

Informing stress management. A research project focusing on mental health professionals in training.

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Abstract. This article presents an overview of a research project that focuses on stress in clinical psychology trainees and mental health nursing students. As these groups are exposed to a variety of stressors, a multi-dimensional approach to stress is required. Qualitative and quantitative methods were used to investigate stress in these groups and some of the key findings from these studies are discussed. This approach provides a more comprehensive account of the factors influencing stress levels and allows future interventions to be more informed, and be of particular relevance, to these groups of students.

Keywords. Occupational stress; multi-dimensional research; clinical psychology trainees; mental health nursing students.

1. Introduction

1.1 Stress of training in the mental health professions

Research focusing on sources of stress in mental healthcare training suggests students are exposed to a variety of stressors during training (Cushway, 1992; Prymachuk & Richards, 2007). Despite this, very few studies have considered multiple factors when predicting stress in these groups and, instead, tend to concentrate their studies on a smaller selection of variables. However, limiting the focus of studies in this way is understandable, due to the impracticalities of having laborious questionnaires that can take up a significant amount of the participants' time. This may ultimately lead to a lower response and higher dropout rates.

1.2 Multi-dimensional approach to measuring stress

The importance of considering multiple factors in stress research has been well documented (Smith, McNamara & Wellens, 2004). The Demands, Resources and Individual Effects model (DRIVE model; Mark & Smith, 2008) provides a framework that can be useful when measuring multiple factors in the prediction of stress and mental health outcomes. The DRIVE model includes factors such as demands, resources, individual differences and outcomes. However, the design of the model is flexible and therefore allows other variables to be applied depending on the aims of the study.

The Wellbeing Process Questionnaire (WPQ; Williams & Smith, 2014) has been developed to allow the measurement of multiple constructs using single-item questions. This measure can help limit the practical problems associated with lengthier, multi-item questionnaires. The items in the questionnaire have shown to be correlated with multi-item scales and predict outcomes just as well as these scales (Williams & Smith, 2014).

The WPQ is a set of single item questions which were generated based on previously validated multi-item scales. The questions are designed by providing examples in parenthesis of what each question is referring to, and participants are instructed to use

these examples for guidance. For example, a sample demands question is described below, and participants rate their agreement with the statement on a scale of 1: disagree strongly to 10: agree strongly.

Demands: I feel that my work is too demanding (For example: I have to work very fast, I have to work very hard, I have conflicting demands).

The design allows for the inclusion of other variables to be taken into consideration when the participant is making their response about the construct. This allows for greater consistency and confidence in those responses in comparison to other single-item designs.

1.3 Objectives

This paper provides an overview of a body of research that has been conducted for the first authors PhD project focusing on stress in clinical psychology trainees and mental health nursing students. Implementing the multi-dimensional approach described, this project investigates multiple predictors of stress on mental health outcomes. In addition to this, qualitative methods have been used to complement the quantitative research.

2. Methods

Brief overviews of four studies are described in this paper. Ethical approval was provided from the School of Psychology Research Ethics Committee for all the studies.

2.1 Qualitative studies

The use of qualitative research is useful to initially explore the common stressors reported by a particular group as, based on this information, a researcher can then decide which variables they wish to include in their questionnaire for the particular group under investigation. The initial qualitative work comprised two studies that involved semi-structured one-to-one interviews with participants. Purposive sampling was used, and interviews were terminated when the collection of new data did not provide any more useful information. Thematic analysis was chosen as it aims to describe, analyse, and report themes and patterns in data (Braun & Clarke, 2006). The flexibility of thematic analysis allows the method to be used under other qualitative frameworks, and in this case, the framework employed was grounded theory. This inductive, bottom up, and data-driven approach allowed for unexpected themes to be identified.

2.1.1 Qualitative study 1: Trainee clinical psychologists

A sample of $n=15$ clinical psychology trainees enrolled on the Doctorate in Clinical Psychology (DClinPsy) course at Cardiff University participated in the study. Participants included seven first years, five second-years and three third-year trainees.

2.1.2 Qualitative study 2: Mental health nursing students

Mental health nursing students ($n = 12$) enrolled on a Bachelor of Nursing degree at Cardiff University participated. All participants were specifically aiming for BN (Hons) in Mental Health Nursing, with registration in the mental health nursing field. Participants included two first-years, four second-years and six third-year students.

2.2 Quantitative studies

The quantitative-based studies involved questionnaires being distributed to participants. These questionnaires included single-item questions focusing on demographics, work characteristics, appraisals, individual differences, coping, health behaviours and mental health outcomes from the WPQ (Williams & Smith, 2012).

2.2.1 Study 3: Cross-sectional questionnaire study considering both clinical psychology trainees and mental health nursing students.

This questionnaire-based study involved 168 clinical psychology trainees and 94 psychiatric nursing students taking part. MANOVA and multiple regression techniques were used to consider the importance of the variables for both groups of students.

