

Staff Burnout – A Comparative Study of Metropolitan and Rural Mental Health Nurses within Australia

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Abstract

This paper will present the findings of a research study that investigated the extent to which mental health nurses employed within rural and metropolitan areas of Australia are affected by burnout, using the Maslach Burnout Inventory (MBI) and a demographic questionnaire.

The study also examined whether the Maslach Burnout Inventory (MBI) was a valid measure of mental health burnout within the Australian context and culture or alternatively in what ways if needed to be refined?

A Cross Sectional study of Mental Health Nurses (n= 319) from the states of New South Wales, Victoria, Queensland and Western Australia was undertaken. The 22 items Maslach Burnout Inventory (MBI) was used to measure burnout and a demographic questionnaire utilising a cluster sampling, cross-sectional design survey method was used to gather the data.

The study found that gender and level of qualification were the two major factors that showed any significance where males experienced a higher level of depersonalisation on the frequency and intensity subscale scores of the MBI and that the more qualified a nurse, the greater the level of depersonalisation they experienced. These results were true for participants in both rural and metropolitan settings within Australia. Age was the third most

influencing factor in terms of emotional exhaustion where younger participants (under 30) reported higher levels of emotional exhaustion. Younger male mental health nurses experienced higher levels of depersonalisation.

KEYWORDS: Stress, occupational stress, burnout, burnout syndrome, mental health nurses.

BACKGROUND

Over the last decade there have been a number of studies undertaken regarding burnout among mental health nurses. However, few studies have compared burnout among metropolitan and rural mental health nurses. There is significant consensus in the literature regarding the causative factors of burnout and it is generally related to factors in the work environment that interact with an individual's personality in such a way as to disrupt the worker's psychological or physical functioning (Constantini *et al.* 1997; Cottrell 2001; Duquette *et al.* 1995; Fagin *et al.* 1996; Kilfedder *et al.* 2001, Leiter & Harvie 1996; Moore & Cooper 1996; Prosser *et al.* 1997; Rossler 2012). From the 1980s occupational stress has been well-documented as posing serious problems in mental health settings such as psychiatric hospitals (Curid, 2009, Happell, *et al.* Kipping 2000; Morse, *et al.* 2011; Richards *et al.* 2006; Ryan, Hill & Dawson 2008). However little is understood about the true nature of the relationship between specific occupational stressors present in different health care settings, (e.g. rural versus metropolitan) and what may be empirically defined as occupational burnout. In spite of this long standing concern, it is surprising to note the paucity of literature on the prevalence and degree of burnout among mental health nurses in Australia.

Freudenberger first used the term "burnout" in 1974, and few articles discussing burnout were published prior to 1978 (Freudenberger, 1974; Freudenberger, 1975; Maslach & Pines, 1977;

Mitchell, 1977). However, the 1980s saw a burgeoning of research, indicating an awareness of the problem in various occupations. By the 1990s, the term had been used widely among researchers and attempts were made to discover and relate the factors associated with these feelings and behaviours, but few reached consistent conclusions. One of the salient reasons for this was because burnout was not well understood and often equated with occupational stress (Bailey, 1985). Over recent years there has been growing concern about stress and burnout in a number of health care services and occupations, in particular psychiatrists (Kumar, Fisher, Robinson, Hatcher & Bhagat 2007), occupational therapists and social workers (Lloyd, King, & Chenoweth 2002; Lloyd, McKenna, & King 2005), nurses (Lee & Akhtar 2007), social workers and psychologists (Evans, Huxley, Gately, Webber, Mears, et al. 2006) Chiropractors (Williams, 2011) and mental health nurses (Happell, Martin & Pinikhana, 2003; Imai, *et al.* 2006; Jenkins and Elliot 2004, Lin, St John, & McVeigh 2009; Lloyd and King 2004; Morse, Salyers, Rollins, Monroe-Devita & Pfahler 2011, Nayeri, Negarandeh, Vaismoradi, Ahmadi, & Faghihzadeh 2009; Sherring and Knight 2009; Tebandeke 2008; Yousefy & Ghassemi, 2006).

Research on burnout has expanded considerably and more recently has led to the development of new conceptual models with an emphasis on the social constructs of burnout (Maslach, Shaufeli & Leiter, 2001). Maslach (1976) offered the first research evidence of a destructive phenomenon which seemed to pervade the work of persons in the helping professions and reported that workers were often unable to cope with the continual stress of their profession so that they become unconcerned, unfeeling, and detached themselves from their clients to the point of dehumanizing them.

