiality, contact numbers and general instructions. To ensure anonymity, each participant received a 'code number card', which they were advised to retain should they later require their data be removed. The participants returned their completed research packs in a pre-paid S.A.E. The service managers distributed a reminder letter to their entire staff team approximately one month later. A summary of the research findings and recommendations were sent to the service managers to distribute amongst their entire staff team.

Results

Data preparation

Exploratory data analysis examined the distribution of the data for normality and suitability for parametric analysis. The means were calculated and the data were examined for outliers (which were set at two SD from the mean). The outliers were removed and the new means were calculated and used to replace the outliers.

Principal component analysis (PCA) was applied to the BCI scores to reduce the number of variables for analysis. A plot of the eigenvalues indicated that four factors should be extracted (Appendix P). The varimax rotated four-factor solution accounted for 46% of the variance (Appendix Q). The four factors were named according to their dominant factor loadings, as positive coping, negative coping, supported coping and religious coping.

A Kolmogorow-Smirnov (KS) test was employed to assess the normality of the data. A non-significant result indicates normal distribution ($\alpha > 0.05$). The KS test indicated that the distribution of a number of variables did not differ significantly from normality ($Z \geq 0.77$, $P \leq 0.05$), namely the SSQ (clients challenging behaviour, bureaucracy and total score), the 3SQ (job satisfaction and total score), the BCI (positive) and the MBI (emotional exhaustion, depersonalization and personal accomplishment). The KS results indicated that the remaining variables had distributions showing significant deviations from normality ($Z \geq 1.09$, $P \leq 0.05$), these included the SSQ (coping resources, clients poor skills, staff support, resources, job

status and work-home conflicts), the 3SQ (role clarity, risk factors and supportive people), the BCI (negative, supported and religious) and the GHQ12.

The Bonferroni method of alpha adjustment was applied to control for multiple measurement on correlation analysis, with 19 correlations the new alpha level was 0.003 ($0.05 / 19 = 0.0026316$). Analysis of variance (ANOVA) was employed for all group based comparisons because it is robust to violation of the non parametric assumption with moderate to large sample sizes (Green, Salkind & Akey, 2000). The default SPSS approach was employed to deal with missing data.

Analysis strategy

The analysis contained four distinct stages. In the first stage the mean scores were compared with those of similar occupational groups. In the second stage a one-way ANOVA was employed to examine the influence of demographic factors on psychological well-being and coping. In the third stage correlational analysis was used to examine associations between health related factors and measures of psychological well-being and coping. Finally a two-step linear regression model was created to examine associations between measures of burnout, psychological well-being and coping, whilst controlling for demographic factors shown to have a significant influence upon the data. Spearman's Rho or Pearson's correlation coefficients were applied depending upon the data distribution.

Comparison of mean scores

The mean scores for the five assessment measures were calculated (see Table Three). The GHQ12 mean score fell just below the threshold for 'psychiatric case-ness' and overall the sample appeared to experience a similar degree of psychological distress when compared with a group of acute geriatric nurses (Cocco, Gatti, Lima & Camus, 2003). 42.2% scored zero on the GHQ12 and 34.2% had scores above the threshold for determining psychiatric case-ness in terms of psychological distress.

The average scores on the MBI all fell within the moderate burnout range. When compared with a group of FCMHN, similar levels of depersonalisation and personal accomplishment were found and slightly lower levels of emotional exhaustion were reported (Coffey, 1999). In comparison with Coffey's (1999) research findings, 31.9% of the current sample experienced high emotional exhaustion scores (compared with 44.3% of FCMHN); 27.4% demonstrated high depersonalisation scores (compared with 26.6% of FCMHN); and 22.2% had low personal accomplishment scores (compared with 26.5% of FCMHN).

[Insert Table Three]

The average 3SQ scores shared some similarities with those exhibited amongst a group of residential learning disability staff (Harris, 1998). Overall marginally higher scores were achieved in terms of role clarity, coping resources, risk factors and job satisfaction, whilst a lower score was found in terms of supportive people. Although no comparative data was available for the total 3SQ score, an examination of the

current data revealed that 17% scored one SD below the mean, thus indicating low perceived levels of staff support and satisfaction.

In terms of stress caused through work-home conflicts and lack of staff support the average SSQ scores shared some similarities with those exhibited amongst a large sample of residential learning disability staff (Hatton, 2004), however markedly higher scores were found in relation to stress caused through clients challenging behaviour and poor skills. An examination of the current SSQ scores revealed that 17.8% scored one SD above the mean with regards to stress experienced due to clients challenging behaviour and poor skills and on the SSQ total score. 16.3% scored one SD above the mean in terms of stress caused due to low job status and work-home conflicts, 19.3% due to lack of staff support and 21.5% due to bureaucracy.

No comparative data were available for the total SSQ score or for the BCI sub-scales and the original authors were unable to provide any additional data (Appendix R).

The influence of demographic factors on psychological well-being and coping

All sub-scale and total scores were entered into a one-way ANOVA with all the demographic factors as grouping variables and the psychological well-being and coping measures as dependent variables. The significant results are presented below in Table Four (see Appendix S for non-significant findings).

An examination of the influence of gender revealed that females experienced significantly greater satisfaction and support at work, utilized more positive and

supported coping mechanisms and found clients' challenging behaviour more stressful than males. Younger staff utilized more supported coping mechanisms, had greater coping resources and experienced less stress in relation to work-home conflicts and lack of resources, than middle aged or older staff. Staff who lived by themselves relied upon religious coping mechanisms and found clients' challenging behaviour significantly more stressful, while those with dependant children living at home reported significantly more stress in relation to clients' poor skills and work-home conflicts.

[Insert Table Four]

Staff who had dependant others living with them experienced significantly less emotional exhaustion and greater levels of job satisfaction. Those who had experienced a life event within the past six months had significantly higher scores on the GHQ12 and were more likely to rely upon religious coping mechanisms. 'Front-line' staff utilized less religious coping mechanisms and felt less supported by their work colleagues. An examination of the influence of experience revealed, that the least experienced group reported significantly less depersonalization and greater role clarity. Those who had been employed longest in their current forensic service utilized significantly less negative coping mechanisms. Staff who did not work shifts experienced significantly higher levels of emotional exhaustion and utilized more negative coping mechanisms. An examination of the influence of clinical supervision revealed, that staff who received between one and two hours of supervision per month utilized significantly more negative coping mechanisms.

Association between health related factors, psychological well-being and coping

Association between health related factors, psychological well-being and coping were examined using Pearson correlation; three significant correlations existed once corrections for multiple measurements had been applied. MBI depersonalization was associated with the number of cigarettes smoked per day ($r = 0.31, p = 0.001$). MBI emotional exhaustion was associated with the number of alcohol units consumed per week ($r = 0.30, p = 0.001$). The 3SQ total score was associated with hours of supervision received per month ($r = -0.35, p = 0.001$).

Association between burnout, psychological well-being and coping

The influence of psychological well-being and coping on personal accomplishment was examined using linear regression. All subscale and total scores for the GHQ12, the SSQ, the 3SQ and the BCI were entered into the final model, which explained 15% of the variance ($r^2 = 0.154$); the only significant predictor of personal accomplishment was the 3SQ total score ($\beta = 0.229, p = 0.01$). This indicated that high 3SQ total scores predicted higher levels of personal accomplishment.

Linear regression was also used to investigate the influence of psychological well-being and coping on depersonalization. Previous examination of the demographic variables highlighted the influence of experience in forensic in-patient services upon depersonalization scores: to control for this a two-step model was created where experience in forensic in-patient services was entered in the first step and all subscale and total scores for the GHQ12, the SSQ, the 3SQ and the BCI were entered in the

second step. Experience in forensic in-patient services was not a significant predictor of depersonalization ($\beta = 0.025$, $p = 0.78$) and explained less than 1% of the variance ($r^2 = 0.001$). The significant predictors of depersonalization, explaining 17% of the variance ($r^2_{\text{Change}} = 0.174$), were the SSQ total score ($\beta = 0.182$, $p = 0.045$) and the BCI negative coping ($\beta = 0.271$, $p = 0.003$). This indicated that high SSQ total scores and negative coping factor scores predicted higher levels of depersonalization.

The influence of psychological well-being and coping on emotional exhaustion was also examined using linear regression. Previous examination of the demographic variables highlighted the influence of living with dependant others and working shift hours upon emotional exhaustion scores. To control for this a two-step model was created where living with dependant others and working shifts was entered in the first step and all subscale and total scores for the GHQ12, the SSQ, the 3SQ and the BCI were entered in the second step. Living with dependant others ($\beta = 0.225$, $p = 0.008$) and working shifts ($\beta = 0.204$, $p = 0.016$) were significant predictors of emotional exhaustion and explained 9% of the variance ($r^2 = 0.086$). Significant predictors of emotional exhaustion, explaining 37% of the variance ($r^2_{\text{Change}} = 0.365$), included the GHQ12 ($\beta = 0.234$, $p = 0.001$), the SSQ total score ($\beta = 0.310$, $p = 0.000$) and the BCI negative coping ($\beta = 0.268$, $p = 0.000$). This indicated that high GHQ12 score, SSQ total score and the BCI negative coping factor score predicted higher levels of emotional exhaustion.

Discussion

Overall a third of the sample scored above the threshold for determining psychiatric case-ness, which suggested that a substantial number experienced marked levels of psychological distress. This finding provided support for the researcher's prediction that forensic healthcare professionals would experience reduced levels of psychological well-being. In comparison with previous research findings, the proportion of forensic healthcare professionals experiencing elevated levels of psychological distress was very similar to those reported amongst a group of FCMHN (Coffey, 1999). However on average a considerably lower level of psychological distress was observed amongst the forensic healthcare professionals, when compared with the overall level of psychological distress reported amongst FMHN employed within a Special Hospital (Jones, et al. 1987). A possible explanation for the lower level of psychological distress found amongst the forensic healthcare professionals, may involve differences in terms of the samples working environments (e.g. medium versus high security settings) or due to variations in the types of GHQ12 scoring methods used (e.g. bimodal versus Likert scoring).

Almost a fifth of the sample experienced markedly elevated levels of occupational stress. A range of work stressors were identified and a substantial proportion reported high levels of stress in relation to work-home conflicts, clients challenging behaviour and poor skills, low job status, lack of staff support and bureaucracy. The results supported the researcher's prediction that forensic healthcare professionals would exhibit elevated levels of occupational stress and report a range of work stressors. The results also provided strong support for previous research findings (Coffey, 1999;

Chalder & Nolan, 2000) and demonstrated that forensic healthcare professionals reported noticeably higher stress levels when compared with a group of healthcare professionals from a residential learning disability service (Hatton, 2004). A possible explanation for the somewhat lower than expected levels of occupational stress observed amongst forensic healthcare professionals, is that the vast majority of the sample reported high levels of perceived staff support and satisfaction at work. Coffey and Coleman's (2001) asserted that clinical supervision and supportive working relationships were important ameliorating factors in reducing occupational stress levels. This could suggest that higher levels of perceived support and satisfaction at work helped protect many forensic healthcare professionals from experiencing elevated levels of stress and psychological distress. An alternative explanation could be that these healthcare professionals accept that stress is an integral part of working in forensic services and develop coping strategies to combat the negative implications often associated with stress related conditions (Phillips, 1983). However, the results also demonstrated that the less hours of supervision received per month the greater the sense of staff support and satisfaction, which may suggest that quality, outweighs the importance of quantity in clinical supervision.