2.2.2 Study 4: Longitudinal questionnaire study considering both groups

The longitudinal study involved clinical psychology trainees (n=149) and nursing students (n=358) again completing a multi-construct questionnaire over two different time points. At time point 1 (T1), participants completed the questionnaire in the middle of their first clinical placement of the 2014/2015 academic year. The main reason for collecting the data at this point was that the measures relating to clinical experiences were not applicable to first year participants up until this point. In other words, we waited until year one students had gained some clinical experience to allow them to draw upon these experiences in their responses. The timing of the follow up questionnaire at time point 2 (T2) was at the end of the 2014/15 academic year.

The analysis involved computing change scores and then allocating participants into groups depending on whether they increased or decreased in a particular independent variable. Chi-square and logistic regression analyses were then run to test the associations between these increase/decrease variables and mental health outcomes. To investigate the combined effects of all the variables considered in this study, a composite score was computed, named the Negative Occupational Factor (NOF) and this score was then used in subsequent analysis.

The NOF was computed by recoding the independent variables so that 'bad' factors were recoded as 1 and 'good' factors were recoded as 0. For example, a participant that increased in job demands between T1 and T2 were coded as 1 whereas a participant that decreased in job demands between T1 and T2 were coded as 0. The recoded scores from each independent variable were then summed together to compute the NOF. The NOF was split into tertiles and forward logistic regression was used to assess the association between increased NOF and increased stress.

3. Results

Only a summary of the key findings are described here. For more specific details of the results refer to the associated papers (Galvin, 2015; Galvin & Smith, 2015a; Galvin & Smith, 2015b; Galvin et al., 2015).

3.1 Qualitative studies

Trainee clinical psychologists

- Trainee clinical psychologists described how being labelled a 'trainee' was problematic when working in clinical settings with other health professionals and/or clients who may not understand their role. For example, participants described how some staff members on wards would introduce them as 'psychology students' to other members of the team and/or clients, and this often resulted in them being perceived and treated as being a lower rank than they actually were.

- Trainees described the life experiences they have had that has led them to pursue a mental health profession, and described how they believed these experiences can make them a better clinician overall.

Mental health nursing students

- Mental health nursing students also reported that their life experiences were a major factor in pursuing their career.
- A number of negative coping strategies were described by the participants. For example, a number of the participants described how alcohol was often used as a source of release.
- Problems accessing the university support services were described. For example, when students were in lectures 9-4 or out on clinical placement, a number of participants described how the 9-5 working hours of the university counselling support services were not readily available to them. Educators should therefore ensure that support services are available beyond normal working hours, even if these services are limited in scope.
- The students reported unreasonable demands during clinical blocks and described how control and support was at its lowest on placements with staff shortages.
- Raising concerns about quality of care on clinical placements was particularly stressful for participants.

3.2 Quantitative studies

Trainee clinical psychologists

- Trainees reported higher levels of stress and greater incidences of negative life experiences compared to controls.
- Increases in academic demands were associated with lower job satisfaction and higher job stress but no such association was present for increases in clinical demands.
- Individual differences such as personality were the factors most strongly associated with mental health outcomes for this group.

Mental health nursing students

- Mental health nursing students engage in more emotion-based coping strategies and less problem-focused coping strategies than other groups.
- The negative coping strategies employed by mental health nursing students were predictive of a higher risk of mental health problems over time.
- High alcohol consumption appeared to be a negative coping strategy commonly adopted by this group and this was predictive of poorer mental health outcomes.
- Increases in perceived life stress were associated with increased risk of poorer wellbeing in mental health nursing students.

3.3 Combined effects approach

The overall Negative Occupation Factors (NOF) score (computed as described earlier in the analysis section of this paper) was examined. The association between increased NOF score and having increased stress levels is described in table 1. A linear relationship between increases in the NOF score and perceived stress at work is shown, with individuals in the highest tertile being over seven and a half times more likely to be in the increased stress group. This incremental risk of stress at each level of the NOF provides clear support for the combined effects approach.

Table 1. Association between increased NOF and increased stress.

	OR	95% CI	p
Lowest tertile	1.000		
Middle tertile	2.284	1.292-4.035	.004
Highest tertile	7.668	3.965-14.830	<.001

4. Conclusion

Approaches to measuring stress must be flexible enough to represent individual circumstances. We argue that adopting a multi-dimensional approach can provide more useful information for informing future stress management interventions than other methods that have a tendency to focus efforts on a smaller selection of variables.

The findings of this project suggest a combined effect technique, with short practical measures of wellbeing as being a good way of assessing and predicting stress, and this is the first project using this approach in these particular groups. Such an approach can help identify specific issues for both workers and students, and help assist in the identification of individuals who are at a high risk of stress. This is particularly important in mental health care settings, as poor functioning in employees and students working in these settings can have implications for the quality of care patients receive. Indeed, the American Psychological Association regards self-monitoring of stress levels as an ethical obligation of every mental health professional (APA, 2002).

Training programmes that include appropriately focused educational interventions are therefore central to supporting students in their practice. The measurement approach described here can help inform educators to ensure that learning outcomes on training courses are directed towards areas of particular importance. For example, our findings suggested that raising concerns in NHS settings is particularly stressful. Therefore, educating the students about issues surrounding raising concerns could be considered a key learning outcome on training courses moving forward (Galvin et al., 2015), and this can also help the governments most recent drive for a more open and transparent NHS.

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