In terms of burnout, the overall results indicated that the sample experienced moderate levels of burnout on all three dimensions. The results further demonstrated that a significant proportion of forensic healthcare professionals experienced elevated levels of burnout, which lent support to the researcher's prediction and to previous research findings (Coffey, 1999). Almost a third of the sample experienced high levels of burnout in terms of emotional exhaustion, which was found to be predicted by higher levels of psychological distress, occupational stress and greater reliance

upon negative coping strategies. Interestingly, the results demonstrated that forensic healthcare professionals who did not work shifts (e.g. psychologists and psychiatrists) experienced significantly higher levels of emotional exhaustion than those who did (e.g. nurses and support workers). Just over a quarter of the sample experienced high levels of depersonalization, which was found to be predicted by higher levels of occupational stress and greater reliance upon negative coping strategies. Overall these findings are cause for concern, not only for the individual and their service, but also because they may likely have detrimental implications in terms of client outcome (e.g. cynical attitudes and poor therapeutic relationships). However, only a fifth of the sample experienced high levels of burnout in terms of personal accomplishment, which suggested that the vast majority felt confident in their role, found their work rewarding and felt that they were doing well at work. The results also demonstrated that higher perceived levels of support and satisfaction at work predicted a greater sense of personal accomplishment. These findings support Happell, Martin and Pinikahana (2003) who demonstrated that FMHN displayed high levels of job satisfaction and low levels of burnout in terms of personal accomplishment.

Finally, the findings confirmed that the sample utilized a range of problem-focused (e.g. positive) and emotion-focused (e.g. religious, negative and supported) coping strategies. In terms of health-related behaviours, higher depersonalization levels were found amongst those who smoked and higher emotional exhaustion levels were found amongst those who consumed more alcohol. These findings suggested that forensic healthcare professionals with higher levels of burnout adopted more palliative coping mechanisms (e.g. heavy smoking and excessive alcohol consumption) and provided further support for the research findings of Coffey and Coleman (2001).

However, the results must be viewed with a degree of caution. One of the main limitations of the study relates to the relatively small number of participants and the poor response rate, hence the difficulty in generalizing the findings to the wider population of forensic healthcare professionals. Another limitation involved the absence of information in relation to those forensic healthcare professionals who refused to participate in the research study. In addition, the extent to which the findings are indicative of occupational stress or are merely a reflection of other sources of stress that transfer into an individual's working environment, remains unclear. Whilst this possibility cannot be ruled out and is virtually impossible to control for in such investigations, the wording on the assessment measures (apart from the GHQ12) specifically referred directly to work experiences.

Overall, the research findings make a valuable contribution and offer further insight into the phenomena of stress, burnout, coping and psychological well-being of a rarely studied group of healthcare professionals. The findings also provide further support to the small body of research, which has demonstrated that occupational stress affects a significant proportion of forensic healthcare professionals and often results in a range of detrimental consequences for the individual, which in turn can have vast implications for their organization and the clients for whom they care.

Future research should endeavour to recruit larger samples to allow for more definitive statements to be made about forensic healthcare professionals' experiences of stress, burnout, coping and psychological well-being. In terms of individual and organizational consequences, research should attempt to develop appropriate stress management and intervention strategies to help reduce forensic healthcare

professionals' experiences of occupational stress and reduce the risk of burnout and psychological distress. It may also prove beneficial for future research to investigate the impact of occupational stress amongst forensic healthcare professionals upon client outcome and therapeutic relationships.

In terms of clinical implications, future management strategies aimed at promoting forensic healthcare professionals' well-being, should endeavour to address this group's apparent reliance upon palliative mechanisms (e.g. excessive alcohol consumption and heavy smoking) as a means of coping with elevated levels of occupational stress, psychological distress and burnout. In addition, if forensic service managers wish to help prevent their staff from experiencing unnecessary levels of occupational stress and promote psychological well-being, they should ensure that appropriate support mechanisms are encouraged and that access to effective clinical supervision is available to all forensic healthcare professionals.

In conclusion, the study has shown that a substantial proportion of forensic healthcare professionals experienced elevated levels of occupational stress and psychological distress, whilst moderate levels of burnout were demonstrated in terms of emotional exhaustion, depersonalization and personal accomplishment. The findings confirmed that forensic healthcare professionals utilized a range of problem-focused, emotion-focused and palliative coping strategies. Overall, the results appeared to support the commonly held assertion that forensic services are an inherently stressful and dangerous working environment which can cause forensic healthcare professionals to experience marked levels of psychological distress, burnout and occupational stress.

References

Akroyd, D.R.T., Caison, A. & Adams, R.D. (2002). Burnout in radiation therapist: The predictive value of selected stressors. *International Journal of Radiation Oncology, Biology & Physiology*, 52, 3, 816-821.

Buunk, B.P., Ybema, J.F., Gibbons, F.X. & Ipenburg, M. (2001). The affective consequences of social comparison as related to professional burnout and social comparison orientation. *European Journal of Social Psychology*, 31, 337-351.

Carver, C.S., Scheier, M.E. & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality & Social Psychology*, 56, 2, 267-283.

Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioural Medicine*, 4, 92-100.

Chadler, G. & Nolan, P.W. (2000). A comparative study of stress among forensic and acute mental health nurses. *The British Journal of Forensic Practice*, 2, 3, 24-29.

Cocco, E., Gatti, M., Lima, C.A. & Camus, V. (2003). A comparative study of stress and burnout among staff caregivers in nursing homes and acute geriatric wards. *International Journal of Geriatric Psychiatry*, 18, 78-85.

Coffey, M. (1999). Stress and burnout in Forensic Community Mental Health Nurses (FCMHN): An investigation of its causes and effects. *Journal of Psychiatric & Mental Health Nursing*, 6, 433-444.

Coffey, M. & Coleman, M. (2001). The relationship between support and stress in forensic community mental health nursing. *Journal of Advanced Nursing*, 34, 397-407.

Cooper, C., Sloan, S. & Williams, S. (1988). *Occupational Stress Indicator (OSI) Management Guide*. Windsor, UK: NFER-Nelson.

Cushway, D. (1992). Stress in clinical psychology trainees. *British Journal of Clinical Psychology*, 31, 169-179.

Cushway, D. & Tyler, P. (1999). Stress in clinical psychologist. *International Journal of Social Psychiatry*, 42, 2, 141-149.

Edwards, D. & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Journal of Advanced Nursing*, 42, 2, 169-200.

Escot, C., Artero, C., Ganubert, C., Boulenger, J.P. & Ritchie, K. (2001). Stress levels in nursing staff working in oncology. *Stress & Health*, 17, 273-279.

Ewers, P., Bradshaw, T., McGovern, J. & Ewers, B. (2002) Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing*, 37, 5, 470-476.

Fagin, L., Brown, D., Bartlett, H., Leary, J. & Carson, J. (1995). The Claybury Community Psychiatric Nurse Stress Study: Is it more stressful to work in a hospital or the community? *Journal of Advanced Nursing*, 22, 347-358.

Gray, P. (2000). *Mental Health in the Workplace: Tackling the Effects of Stress*. London: Mental Health Foundation.

Green, S.B., Salkind, N.J. & Akey, T.M. (2000). *Using SPSS for Windows: Analyzing and Understanding Data (2nd Edition)*. New Jersey: Prentice Hall.

Goldberg, D. (1972). *The Detection of Psychiatric Illness by Questionnaire*. New York: Oxford University Press.

Goldberg, D. & Hillier, V.F. (1979). A scaled version of the General Health Questionnaire. *Psychological Medicine*, 9, 139-145.

Goldberg, D. & Williams, P. (1988). *A Users Guide to The General Health Questionnaire*. Windsor, UK: NFER-Nelson.

Gray-Toft, P. & Anderson, J.G. (1981). Stress among hospital nursing staff: It's cause and effects. *Social Science & Medicine*, 15, 639-647.

Happel, B., Martin, T. & Pinikahana, J. (2003). Burnout and job satisfaction: A comparative study of psychiatric nurses from forensic and a mainstream mental health service. *International Journal of Mental Health Nursing*, 12, 39-47.

Happel, B., Pinikahana, J. & Martin, T. (2003). Stress and burnout in forensic psychiatric nursing. *Stress & Health*, 19, 63-68.

Harris, L.A. (1998). *An examination of the relationship between perceived stress and support in staff working with individuals with learning disabilities in residential settings*. MSc Dissertation, University of Wales Cardiff, Cardiff.

Harris, P. & Rose, J. (2002). Measuring staff support in services for people with intellectual disabilities: the staff support and satisfaction questionnaire – version two. *Journal of Intellectual Disability Research*, 46, 2, 151-157.

Hatton, C., Rivers, M., Mason, H., Kiernan, C., Emerson, E., Alborz, A. & Reeves, D. (1999). Staff stressors & staff outcomes in services for adults with intellectual disabilities: The staff stressor questionnaire. *Research in Developmental Disabilities*, 20, 4, 269-285.

Hatton, C. (2004). SSQ Unpublished data. Personal Communication.

Health and Safety Commission. (2000). Health and Safety Home pages. <http://www.healthandsafety.co.uk>

Horowitz, M.J., Wilner, N. & Alvarez, W. (1979). The impact of events scale: A measure of subjective stress. *Psychosomatic Medicine*, 41, 209-218.

Jones, J., Janman, K., Payne, R. & Rick, J. (1987). Some determinants of stress in psychiatric nurses. *International Journal of Nursing Studies*, 24, 129-144.

Kipping, C.J. (2000). Stress in mental health nursing. *International Nursing Studies*, 37, 207-218.

Kirby, S. & Pollack, P.H. (1995). The relationship between a medium secure environment and occupational stress in forensic psychiatric nursing. *Journal of Advanced Nursing*, 22, 862-867.

Luce, A., Firth-Cozens, J., Midgley, S. & Burgess, C. (2002). After the Omagh Bomb: Posttraumatic stress disorder in health service staff. *Journal of Traumatic Stress*, 15, 1, 27-30.

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). *Maslach Burnout Inventory Manual* (3rd edition). Palo Alto: Consulting Psychologists Press, Inc.

Nhiwatiwa, F.G. (2003). The effects of single session education in reducing symptoms of distress following patient assault in nurses working in medium secure settings. *Journal of Psychiatric and Mental Health Nursing*, 10, 561-568.

Nuffield Trust. (1998). *Improving the Health of the NHS Workforce*. London: The Nuffield Trust.

Phillips, M.S. (1983). Forensic psychiatry: nurses attitudes revealed. *Dimensions in Health Service*, 60, 9, 41-43.

Schaufeli, W. & van Dierendock, D. (2000). *UBOS: Utrechtse Burnout Schaal & MDASH Manual*. Lisse, The Netherlands: Swets & Zeitlinger.

Seecombe, I. & Ball, J. (1992). *Motivation, Morale & Mobility: A Profile of Qualified Nurses in the 1990's*. Brighton, University of Sussex: Institute of Manpower Studies.

Shelby, R.A, Stoddart, R.M. & Taylor, K.L. (2001). Factors contributing to levels of burnout among sex offender treatment providers. *Journal of Interpersonal Violence* 16, 11, 1205-1217.

Sullivan, P.J. (1993). Occupational stress in psychiatric nursing. *Journal of Advanced Nursing*, 18, 591-602.

Sutherland, V. & Cooper, C. (1990). *Understanding Stress: A Psychological Perspective for Health Care Professionals*. London: Chapman & Hall.

Sweeney, G. & Nichols, K. (1996). Stress experiences of occupational therapists in mental health practice arenas: A review of the literature. *International Journal of Social Psychiatry*, 42, 2, 132-140.

Tait, R.J., French, D.J. & Hulse, G.K. (2003). Validity and psychometric properties of the GHQ12 in young Australian adolescents. *Australian & New Zealand Journal of Psychiatry, 37*, 374-381.

Thorpe, G.L., Righthand, S. & Kubick, E.K. (2001). Brief report: Dimensions of burnout in professionals working with sex offenders. *Sexual Abuse: A Journal of Research & Treatment, 13*, 3, 197-203.

Tyson, P.D., Pongreunghant, R. & Aggarwal, B. (2001). Coping with organizational stress among hospital nurses in Southern Ontario. *International Journal of Nursing Studies, 39*, 4, 453-459.

van der Ploeg, E., Dorresteijn, S.M. & Kleber, R.J. (2003). Critical incidents and chronic stressors at work: Their impact on forensic doctors. *Journal of Occupational Health Psychology, 8*, 2, 157-166.

van Dierendonck, D., Schaufeli, W.B. & Buunk, B.P. (1996). Inequity among human service professionals: Measurement and relation to burnout. *Basic & Applied Social Psychology, 18*, 4, 429-451.

Results Tables**Table One:****Demographic and health related characteristics of sample**

Characteristics	N	%	Characteristics	N	%
Male	64	47.4%	Non-Drinkers	44	32.6%
Female	71	52.6%	Drinkers (14+ units)	41	30.4%
Single	24	17.8%	Adequate Supervision	92	68.1%
Married	72	53.3%	Inadequate Supervision	40	29.6%
Co-habiting	25	18.5%	Sick Leave (past 6 months)	61	45.2%
Divorced	11	8.1%	Annual Leave (past 6 months)	125	92.6%
Widowed	1	0.7%	Smokers	38	28.1%
Separated	2	1.5%	Non-Smokers	97	71.9%
Living with Children	65	48.1%	Heavy Smokers (20 +)	15	11.1%
Living with Dependants	12	8.9%	Shift Hours	93	68.9%
Live Alone	38	28.1%	Non-Shift Hours	42	31.1%
Live with Others	97	71.9%	Asian	7	5.2%
Forensic MH Service	72	53.3%	Black (African)	5	3.7%
Forensic LD Service	63	46.7%	Black (other)	1	0.7%
Nurse	44	32.6%	White (British)	102	75.5%
Support Workers	41	30.4%	White (Irish)	5	3.7%
Occupational Therapists	9	6.7%	White (European)	3	2.2%
Medical Staff	9	6.7%	White (Scottish)	2	1.5%
Psychologists	9	6.7%	White (Welsh)	8	5.9%
Alternative Therapists	5	3.7%	White (South African)	2	1.5%
Nurse Managers	14	10.4%	Life Event (past 6 months)	41	30.4%
Social Workers	4	3.0%	No Life Event	93	69.6%
Ward Based Staff	99	73.3%			
Non-Ward Based Staff	36	26.7%			

Table Two:**Normative scores for mental health workers (N = 730) on the MBI**

Subscales	Low Burnout	Medium Burnout	High Burnout
Emotional Exhaustion	< 13	14 – 20	> 21
Depersonalization	< 4	5 – 7	> 8
Personal Accomplishment	> 34	33 - 29	< 28

Reproduced from Maslach, Jackson & Leiter (1996) (pp 6).

Table Three:**Comparison of mean scores with similar occupational groups**

Assessment Measures (Subscales)	Forensic healthcare professionals		Literature Findings		Reference Occupational Group (Number)
	Mean	SD	Mean	SD	
The GHQ12	1.86	2.34	1.61	2.11	Cocco et. al. (2003) Acute Geriatric Nurses (N = 183)
The MBI					Coffey (1999) Forensic CMHN (N = 97)
Emotional Exhaustion	15.79	9.52	19.34	10.13	
Depersonalization	5.86	4.40	5.65	4.31	
Personal Accomplishment	33.64	7.06	33.0	6.22	
The 3SQ					Harris (1998) Residential LD Staff (N = 86)
Role Clarity	16.89	2.40	16.1	3.0	
Coping Resources	17.51	2.35	16.4	3.2	
Risk Factors	16.56	2.91	14.3	3.6	
Supportive People	15.82	2.68	16.4	2.7	
Job Satisfaction	18.98	3.40	18.3	3.7	
Total Score	84.84	11.09	NR	NR	
The SSQ					Hatton (2004) Residential LD Staff (N = 474)
C's Challenging Behaviour	11.92	6.71	2.32	0.86	
C's Poor Skills	4.75	3.82	2.05	0.82	
Lack of Staff Support	2.73	2.09	2.28	1.06	
Lack of Resources	5.26	2.31	2.86	0.99	
Low Status Job	4.37	2.75	2.41	0.91	
Bureaucracy	3.51	2.10	2.26	0.89	
Work-home Conflicts	2.95	1.97	2.21	0.93	
Total Score	36.09	16.66	NR	NR	
The BCI					
Self Distraction	3.58	1.14	NR	NR	
Active Coping	4.91	1.34	NR	NR	
Denial	2.55	0.99	NR	NR	
Substance Use	2.84	1.30	NR	NR	
Emotional Support	4.28	1.53	NR	NR	
Instrumental Support	5.14	1.56	NR	NR	
Disengagement	2.78	1.70	NR	NR	
Venting	3.80	1.37	NR	NR	
Positive Reframing	4.79	1.43	NR	NR	
Planning	5.50	1.40	NR	NR	
Humor	4.40	1.76	NR	NR	
Acceptance	5.30	1.34	NR	NR	
Religion	2.78	1.45	NR	NR	
Self Blame	4.12	1.56	NR	NR	

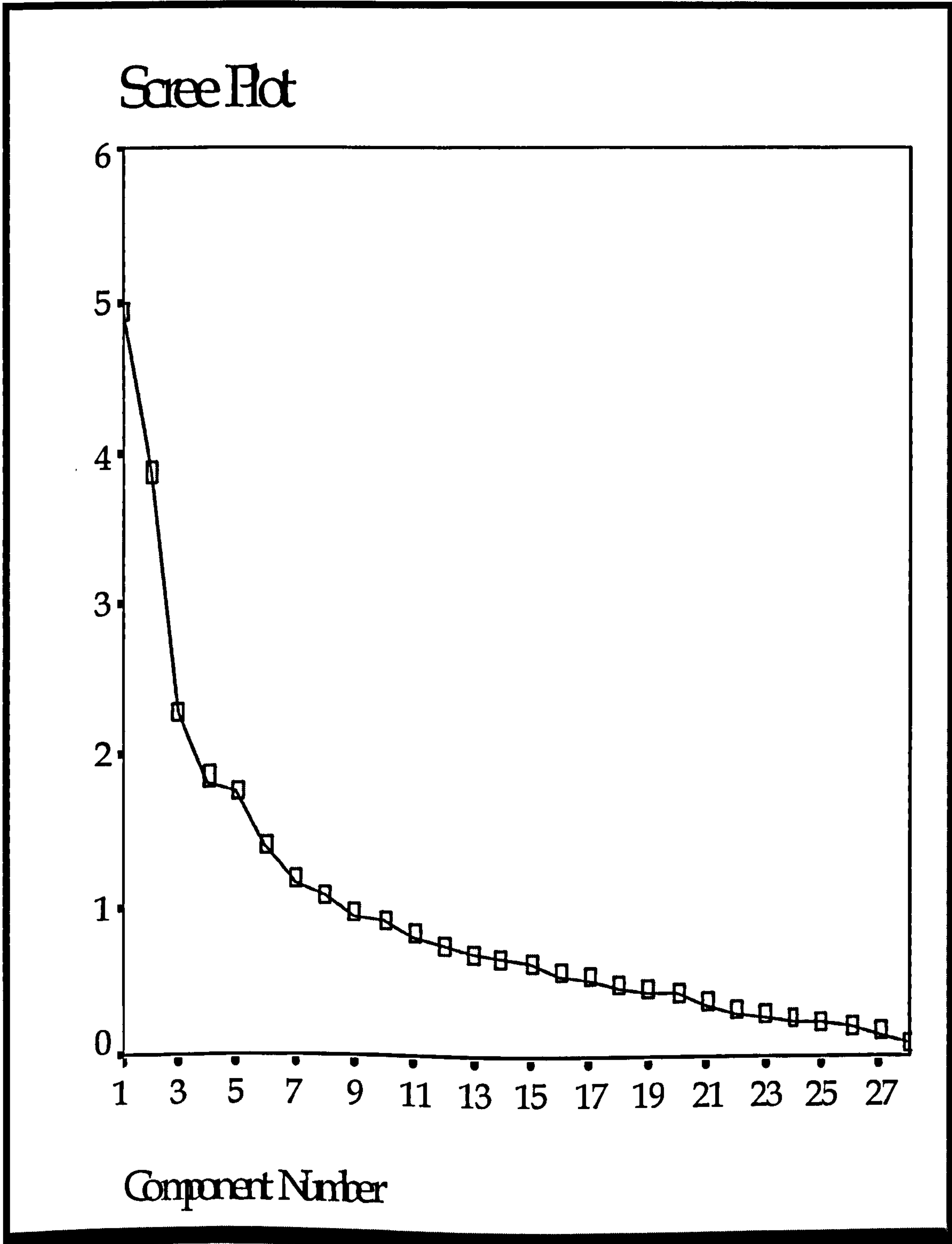
NR = Not Reported / No data available

Table Four:**Significant influence of demographic variables on psychological well-being and coping**

Assessment Measures	Mean (Standard deviation)			F	P
	<i>Age</i>				
	<i>22 – 34</i> (N = 45)	<i>35 – 46</i> (N = 48)	<i>47 – 66</i> (N = 42)		
3SQ (Coping Resources)	18.22 (1.86)	17.08 (2.57)	17.24 (2.46)	3.23	0.04
SSQ (Lack of Resources)	4.76 (2.35)	5.08 (2.38)	5.99 (2.05)	3.39	0.03
SSQ (Work-home Conflicts)	2.42 (1.89)	3.43 (2.06)	2.98 (1.85)	3.17	0.04
BCI (Supported Coping)	12.01 (2.70)	10.77 (2.53)	10.59 (2.59)	3.90	0.02
	<i>Gender</i>				
	<i>Male (N = 64)</i>	<i>Female (N = 71)</i>			
3SQ (Total Score)	81.87 (10.15)	87.52 (11.29)		9.26	0.00
3SQ (Coping Resources)	16.77 (2.48)	18.18 (2.02)		13.31	0.00
3SQ (Job Satisfaction)	17.97 (3.29)	19.90 (3.25)		11.73	0.00
SSQ (Clients C/Behaviour)	10.38 (6.55)	13.29 (6.58)		6.57	0.11
BCI (Positive Coping)	12.23 (2.68)	13.60 (2.29)		10.28	0.00
BCI (Supported Coping)	10.22 (2.53)	11.95 (2.51)		15.84	0.00
	<i>Home Life</i>				
	<i>Alone (N = 38)</i>	<i>With others (N = 67)</i>			
SSQ (Clients C/Behaviour)	14.20 (6.78)	11.01 (6.50)		6.42	0.01
BCI (Religious Coping)	2.88 (1.29)	2.48 (0.93)		4.13	0.04
	<i>Children (N = 65)</i>	<i>None (N = 70)</i>			
SSQ (Clients Poor Skills)	5.55 (3.95)	4.01 (3.58)		5.62	0.01
SSQ (Work-home Conflicts)	3.52 (1.86)	2.42 (1.93)		11.12	0.00
	<i>Dependants (N = 12)</i>	<i>None (N = 123)</i>			
3SQ (Job Satisfaction)	20.83 (3.21)	18.80 (3.37)		3.97	0.01
MBI (Emotion Exhaustion)	9.41 (5.14)	16.41 (9.63)		6.14	0.04
	<i>Life Events</i>				
	<i>Life event (N = 41)</i>	<i>No life events (N = 93)</i>			
BCI (Religious Coping)	2.91 (1.36)	2.43 (0.85)		3.85	0.02
GHQ12 (Total Score)	2.467 (2.51)	1.41 (2.01)		10.22	0.00
	<i>Occupational Factors</i>				
	<i>Frontline Staff (N = 99)</i>	<i>MDT Staff (N = 36)</i>			
3SQ (Supportive People)	15.53 (2.69)	16.63 (2.47)		4.66	0.03
BCI (Religious Coping)	2.45 (0.92)	2.97 (1.29)		6.81	0.01
	<i>Shift Hours (N = 93)</i>	<i>9 to 5 Hours (N = 42)</i>			
BCI (Negative Coping)	11.67 (2.55)	12.76 (2.95)		4.64	0.03
MBI (Emotion Exhaustion)	14.59 (9.18)	18.45 (9.82)		4.89	0.02
	<i>Experience in Forensic Inpatient Services</i>				
	<i>< 2 Years</i> (N = 43)	<i>2-5 Years</i> (N = 40)	<i>> 5 Years</i> (N = 52)		
3SQ (Role Clarity)	17.18 (2.44)	16.09 (2.53)	17.30 (2.14)	3.28	0.03
MBI (Depersonalization)	5.01 (4.10)	7.38 (4.51)	5.40 (4.33)	3.59	0.04
	<i>Time in Current Forensic Service</i>				
	<i>< 2 Years</i> (N = 49)	<i>2-5 Years</i> (N = 45)	<i>> 5 Years</i> (N = 41)		
BCI (Negative Coping)	12.42 (2.71)	12.46 (2.80)	11.02 (2.49)	4.01	0.02
	<i>Hours of Clinical Supervision per Month</i>				
	<i>None</i> (N = 78)	<i>1-2 Hours</i> (N = 26)	<i>> 3 Hours</i> (N = 31)		
BCI (Negative Coping)	11.81 (2.52)	13.31 (3.04)	11.45 (2.76)	3.93	0.02

Appendix P

Principal Components Analysis: A plot of the eigenvalues



Appendix Q**Factor Analysis: The varimax rotated four-factor solution**

Rotated Component Matrix	Component 1	Component 2	Component 3	Component 4
The Brief Cope Inventory (BCI) 1	.306	.356	-.182	-.421
The Brief Cope Inventory (BCI) 2	-.124	.438	.155	-6.154E-02
The Brief Cope Inventory (BCI) 3	.509	-2.694E-02	9.098E-03	8.992E-02
The Brief Cope Inventory (BCI) 4	.539	-.311	.254	-.244
The Brief Cope Inventory (BCI) 5	3.120E-02	.220	.705	2.110E-02
The Brief Cope Inventory (BCI) 6	.721	-6.858E-02	6.772E-02	9.391E-02
The Brief Cope Inventory (BCI) 7	-.118	.560	.286	-.124
The Brief Cope Inventory (BCI) 8	.659	-.143	-8.524E-02	.162
The Brief Cope Inventory (BCI) 9	.510	.150	.315	.125
The Brief Cope Inventory (BCI) 10	-.113	.443	.629	-.213
The Brief Cope Inventory (BCI) 11	.615	-.308	.167	-.118
The Brief Cope Inventory (BCI) 12	-2.819E-02	.582	.191	.209
The Brief Cope Inventory (BCI) 13	.548	.155	.149	-.265
The Brief Cope Inventory (BCI) 14	-1.830E-02	.754	.222	.130
The Brief Cope Inventory (BCI) 15	1.356E-02	.238	.665	-4.019E-02
The Brief Cope Inventory (BCI) 16	.679	1.715E-02	-.121	.195
The Brief Cope Inventory (BCI) 17	.139	.543	-1.457E-02	.264
The Brief Cope Inventory (BCI) 18	.207	-4.337E-02	.495	-5.086E-03
The Brief Cope Inventory (BCI) 19	.379	5.624E-02	.312	.203
The Brief Cope Inventory (BCI) 20	-5.245E-02	.448	.110	-.266
The Brief Cope Inventory (BCI) 21	.371	.269	.340	-.116
The Brief Cope Inventory (BCI) 22	.225	8.065E-02	-.112	.851
The Brief Cope Inventory (BCI) 23	-7.638E-03	.344	.615	-3.794E-02
The Brief Cope Inventory (BCI) 24	.279	.486	-.275	-.195
The Brief Cope Inventory (BCI) 25	-5.616E-02	.744	.114	-5.654E-02
The Brief Cope Inventory (BCI) 26	.464	.235	.319	-.332
The Brief Cope Inventory (BCI) 27	.116	3.983E-02	6.664E-02	.819
The Brief Cope Inventory (BCI) 28	.283	-9.364E-02	.546	.112

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a Rotation converged in 8 iterations.

Appendix R

E-mail correspondence with authors of the BCI, 3SQ & SSQ

Section 4

Research Paper - 42 -



katieannelliott@hotmail.com

Printed: 22 November 2004 16:23:42

From : Charles S. Carver <ccarver@miami.edu>
Sent : 14 November 2004 22:38:44
To : Katie Ann Elliott <katieannelliott@hotmail.com>
Subject : Re: BCI Means & SD's Search!

If the original report didn't have any means, I have not published any means. If I haven't published them, I couldn't easily lay my hands on them, sorry. I'm not entirely sure it would mean a great deal to make those comparisons anyway.

> Dear Charles
>
> I hope you don't mind me emailing you?
>
> I am a third year trainee clinical psychologist on the North Wales Clinical
> Psychology Programme at The University of Wales, Bangor, UK.
>
> I am in the midst of writing up my large scale research project (Phd
> thesis), which has investigated 'stress, burnout and psychological
> well-being among healthcare professionals employed within forensic
> in-patient settings'. The participants were invited to complete a
> postal-questionnaire. All health care professionals from four forensic
> units in the UK (two AMH and two LD) were invited to participate.
>
> On the advice of our research director I employed the 'Brief Cope Inventory'
> (BCI) as one of the 5 measures in the research project. I have received a
> 135 completed questionnaires and I have completed data analysis!
>
> I am currently writing up my results section and was hoping to be able to
> compare my research samples average scores on all of the assessment
> measures, with those found in other research studies. However having just
> reviewed the papers I have on the BCI, I have realized that the Means and
> SD's are not reported for any of the 14 subscales.
>
> So, I was just wondering if you had any unpublished data on the 14 subscales
> which I could compare my findings with or if you could direct me to any
> other publications which contain the Mean & SD's for the BCI?
>
> Please accept my apologies if this is too cheeky a request?
>
> Any advice or suggestions would be most gratefully received.
>
> Best wishes
>
> Katie Ann Elliott
>
>

--

Charles S. Carver
Department of Psychology
University of Miami
Coral Gables, FL 33124-0751

<http://www.psy.miami.edu/faculty/ccarver/>

Section 4

Research Paper - 43 -



katieannelliott@hotmail.com

Printed: 22 November 2004 17:02:14

From : Harris, Philip E. <PEHarris@uwic.ac.uk>
Sent : 15 November 2004 17:03:29
To : "Katie Ann Elliott" <katieannelliott@hotmail.com>
Subject : RE: 3SQ Means & SD's Search!

📎 Attachment : SSQnorms1.doc (0.03 MB)

Hi Katie

The only data I have to hand on norms is attached. Hope it is one some use.

Best wishes

Philip

-----Original Message-----

From: Katie Ann Elliott [mailto:katieannelliott@hotmail.com]
Sent: 14 November 2004 21:55
To: Harris, Philip E.
Subject: 3SQ Means & SD's Search!

Dear Philip

I hope you don't mind me emailing you again?

As you may remember I am a third year trainee clinical psychologist on the North Wales Clinical Psychology Programme, University of Wales, Bangor.

I am in the midst of writing up my large scale research project, which has investigated 'stress, burnout and psychological well-being among healthcare professionals employed within forensic in-patient settings'.

On the advice of our research director (Dr. Richard Hastings) I employed the '3SQ' as one of the measures in my research project, after you kindly emailed me an updated version of the questionnaire. I have received a 135 completed questionnaires and I have completed data analysis!

I am currently writing up my results section and was hoping to be able to compare my research samples scores on all of the measures subscales (means & standard deviations) with a similar staff population. However having reviewed the papers that I have on the 3SQ (Harris & Rose 2002 and Harris & Thompson 1993), no Means or SD's are reported on any of the subscales or for the total score.

I was just wondering if you could direct me to any other publications which contain the Mean & SD's for the 3SQ or researchers that have used the 3SQ?

Any suggestions would be most gratefully received.

Best wishes

Katie Ann Elliott



katieannelliott@hotmail.com

Printed: 07 December 2004 09:44:23

From : Richard Hastings <r.hastings@bangor.ac.uk>
Sent : 23 November 2004 10:05:15
To : katieannelliott@hotmail.com
Subject : Fwd: RE: FW: SSQ Means & SD's Search!

📎 Attachment : Stressor_stats.spo (2.19 MB)

For you!
Richard

Subject: RE: FW: SSQ Means & SD's Search!
Date: Tue, 23 Nov 2004 09:36:11 -0000
Thread-Topic: FW: SSQ Means & SD's Search!
Thread-Index: AcTNZw/fRLCYHikWSfi6AjfWoySf9AD2BhKg
From: "Hatton, Chris" <chris.hatton@lancaster.ac.uk>
To: "Richard Hastings" <r.hastings@bangor.ac.uk>
X-OriginalArrivalTime: 23 Nov 2004 09:36:18.0009 (UTC) FILETIME=[E21FB490:01C4D13F]
X-MailScanner-Information: Please contact the ISP for more information
X-UWB-MailScanner: Found to be clean
X-MailScanner-SpamCheck: nid sbam/not spam, SpamAssassin (sgor/score=1.509,
yn ofynnol/required 4.5, FORGED_RCVD_HELO 0.00,
MIME_MISSING_BOUNDARY 1.51)
X-MailScanner-SpamScore: s
Status:

Hi Richard

Many apologies for not replying to your trainee sooner. Attached is an SPSS output file hot off the press. This has means, sds etc for the 33 stressor items and the 7 stressor factors (scored as mean item scores to enable equivalence in interpretation). This is firstly done for the whole staff sample; then for the sample split by job title in case she wants more specific groups (e.g. unqualified residential staff).

Let me know if she needs any more information!

All the best

Chris

Chris Hatton PhD
Professor of Psychology, Health & Social Care
Research Director, Doctoral Programme in Clinical Psychology
Institute for Health Research
Lancaster University
Lancaster LA1 4YT
UK

Tel: 01524 592823
Fax: 01524 592401

E-mail: chris.hatton@lancaster.ac.uk

-----Original Message-----

From: Richard Hastings [<mailto:r.hastings@bangor.ac.uk>]
Sent: 18 November 2004 12:05
To: Hatton, Chris; Katie Ann Elliott
Subject: Re: FW: SSQ Means & SD's Search!

Hi Chris

Below is a request from one of our final year trainees. She is about to submit her thesis as she was delayed from the summer deadline this

Section 4

Research Paper - 45 -

year due to maternity leave. She'd like to examine whether her sample seem to have similar or different mean scores on the SSQ to the sample you reported in the development paper. Do you have the info to hand? It would be very helpful.

Best wishes

Richard

>From: "Katie Ann Elliott" <katieannelliott@hotmail.com>

>To: chris.hatton@man.ac.uk

>Subject: SSQ Means & SD's Search!

>Date: Sun, 14 Nov 2004 22:15:28 +0000

>

>Dear Chris

>

>I hope you don't mind me emailing you?

>

>I am a third year trainee clinical psychologist on the North Wales

>Clinical Psychology Programme at The University of Wales, Bangor.

>

>I am in the midst of writing up my large scale research project

>(thesis), which has investigated 'stress, burnout and psychological

>well-being among healthcare professionals employed within forensic

>in-patient settings'. The participants were invited to complete a

>postal-questionnaire. All health care professionals from four

>medium secure units in the UK (two AMH and two LD) were invited to

>participate.

>

>On the advice of our research director I employed the 'Staff

>Stressor Questionnaire' (SSQ) as one of the measures in the research

> >project. I have received a 135 completed questionnaires and I have

> >completed data analysis!

> >

> >I am currently writing up my results section and was hoping to be

> >able to compare my research samples average scores on all of the

> >assessment measures with those reported from similar (staff)

> >research studies. However having just reviewed the papers (Hatton

> >et al 1999) I have on the SSQ, I have realized that the Means and

> >SD's are not reported for any of the subscales or for the total

> >score.

> >

> >So, I was just wondering if you had any unpublished data I could

> >compare my findings with or if you could direct me to any other

> >publications which contain the Mean & SD's for the all of the SSQ

> >subscales?

> >

> >Please accept my apologies if this is too cheeky a request?

> >

> >Any advice or suggestions would be most gratefully received.

> >

> >Best wishes

> >

> >Katie Ann Elliott

>

--

Dr Richard Hastings

Deputy Head of School

School of Psychology

University of Wales Bangor

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Unit e-mail: lddu@bangor.ac.uk

http://www.psychology.bangor.ac.uk/~richard_hastings

Appendix S**Non-significant influence of demographic variables on
psychological well-being and coping**

Demographic Variables	Assessment Measures	N	F	P
<i>Age</i>	GHQ12 (Total Score)	135	0.821	0.442
	MBI (Emotion Exhaustion)	135	0.427	0.654
	MBI (Depersonalization)	134	0.112	0.894
	MBI (Personal Accomplishment)	132	0.248	0.780
	3SQ (Role Clarity)	132	1.448	0.239
	3SQ (Risk Factors)	128	2.250	0.109
	3SQ (Supportive People)	135	0.967	0.383
	3SQ (Job Satisfaction)	135	1.760	0.176
	3SQ (Total Score)	135	0.152	0.860
	SSQ (Clients Challenging Behaviour)	134	0.626	0.536
	SSQ (Clients Poor Skills)	135	0.873	0.420
	SSQ (Lack of Staff Support)	135	0.644	0.527
	SSQ (Low Status Job)	131	0.177	0.838
	SSQ (Bureaucracy)	135	0.902	0.408
	SSQ (Total Score)	135	0.891	0.413
	BCI (Positive Coping)	134	0.278	0.758
	BCI (Religious Coping)	132	0.179	0.836
	BCI (Negative Coping)	135	0.322	0.725
<i>Gender</i>	GHQ12 (Total Score)	135	0.109	0.741
	MBI (Emotion Exhaustion)	135	0.224	0.637
	MBI (Depersonalization)	134	0.963	0.328
	MBI (Personal Accomplishment)	132	2.180	0.142
	3SQ (Role Clarity)	132	3.103	0.080
	3SQ (Risk Factors)	128	3.455	0.065
	3SQ (Supportive People)	135	0.960	0.329
	SSQ (Clients Poor Skills)	135	1.786	0.184
	SSQ (Lack of Staff Support)	135	3.230	0.075
	SSQ (Lack of Resources)	129	0.201	0.654
	SSQ (Low Status Job)	131	0.559	0.456
	SSQ (Bureaucracy)	135	3.151	0.078
	SSQ (Work-home Conflicts)	133	0.034	0.854
	SSQ (Total Score)	135	0.073	0.768
	BCI (Religious Coping)	132	0.101	0.751
	BCI (Negative Coping)	135	1.595	0.209
<i>Marital Status</i>	GHQ12 (Total Score)	135	0.800	0.572
	MBI (Emotion Exhaustion)	135	1.343	0.243
	MBI (Depersonalization)	134	0.782	0.586
	MBI (Personal Accomplishment)	132	0.408	0.872
	3SQ (Role Clarity)	132	0.881	0.511
	3SQ (Coping Resources)	134	0.669	0.675
	3SQ (Risk Factors)	128	0.674	0.671
	3SQ (Supportive People)	135	0.727	0.628
	3SQ (Job Satisfaction)	135	0.756	0.606
	3SQ (Total Score)	135	0.457	0.839
	SSQ (Clients Challenging Behaviour)	134	2.470	0.057
	SSQ (Clients Poor Skills)	135	0.538	0.778
	SSQ (Lack of Staff Support)	135	0.826	0.552
	SSQ (Lack of Resources)	129	0.486	0.818
SSQ (Low Status Job)	131	0.576	0.749	

	SSQ (Bureaucracy)	135	0.318	0.927
	SSQ (Work-home Conflicts)	133	1.202	0.309
	SSQ (Total Score)	135	1.190	0.316
	BCI (Supported Coping)	135	1.946	0.078
	BCI (Positive Coping)	134	0.621	0.714
	BCI (Religious Coping)	132	0.916	0.485
	BCI (Negative Coping)	135	0.118	0.994
<i>Ethnic Origin</i>	GHQ12 (Total Score)	135	1.331	0.221
	MBI (Emotion Exhaustion)	135	1.057	0.401
	MBI (Depersonalization)	134	1.151	0.330
	MBI (Personal Accomplishment)	132	1.123	0.225
	3SQ (Role Clarity)	132	1.114	0.357
	3SQ (Coping Resources)	134	0.583	0.825
	3SQ (Risk Factors)	128	1.039	0.415
	3SQ (Supportive People)	135	1.278	0.250
	3SQ (Job Satisfaction)	135	0.668	0.752
	3SQ (Total Score)	135	0.899	0.537
	SSQ (Clients Challenging Behaviour)	134	1.116	0.320
	SSQ (Clients Poor Skills)	135	1.724	0.082
	SSQ (Lack of Staff Support)	135	0.608	0.804
	SSQ (Lack of Resources)	129	1.847	0.059
	SSQ (Low Status Job)	131	0.776	0.652
	SSQ (Bureaucracy)	135	1.173	0.315
	SSQ (Work-home Conflicts)	133	1.114	0.357
	SSQ (Total Score)	135	1.061	0.397
	BCI (Supported Coping)	135	0.513	0.878
	BCI (Positive Coping)	134	1.139	0.228
	BCI (Religious Coping)	132	4.537	0.059
	BCI (Negative Coping)	135	1.109	0.360
<i>Home Life</i>				
<i>Live alone Vs with others</i>	GHQ12 (Total Score)	135	0.067	0.796
	MBI (Emotion Exhaustion)	135	1.541	0.217
	MBI (Depersonalization)	134	0.042	0.838
	MBI (Personal Accomplishment)	132	0.002	0.961
	3SQ (Role Clarity)	132	0.644	0.424
	3SQ (Coping Resources)	134	1.377	0.243
	3SQ (Risk Factors)	128	0.007	0.935
	3SQ (Supportive People)	135	0.001	0.978
	3SQ (Job Satisfaction)	135	0.223	0.637
	3SQ (Total Score)	135	0.010	0.863
	SSQ (Clients Poor Skills)	135	0.016	0.899
	SSQ (Lack of Staff Support)	135	0.076	0.783
	SSQ (Lack of Resources)	129	0.862	0.355
	SSQ (Low Status Job)	131	1.203	0.275
	SSQ (Bureaucracy)	135	0.151	0.698
	SSQ (Work-home Conflicts)	133	0.263	0.610
	SSQ (Total Score)	135	2.368	0.126
	BCI (Supported Coping)	135	2.562	0.112
	BCI (Positive Coping)	134	0.016	0.900
	BCI (Negative Coping)	135	0.057	0.811
<i>Living with Children</i>	GHQ12 (Total Score)	135	0.966	0.327
	MBI (Emotion Exhaustion)	135	0.108	0.743
	MBI (Depersonalization)	134	0.461	0.498
	MBI (Personal Accomplishment)	132	0.138	0.711
	3SQ (Role Clarity)	132	0.015	0.902
	3SQ (Coping Resources)	134	1.785	0.184
	3SQ (Risk Factors)	128	0.011	0.916
	3SQ (Supportive People)	135	0.684	0.410

	3SQ (Coping Resources)	134	0.008	0.927
	3SQ (Risk Factors)	128	1.267	0.262
	3SQ (Job Satisfaction)	135	1.524	0.219
	3SQ (Total Score)	135	0.006	0.939
	SSQ (Clients Challenging Behaviour)	134	3.188	0.076
	SSQ (Clients Poor Skills)	135	2.276	0.134
	SSQ (Lack of Staff Support)	135	3.922	0.051
	SSQ (Lack of Resources)	129	0.322	0.571
	SSQ (Low Status Job)	131	2.166	0.143
	SSQ (Bureaucracy)	135	0.042	0.837
	SSQ (Work-home Conflicts)	133	0.289	0.592
	SSQ (Total Score)	135	2.201	0.140
	BCI (Supported Coping)	135	3.803	0.053
	BCI (Positive Coping)	134	2.470	0.118
	BCI (Negative Coping)	135	0.449	0.504
<i>Occupational Groups</i>				
	GHQ12 (Total Score)	135	0.969	0.457
	MBI (Emotion Exhaustion)	135	1.641	0.130
	MBI (Depersonalization)	134	0.544	0.800
	MBI (Personal Accomplishment)	132	0.646	0.717
	3SQ (Role Clarity)	132	1.654	0.126
	3SQ (Coping Resources)	134	2.674	0.133
	3SQ (Risk Factors)	128	1.183	0.317
	3SQ (Supportive People)	135	2.211	0.051
	3SQ (Job Satisfaction)	135	1.860	0.082
	3SQ (Total Score)	135	2.460	0.025
	SSQ (Clients Challenging Behaviour)	134	3.574	0.200
	SSQ (Clients Poor Skills)	135	0.949	0.472
	SSQ (Lack of Staff Support)	135	2.676	0.131
	SSQ (Lack of Resources)	129	2.001	0.060
	SSQ (Low Status Job)	131	1.896	0.075
	SSQ (Bureaucracy)	135	4.023	0.100
	SSQ (Work-home Conflicts)	133	2.403	0.240
	SSQ (Total Score)	135	3.392	0.200
	BCI (Supported Coping)	135	2.440	0.220
	BCI (Positive Coping)	134	0.771	0.613
	BCI (Religious Coping)	132	2.337	0.280
	BCI (Negative Coping)	135	0.967	0.458
<i>Experience in Forensic In-patient Services</i>				
	GHQ12 (Total Score)	135	0.136	0.873
	MBI (Emotion Exhaustion)	135	0.835	0.436
	MBI (Personal Accomplishment)	132	0.278	0.757
	3SQ (Coping Resources)	134	0.645	0.526
	3SQ (Risk Factors)	128	0.357	0.700
	3SQ (Supportive People)	135	0.796	0.453
	3SQ (Job Satisfaction)	135	2.750	0.068
	3SQ (Total Score)	135	1.272	0.284
	SSQ (Clients Challenging Behaviour)	134	0.971	0.381
	SSQ (Clients Poor Skills)	135	0.560	0.572
	SSQ (Lack of Staff Support)	135	1.294	0.278
	SSQ (Lack of Resources)	129	2.499	0.086
	SSQ (Low Status Job)	131	0.242	0.785
	SSQ (Bureaucracy)	135	0.933	0.396
	SSQ (Work-home Conflicts)	133	0.374	0.689
	SSQ (Total Score)	135	0.793	0.455
	BCI (Supported Coping)	135	2.162	0.119
	BCI (Positive Coping)	134	2.118	0.124
	BCI (Religious Coping)	132	0.814	0.445
	BCI (Negative Coping)	135	1.196	0.306

<i>Time in Current Forensic In-patient Service</i>	GHQ12 (Total Score)	135	0.100	0.905
	MBI (Emotion Exhaustion)	135	0.108	0.898
	MBI (Depersonalization)	134	2.078	0.129
	MBI (Personal Accomplishment)	132	0.807	0.448
	3SQ (Role Clarity)	132	1.338	0.366
	3SQ (Coping Resources)	134	1.333	0.267
	3SQ (Risk Factors)	128	0.480	0.620
	3SQ (Supportive People)	135	0.126	0.881
	3SQ (Job Satisfaction)	135	0.652	0.523
	3SQ (Total Score)	135	0.077	0.926
	SSQ (Clients Challenging Behaviour)	134	0.854	0.428
	SSQ (Clients Poor Skills)	135	1.648	0.296
	SSQ (Lack of Staff Support)	135	1.505	0.226
	SSQ (Lack of Resources)	129	1.809	0.168
	SSQ (Low Status Job)	131	0.108	0.898
	SSQ (Bureaucracy)	135	0.600	0.550
	SSQ (Work-home Conflicts)	133	0.514	0.599
	SSQ (Total Score)	135	0.745	0.477
	BCI (Supported Coping)	135	1.485	0.230
	BCI (Positive Coping)	134	2.485	0.087
BCI (Religious Coping)	132	1.684	0.190	
<i>Shift Work</i>	GHQ12 (Total Score)	135	0.268	0.606
	MBI (Depersonalization)	134	0.289	0.592
	MBI (Personal Accomplishment)	132	0.002	0.964
	3SQ (Role Clarity)	132	0.042	0.838
	3SQ (Coping Resources)	134	0.152	0.697
	3SQ (Risk Factors)	128	0.511	0.476
	3SQ (Supportive People)	135	2.013	0.158
	3SQ (Job Satisfaction)	135	1.150	0.285
	3SQ (Total Score)	135	0.129	0.720
	SSQ (Clients Challenging Behaviour)	134	0.388	0.534
	SSQ (Clients Poor Skills)	135	0.186	0.667
	SSQ (Lack of Staff Support)	135	0.865	0.354
	SSQ (Lack of Resources)	129	0.016	0.901
	SSQ (Low Status Job)	131	0.030	0.862
	SSQ (Bureaucracy)	135	1.066	0.304
	SSQ (Work-home Conflicts)	133	0.462	0.498
	SSQ (Total Score)	135	0.143	0.706
	BCI (Supported Coping)	135	3.518	0.063
	BCI (Positive Coping)	134	0.509	0.477
	BCI (Religious Coping)	132	2.702	0.101
<i>Clinical Supervision</i>	GHQ12 (Total Score)	135	3.09	0.73
	MBI (Emotion Exhaustion)	135	0.79	0.45
	MBI (Depersonalization)	134	1.71	0.18
	MBI (Personal Accomplishment)	132	0.51	0.59
	3SQ (Role Clarity)	132	0.66	0.93
	3SQ (Coping Resources)	134	0.35	0.69
	3SQ (Risk Factors)	128	0.93	0.39
	3SQ (Supportive People)	135	1.76	0.17
	3SQ (Job Satisfaction)	135	1.10	0.33
	3SQ (Total Score)	135	0.37	0.69
	SSQ (Clients Challenging Behaviour)	134	2.49	0.86
	SSQ (Clients Poor Skills)	135	0.29	0.74
	SSQ (Lack of Staff Support)	135	1.37	0.25
	SSQ (Lack of Resources)	129	1.59	0.27
	SSQ (Low Status Job)	131	0.68	0.50
SSQ (Bureaucracy)	135	0.70	0.49	

	SSQ (Work-home Conflicts)	133	0.32	0.72
	SSQ (Total Score)	135	0.41	0.66
	BCI (Supported Coping)	135	0.92	0.40
	BCI (Positive Coping)	134	0.01	0.99
	BCI (Religious Coping)	132	1.32	0.26

Appendix T

Journal of Legal and Criminological Psychology - Notes for Contributors



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Legal and Criminological Psychology

Notes for Contributors

The journal publishes papers which advance professional and scientific knowledge in the field of legal and criminological psychology, defined broadly as the application of psychology to law or interdisciplinary enquiry in legal and psychological fields. Theoretical, review and empirical studies in any of the following areas are welcomed: new legislation; management of offenders; crime prevention; victimology; mental health and the law; impact of law on behaviour; public attitudes to crime and the law; policing and crime detection; child and family issues; legal decision making; civil law procedures; interviewing; interrogation and testimony; court processes; disputes and litigation; legal development and policy; role of the expert witness; sentencing and penology; ethical issues; assessment and treatment of criminal behaviour; and professional training.

1. Circulation

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

2. Length

Papers should normally be no more than 5,000 words, although the Editor retains discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

3. Reviewing

The journal operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the Editor) although the Editor may process a paper at his or her discretion. The referees will not be aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to the title page (and the text should be free of such clues as identifiable self-citations e.g. 'In our earlier work...').

1) All manuscripts must be submitted online at <http://lcp.edmgr.com>.

First-time users: click the REGISTER button from the menu and enter in your details as instructed. On successful registration, an email will be sent informing you of your user name and password. Please keep this email for future reference and proceed to LOGIN. (You do not need to re-register if your status changes e.g. author, reviewer or editor).
Registered users: click the LOGIN button from the menu and enter your user name and password for immediate access. Click 'Author Login'.

2) Follow the step-by-step instructions to submit your manuscript.

3) The submission must include the following as separate files:

- o Title page consisting of manuscript title, authors' full names and affiliations, name and address for corresponding author.
- o Abstract
- o Full manuscript omitting authors' names and affiliations. Figures and tables can be attached separately if necessary.

4) If you require further help in submitting your manuscript, please consult [Tutorial for Authors](#) (PDF, 130Kb).

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5. Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate page. The resolution of digital images must be at least 300 dpi.
- All papers must include a structured abstract of up to 250 words with the following headings: Purpose, Methods, Results, Conclusions.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations etc for which they do not own copyright.

For guidelines on editorial style, please consult the APA Publication Manual published by the American Psychological Association, Washington DC, USA (<http://www.apastyle.org>).

6. Publication ethics

Code of Conduct
Principles of Publishing

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Supplementary data too extensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

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- Title page (include title, authors' names, affiliations, full contact details)
- Full article text (double-spaced with numbered pages and anonymised)
- References (APA style). Authors are responsible for bibliographic accuracy and must check every reference in the manuscript and proofread again in the page proofs.
- Tables, figures, captions placed at the end of the article or attached as separate files.

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Section Five

Contributions to Theory, Clinical

Practice and Learning

Contributions to Theory, Clinical Practice and Learning

Katie Ann Elliott

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Introduction

Although, the phenomenon of stress has been extensively researched amongst certain groups of healthcare professionals, very few investigations have focused upon those employed within forensic services, especially in the UK. The research has provided further insight into this rarely studied group of healthcare professionals experiences of stress, burnout, coping and psychological well-being. The findings generated from the research study have highlighted a range of implications in terms of future research, theory development and clinical practice; these issues were not discussed fully in the research paper and are therefore considered in further detail below.

Implications for Future Research and Theory Development

Overall, the results appeared to support the commonly held assertion that forensic services are an inherently stressful and dangerous working environment, which can cause healthcare professionals to experience marked levels of occupational stress, psychological distress and burnout.

Occupational Stress

In terms of occupational stress, the research findings provided further support to the small body of research, which has demonstrated that occupational stress affects a significant proportion of forensic healthcare professionals (Jones et al., 1987; Kirby & Pollack, 1995; Coffey, 1999). The findings also lend support to the large more generic body of research, which has found that healthcare professionals are

particularly vulnerable to stress and the detrimental effects often associated with stress related conditions, due to the nature of their work (Edwards & Burnard, 2003).

Available research findings have shown that forensic healthcare professionals generally report high to moderate levels of stress (Jones et al., 1987; Kirby & Pollock, 1995; Coffey & Coleman, 2001), with only one study reporting much lower levels (Happell et al., 2003). A substantial proportion of the current sample reported high levels of stress in relation to a variety of work stressors, namely work-home conflicts, clients challenging behaviour and poor skills, low job status, lack of staff support and bureaucracy. However somewhat lower than expected levels of occupational stress were found overall, with only a fifth of the forensic healthcare professionals experiencing markedly elevated levels of stress.

Whilst the reasons for the lower than expected result remained unclear, the vast majority of the sample reported high levels of staff support and satisfaction at work. It is therefore possible that higher levels of perceived support and satisfaction at work helped protect many forensic healthcare professionals from experiencing elevated levels of stress. This could suggest that support and satisfaction played a critical role in influencing stress levels, rather than factors associated with the nature of the client group or the working environment (e.g. exposure to disturbing social issues, severe mental illness and challenging behaviour) as previously suggested (Thorpe, Righthand & Kubick, 2001).

The findings appeared to somewhat conflict with previous researchers who have reported that in comparison with other groups of healthcare professionals (e.g. acute

mental health) forensic healthcare professionals generally achieved comparable (Chalder & Nolan, 2000) or lower levels of stress (Happell et al., 2003). The study demonstrated that forensic healthcare professionals on average reported markedly higher stress levels when compared with a group of healthcare professionals from a learning disability service (Hatton, 2004); although similar comparisons have previously been reported with mental health services staff (Jones et al., 1987; Kirby & Pollack, 1995).

Future research efforts should endeavour to recruit larger samples to allow for more definitive statements to be made about the prevalence and severity of occupational stress amongst forensic healthcare professionals, which in turn would help facilitate more accurate comparisons with other groups of healthcare professionals.

Psychological Well-being

In relation to psychological well-being, the research demonstrated that a substantial proportion of forensic healthcare professionals experienced marked levels of psychological distress and scored above the threshold for determining psychiatric case-ness. Although the proportion of forensic healthcare professionals experiencing elevated levels of psychological distress was very similar to those reported amongst a group of FCMHN (Coffey, 1999), on average a considerably lower level was found when compared with a group of Special Hospital FMHN (Jones, et al. 1987).

A possible explanation for the lower level of psychological distress may have involved differences in terms of the forensic healthcare professionals working

environments. Forensic services are defined by the dangerousness of the clients they care for, it would seem reasonable to assume that forensic healthcare professionals working in high secure settings (e.g. Special Hospitals) are at greater risk of experiencing psychological distress than those working in medium secure settings.

Or perhaps the disparity reflects underlying differences between the types of occupational groups included in the two studies (e.g. all healthcare professionals versus just nurse)? If this proved to be the case, it could be hypothesized that nurses experienced higher levels of psychological distress due to the 'front-line' nature of their work and the intensity of their therapeutic relationships with an inherently challenging client group. However, no such significant differences were observed between frontline forensic healthcare professionals (e.g. nurses and support workers) and other professionals (e.g. psychiatrists and psychologists) in the current research.

However a more likely explanation involved variations between the scoring methods. Although both studies used the 12-item version of the GHQ, the current study utilized the bimodal scoring technique (e.g. 0-0-1-1), whereas Jones and colleagues (1987) adopted the Likert scoring method (e.g. 0-1-2-3). Arguably the bimodal scoring technique is the more stringent of the two methods and higher scores would have been achieved in the current study if the researcher had used the Likert method (Goldberg & Williams, 1988).

Although the reasons for the lower than expected result remained unclear, future research efforts need to achieve larger sample sizes, utilize standard assessment

measures and adopt consistent scoring techniques, if more definitive conclusions are to be made about forensic healthcare professionals levels of psychological well-being.

Burnout

Overall, the research study found that forensic healthcare professionals experienced moderate levels of burnout. The findings also demonstrated that a substantial number of forensic healthcare professionals exhibited high levels of burnout in terms of emotional exhaustion, depersonalization and personal accomplishment. Thus the results provided further support to the growing body of research that has demonstrated that forensic healthcare professionals often experienced elevated levels of burnout (Coffey, 1999; Coffey & Coleman, 2001; Ewers, et al., 2002).

The research study demonstrated that emotional exhaustion was predicted by higher levels of psychological distress, occupational stress and greater reliance upon negative coping strategies. In light of previous research, it would seem reasonable to accept that forensic healthcare professionals who relied upon negative coping strategies (e.g. avoidance and substance use) and suffered from elevated levels of psychological distress and occupational stress, would be at greater risk of emotional exhaustion (Maslach, Jackson & Leiter, 1996).

Elevated levels of emotional exhaustion were found to be associated with higher levels of alcohol consumption, which supports the work of Coffey and Coleman (2001) who reported that FCMHN who drank more than three units of alcohol per day exhibited significantly high levels of emotional exhaustion and psychological distress.

These findings appeared to suggest that forensic healthcare professionals with high levels of emotional exhaustion tend to adopt more palliative coping mechanisms, but of course it could be that these individuals drank heavily regardless of burnout levels.

Interestingly, the results also demonstrated that forensic healthcare professionals who did not work shifts (e.g. psychologists) experienced significantly higher levels of emotional exhaustion than those who did (e.g. nurses). Why this proved to be the case remained uncertain? As one may have expected to find that higher emotional exhaustion was in fact related to shift work. This finding could of course reflect fundamental differences in the types of occupational groups examined or may merely be an artifact of the relatively small and unequal sample size.

In terms of depersonalization, the research findings established that forensic healthcare professionals with the least experience reported significantly lower levels. Thus lower levels of depersonalization were exhibited amongst those individuals who had been exposed to the negative effects of potential work stressors for the least amount of time. This finding lends support to the Structural Model of Burnout (Maslach, Jackson & Leiter, 1996), which suggests that depersonalization gradually develops as a defence mechanism to reduce the emotional energy required to work with others and involved developing cynical attitudes about work and clients.

Like emotional exhaustion, depersonalization was found to be predicted by higher levels of occupational stress and greater reliance upon negative coping strategies. Again it would seem quite safe to assume that forensic healthcare professionals who relied upon negative coping strategies (e.g. self-blame and disengagement) and

suffered from elevated levels of occupational stress, would be at greater risk of developing high levels of depersonalization.

Significantly elevated levels of depersonalization were also found amongst forensic healthcare professionals who smoked. This finding lends support to Ogus, Greenglass and Burke (1990) who found a correlation between high depersonalization levels and high cigarette and alcohol consumption. Overall this finding appears to provide further support to the assertion that forensic healthcare professionals with high levels of burnout tend to adopt palliative coping mechanisms.

Interestingly, the research study also demonstrated that relatively few forensic healthcare professionals experienced high levels of burnout in terms of personal accomplishment, which appeared to suggest that the vast majority of the sample felt confident in their role, found their work rewarding and felt that they were doing well. The results showed that higher perceived levels of support and satisfaction at work predicted a greater sense of personal accomplishment. In consideration of previous research findings, it would seem logical that forensic healthcare professionals' who experienced high levels of support and satisfaction at work may also have a greater sense of personal accomplishment (Maslach, Jackson & Leiter, 1996). These findings are further supported by the work of Happell, Martin and Pinikahana (2003) who found an association between high levels of job satisfaction and low levels of burnout in terms of personal accomplishment amongst FMHN.

Although there is a growing body of research that has examined burnout amongst forensic healthcare professionals, future investigations should focus upon the causal

factors and consequences of this phenomenon. The only published studies that have investigated burnout in UK forensic services have exclusively focused upon the experiences of qualified nurses, thus future investigations into the prevalence and implications of burnout amongst other groups of forensic healthcare professionals (e.g. support workers, psychologists and psychiatrists) are urgently called for.

Coping

Overall, the research gave valuable insight into a rarely studied group of healthcare professionals coping mechanisms. The findings confirmed that forensic healthcare professionals often utilized a range of problem-focused (e.g. positive), emotion-focused (e.g. religious, negative and supported) and palliative coping strategies (e.g. smoking and drinking). Female forensic healthcare professionals were found to employ more positive (e.g. planning and reframing) and supported (e.g. emotional and social) coping mechanisms than men. This finding appeared to parallel with information known about gender differences in prison officers, namely that women more often seek social support to cope (Parkes, 1990).

However, the research produced somewhat conflicting results, as younger forensic healthcare professionals were found to use more supported coping mechanisms and had greater coping resources than older staff, whilst an examination of the influence of experience revealed that the most experienced group utilized significantly less negative coping mechanisms (e.g. avoidance, self-blame and venting). These findings are partly supported by previous researchers who found that older and more experienced healthcare professionals employed more effective coping strategies

(Coyle et al., 2000). The research also showed that forensic healthcare professionals who lived by themselves and those who had experienced a life event in the past six months were more likely to rely upon religious coping, whilst 'front-line' staff employed less religious coping mechanisms. In addition, forensic healthcare professionals who did not work shifts were also found to adopt more negative methods of coping.

Very little research attention has examined coping amongst healthcare professionals and the reasons why many of these findings proved to be the case remained unclear? Future research efforts should attempt to employ larger sample sizes to allow for more authoritative conclusions to be made about the nature and consequences of the types of coping mechanisms often employed by forensic healthcare professionals.

Limitations of the Research Study

The results from the research study must be viewed with a degree of caution. One of the main limitations of the research study involved the small number of participants and the poor response rate, hence the difficulty in generalizing the findings to the wider population of forensic healthcare professionals. A further limitation involved the absence of information relating to those forensic healthcare professionals who refused to participate in the research study. Perhaps more could have been done to encourage a greater number of individuals to participate. Possibilities may have included emailing questionnaires directly, sending additional reminders (e.g. email, text or postal) or providing incentives (e.g. raffle prize). However it was not possible in the time allocated to seek further ethical approval for additional changes.

The extent to which the findings are indicative of occupational stress or are merely a reflection of other sources of stress that transfer into an individual's working environment, remains unclear. Whilst this possibility cannot be ruled out and is virtually impossible to control for in such investigations, the wording on the assessment measures (apart from the GHQ12) referred directly to work experiences.

The financial and time constraints placed upon the research study did not allow for multiple sources of information; only self-report measures were employed. Ideally additional and independent sources of information would have been collected to help corroborate the validity and reliability of the current research findings. This could have included, face-to-face interviews, observations or monitoring participants physiological stress symptoms (e.g. increased heart rate and blood pressure).

Due to the research studies reliance upon self-report measures, it could be argued that self-report biases may have influenced the research data and subsequent analysis. However, the constraints placed upon the research study did not allow for multiple informants; only self-report data was collected. In order to strengthen the current research results multiple informants may have involved interviewing service or line managers in relation to individual forensic healthcare professionals or asking the appropriate manager to complete measures of occupational stress for each participant.

Alternatively, multiple self-report measures could have been employed to assess each variable (e.g. stress, psychological well-being, coping and burnout) in greater detail. This may have allowed for greater independence of data. Ideally multiple assessment measures could have been utilized, particularly in consideration of the emphasis

placed upon burnout within the current research study. Although other burnout measures exist, namely the Burnout Measure (BM; Pines *et al*, 1981), the Meier Burnout Assessment (MBA; Meier, 1984) and the Staff Burnout Scale for Health Professionals (BS-HP; Jones, 1980). The vast majority of studies that have investigated burnout amongst forensic healthcare professionals have employed the Maslach Burnout Inventory (MBI) and extensive research has demonstrated that the MBI offers the most popular, validated and reliable measure of burnout to date (Maslach, Jackson & Leiter, 1996).

Implications for Clinical Practice

In terms of clinical practice, the findings generated from the research study have highlighted a range of implications not only for individual forensic healthcare professionals, but also for their organizations and the clients for whom they care.

Individual Consequences

Overall the research study demonstrated that the majority of forensic healthcare professionals experienced low levels of occupational stress, psychological distress and burnout. This suggested that most of the sample had good levels of psychological well-being, were not emotionally overextended, had positive attitudes about their work and clients, felt confident in their role and found their work rewarding.

However, a significant proportion of the forensic healthcare professionals were found to be particularly vulnerable to elevated levels of occupational stress and the harmful

effects often associated with stress related conditions (e.g. emotional exhaustion, depersonalization and psychological distress). Overall these findings are concerning.

Many of the forensic healthcare professionals exhibited levels of psychological distress more parallel to the levels one would expect to find amongst a clinical population. Considerable research efforts have confirmed that high stress levels are associated with mental health problems (Moore & Burrows, 1996), like depression (Glass & McKnight, 1996) and anxiety (Lemma, 2000). Further evidence has shown that high levels of stress can impact upon an individuals physical health (Tsigos & Chrousos, 1996) and well-being (Health and Safety Commission, 2000).

Future research should attempt to develop appropriate stress management and intervention strategies to help diminish forensic healthcare professionals' experiences of stress and reduce the risks of burnout and psychological distress. For example, Ewers, Bradshaw, McGovern and Ewers (2002) demonstrated the positive influence of Psychosocial Intervention Training upon a group of FMHN burnout levels, work knowledge and attitudes towards clients. Other possible interventions could include work-based counseling services (Muscroft & Hicks 1998), relaxation training (Peacock, 1991) and keep-fit (Sheu, Lin & Hwang, 2002).

As a means of coping with elevated levels of stress, psychological distress, emotional exhaustion and depersonalization, many forensic healthcare professionals appeared to rely upon palliative strategies, namely heavy smoking and drinking. The harmful and ultimately devastating implications for individuals adopting such strategies over prolonged periods of time are self-explanatory. Future management strategies aimed

at promoting psychological and physical well-being, should endeavour to address this group's apparent reliance upon palliative mechanisms as a means of coping with elevated levels of stress, psychological distress and burnout.

Organizational Consequences

The organizational consequences raised by the current research study are clear. If forensic healthcare professionals experience stress they are at greater risk of suffering from physical illness, burnout and mental health problems, which will ultimately prevent them from carrying out their clinical duties and is likely to necessitate treatment at the expense of the National Health Service (NHS).

According to the Health and Safety Commission (2000), elevated levels of occupational stress frequently result in detrimental consequences for organizations including: absenteeism, sick leave, poor morale, high staff turnover and reduced efficiency. Research evidence suggests that healthcare professionals have higher rates of absence and sickness when compared with staff from other occupational sectors (Nuffield Trust, 1998) and high stress levels have been causally linked to recruitment and retention difficulties commonly found within the NHS, (Seecombe & Ball, 1992).

If service managers wish to maintain their specialist workforce, prevent staff from experiencing high levels of stress and promote psychological well-being, they should ensure that appropriate support mechanisms are encouraged and access to effective clinical supervision is available to all forensic healthcare professionals.

Client Consequences

In addition to the effects upon individuals and their organizations, high levels of stress amongst forensic healthcare professionals is likely to have a detrimental impact upon client care. Sutherland and Cooper (1990) found that high levels of stress amongst healthcare professionals effected client care, in terms of the lack of continuity, inexperienced staff and poor levels of engagement. Overall, the current research findings are concerning in terms of the impact they may have upon client outcome.

Many of the forensic healthcare professionals exhibited high levels of burnout in relation to emotional exhaustion and depersonalization. Maslach, Jackson and Leiter (1996) confirmed that healthcare professionals with high emotional exhaustion levels have difficulty giving themselves to clients and developing good therapeutic relationships, whilst high depersonalization levels were indicative of cynical and negative attitudes towards work and clients. Corley and Goren (1998) argued that burnout amongst healthcare professionals leads to the development of a harmful therapeutic milieu, which involved uncaring and controlling attitudes, disengagement, limited empathy, manipulation, avoidance and minimizing clients problems.

To date, no research has yet investigated the implications of high levels of stress upon the well-being of forensic clients. It may prove beneficial for future research to investigate the impact of stress amongst forensic healthcare professionals upon client outcome and therapeutic relationships. A further avenue would be to explore the effects of stress upon forensic healthcare professionals attitudes towards clients and the influence that such attitudes may have upon risk assessment and community

discharge. Coffey (1999) argued that if the ethical difficulties were overcome 'research in this area may provide the most powerful evidence yet of the need to seriously address occupational stress'.

Process and Personal Issues Raised

Motivations for the Study

The motivation stemmed from my very first clinical experience, where I worked as a forensic healthcare assistant at a large Medium Secure Unit (MSU). Although I will never forget my first day nerves entering this 'alien world' or the nagging worry that I could get 'attacked or killed at any moment'. I will also never forget many of the professionals with whom I have had the absolute privilege to work alongside.

They were able to care empathically for clients presenting with complex symptomatology, severe personality disorders, challenging behaviour, enduring mental health problems and who had often committed atrocious crimes. Despite being faced with many conflicting goals and vast social, political and legal pressures, these professionals maintained a therapeutic environment whilst ensuring that their clients, colleagues and the general public were kept safe. And although they often worked unsociable hours, were frequently confronted with physically and verbally threatening behaviour and received very little financial reward, thanks or praise for their efforts. These professionals were able to create a positive, supportive, enthusiastic and protective working environment, which helped alleviate my initial fears, provided invaluable lessons and fostered my ongoing interest in forensic issues.

Practical Difficulties Encountered

The most frustrating aspect of the research study involved gaining ethical approval from the NHS Multi-centre Research Ethics Committee (MREC) system, under a relatively tight timescale. The NHS ethics application system has recently undergone significant transformation, which has ultimately lead to the creation of the new Central Office for Research Ethics Committee (COREC) and MREC, as well as to the introduction of a computerized standard ethics application form. The introduction of the new system coincided with the time that the ethics application was submitted.

This proved to be a time of great uncertainty and confusion, not only for myself, but also for the majority of Local Research and Ethics Committee (LREC) co-ordinators and Research and Development (R&D) officers with whom I had contact. Under the new system the ethics application was formally registered with COREC. As the research study involved multiple sites COREC allocated a slot at the next available MREC meeting. I attended the MREC meeting, who reviewed the research study and suggested some minor amendment. I then resubmitted the amended ethics application form and was granted full ethical approval on the provision that I gained 'local management approval'.

Considerable confusion was subsequently encountered when applying for local management approval from the four NHS trusts. Many R&D officers and LREC co-ordinators appeared to be struggling under the new system and many had never encountered an MREC approval before. This phase of the research process ultimately required great patience, clear thinking and good organizational skills.

Perhaps the most disappointing aspect of the research study involved the relatively low response rate resulting in the moderate sized final sample. In an ideal world, a larger number of participants would have been recruited, the researcher would have personally visited each forensic service in an attempt to encourage individual forensic healthcare professionals to participate in the research study and the research project would have included a larger number of forensic services. However the timescale and financial constraints placed upon the research study did not allow for recruitment of additional forensic services or for consideration of methods to boost response rates.

References

Chadler, G. & Nolan, P.W. (2000). A comparative study of stress among forensic and acute mental health nurses. *The British Journal of Forensic Practice*, 2, 3, 24-29.

Coffey, M. (1999). Stress and burnout in Forensic Community Mental Health Nurses (FCMHN): An investigation of its causes and effects. *Journal of Psychiatric & Mental Health Nursing*, 6, 433-444.

Coffey, M. & Coleman, M. (2001). The relationship between support and stress in forensic community mental health nursing. *Journal of Advanced Nursing*, 34, 397-407.

Corley, M.C. & Goren, S.G. (1998). The dark side of nursing: Impact of stigmatizing responses on patients. *Scholarly Inquiry for Nursing Practice: An International Journal*, 12, 2, 99-118.

Coyle, D., Edwards, D., Hannigan, B., Burnard, P. & Fothergill, A. (2000). An explanation of coping strategies used by Community Psychiatric Nurses in Wales. *Nursing Health & Sciences*, 2, 59-67.

Edwards, D. & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Journal of Advanced Nursing*, 42, 2, 169-200.

Ewers, P., Bradshaw, T., McGovern, J. & Ewers, B. (2002) Does training in psychosocial interventions reduce burnout rates in forensic nurses? *Journal of Advanced Nursing*, 37, 5, 470-476.

Glass, D.C. & McKnight, J.D. (1996). Perceived control, depressive symptomatology and professional burnout: A review of the evidence. *Psychology & Health*, 11, 23-48.

Goldberg, D. & Williams, P. (1988). *A Users Guide to The General Health Questionnaire*. Windsor, UK: NFER-Nelson.

Happel, B., Martin, T. & Pinikahana, J. (2003). Burnout and job satisfaction: A comparative study of psychiatric nurses from forensic and a mainstream mental health service. *International Journal of Mental Health Nursing*, 12, 39-47.

Happel, B., Pinikahana, J. & Martin, T. (2003). Stress and burnout in forensic psychiatric nursing. *Stress & Health*, 19, 63-68.

Hatton, C. (2004). SSQ Unpublished data. Personal Communication.

Health and Safety Commission. (2000). Health and Safety Home pages.
<http://www.healthandsafety.co.uk>

Jones, W. (1980). *Preliminary Test Manual: The Staff Burnout Scale for Healthcare Professionals (SBS-HCP)*. Park Ridge: London House Press.

Jones, J., Janman, K., Payne, R. & Rick, J. (1987). Some determinants of stress in psychiatric nurses. *International Journal of Nursing Studies*, 24, 129-144.

Kirby, S. & Pollack, P.H. (1995). The relationship between a medium secure environment and occupational stress in forensic psychiatric nursing. *Journal of Advanced Nursing*, 22, 862-867.

Lemma, A. (2000). *Containing the Containers: The Effects of Training & Support on Burnout in Psychiatric Nurses*. Surrey, University of Surrey: Psychol. D.

Maslach, C., Jackson, S.E. & Leiter, M.P. (1996). *Maslach Burnout Inventory Manual* (3rd edition). Palo Alto: Consulting Psychologists Press, Inc.

Meier, S.T. (1984). The construct validity of burnout. *Journal of Occupational Psychology* 57 211-219.

Moore, K.A. & Burrows, G.D. (1996). Stress and mental health. In C.L. Cooper (ed). *Handbook of Stress, Medicine and Health*. Boca Raton: CRC Press.

Mushcroft, J. & Hicks, C. (1998). A comparison of psychiatric nurses and general nurses and counseling needs: a case study approach. *Journal of Advanced Nursing*, 27, 1317-1325.

Nuffield Trust. (1998). *Improving the Health of the NHS Workforce*. London: The Nuffield Trust.

Ogus, D., Greenglass, E. & Burke, R. (1990). Gender-role differences, work stress and depersonalization. *Journal of Social Behaviour & Personality*, 5, 387-398.

Parkes, K. (1990). Coping, negative affectivity and the work environment: Additive and interactive predictors of mental health. *Journal of Applied Psychology*, 75, 399-409.

Peacock, R. (1991). *Stress in the Workplace: Studies in Psychiatric Nurses & Prison Service Workers*. Cranfield Institute of Technology. UK: Applied Psychology Unit.

Pines, A., Aronson, E. & Kafry, D. (1981). *Burnout from Tedium to Personal Growth*. New York: The Free Press.

Seecombe, I. & Ball, J. (1992). *Motivation, Morale & Mobility: A Profile of Qualified Nurses in the 1990's*. Brighton, University of Sussex: Institute of Manpower Studies.

Sheu, S., Lin, H. & Hwang, S. (2002). Perceived stress and physio-psycho-social status of nursing students during the initial period of clinical practice: The effects of coping behaviours. *International Journal of Nursing Studies*, 39, 165-175.

Sutherland, V. & Cooper, C. (1990). *Understanding Stress: A Psychological Perspective for Health Care Professionals*. London: Chapman & Hall.

Thorpe, G.L., Righthand, S. & Kubick, E.K. (2001). Brief report: Dimensions of burnout in professionals working with sex offenders. *Sexual Abuse: A Journal of Research & Treatment*, 13, 3, 197-203.

Tsigos, C. & Chrousos, G.P. (1996). Stress, endocrine manifestations and diseases. In C.L. Cooper (ed). *Handbook of Stress, Medicine and Health*. Boca Raton: CRC Press.

Section Six

Word Counts

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Appendices	10285
Literature Review	4958
References, Figures, Tables and Appendix	2035
Research Paper	6060
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Included Total:	19978
Excluded Total:	18289
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