Burnout can be best described as a syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that occur among individuals who do people work of some kind (Maslach, Jackson & Leiter, 1996). More recent studies (Gascon et al., 2013; Görgens-Ekermans & Brand, 2012) have highlighted that nursing has been cited as one of the professions especially susceptible to the burnout syndrome. However, in contrast to the relatively high number of studies of stress and burnout among health professionals (Basset & Lloyd. 2001; Ducharme, Knudsen & Roman, 2008; Grunfeld, Whelan, Zitzelsberger, Willan, Montesanto & Evans 2000; Lee & Akhtar, 2011; Lloyd & King 2004; Lloyd, McKenna & King 2005; Peterson, Demerouti, Bergstrom, Asberg and Nygren 2008; & Williams 2011), there have been fewer studies related specifically to mental health nurses, (Edwards, Burnard, et al., 2006; Happell, Martin, & Pinikhana, 2003; Prosser, Johnson, Kuipers et al 1997; Jenkins & Elliot 2004; Sherring & Knight 2009; Sorgaad, Ryan, Hill & Dawson 2007). Over the last few years, a substantial body of knowledge has emerged that demonstrate high level of stress and burnout that is prevalent amongst Mental Health Nurses throughout the world (Barling 2001; Coffey & Coleman 2001; Evans, Huxley Gately et al. 2006; Hamaideh, 2011; Imai, et al. 2006; Jenkins & Elliot 2004, Lin, St John, & McVeigh 2009; Lloyd & King 2004; Morse, Salyers, Rollins, Monroe-Devita & Pfahler 2011, Nayeri, Negarandeh, Vaismoradi, Ahmadi, & Faghihzadeh 2009; Sherring & Knight 2009; Tebandeke 2008; Yousefy & Ghassemi, 2006).

Little attention has been given to the question of what happens to mental health nurses working intimately with clients who are in need of constant emotional support, care and a great deal of patience and understanding. Interestingly, an early study by Ryan and Quayle (1999) addressing stress in mental health nursing challenged the idea that mental health nurses are not as stressed in their work as most research seemed to indicate. Any stress that

does exist relates to organizational, rather than work-related matters. Ryan and Quayle (1999) recommended that further investigations be conducted to address the needs of those mental health nurses that are experiencing and reporting high level of stress. In contrast to this belief there is now growing evidence to support the notion that mental health nurses do experience burnout due to the nature of their stressful work (Dunn & Ritter 1995; Edwards & Burnard 2003a; Edwards & Burnard 2003b; Edwards, Burnard, Coyle, Fothergill, & Hannigan 2000; Hannigan, Edwards, Burnard Coyle & Fothergill 2000a; Hannigan, Edwards, Coyle, Fothergill, and Burnard 2000b; Jenkins & Elliot 2004; Kilfedder, Power & West 2001; Pompili, Rinaldi, Lester, Girardi, Ruberto & Tatarelli, 2006; Sherring & Knight 2009; Sorgaard, Ryan & Dawson, 2010; Taylor & Barling, 2004).

Other recent research findings also support the notion that organizational factors of inpatient psychiatric environments within a general hospital are associated with mental health nurse burnout (Hanrahan, Aiken, McClaine & Hanlon, (2010). The results suggest that organizational factors such as the management of inpatient psychiatric environments play an important role and could have a positive effect on psychiatric nurses' capacity to sustain safe and effective care environments (Hanrahan, et al., 2010).

Various definitions have been postulated about burnout, since the term was first used by Freudenberg in 1974. The most influential definition of burnout is offered by Maslach (1982a,) who described it as a syndrome of emotional exhaustion, depersonalisation and a reduced personal accomplishment that can occur among individuals who do "people work". This definition appears to fit with the type of work that mental health nurses carry out daily and is therefore relevant for the purposes of this study. There are numerous implications which arise from this definition and these need to be carefully examined.

Burnout is a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are stressed. Although it has some of the same deleterious effects as occupational stress responses, what is unique about burnout is that it typically manifests itself as a combination of physical, mental, and emotional exhaustion; loss of commitment; disengagement from one's work; and a general inefficiency in adapting to the unique demands of one's relationship with the environment that surrounds the delivery of human services.(Maslach, 1982b, Schaufeli, Leiter, & Maslach,2009).

Burnout appears to have captured the imagination and feelings of health, education and welfare workers; it aptly describes a condition in which more and more individuals feel increasingly tired, are ineffective in their work, lack support and are disillusioned at the impact they might have despite continued effort and personal concern. It could therefore be assumed that occupational stress is a precursor to burnout. While the various research findings have enlightened us to some issues related to occupational stress and burnout, little is known about the comparison of burnout between rural and metropolitan mental health nurses in Australia. To date no comparative study has examined the differences between the two settings.

Research Questions:

Research Question One

Do mental health nurses who work in rural and metropolitan areas in Australia experience any difference in the frequency and intensity of burnout?

Research Question Two

To what extent is the Maslach Burnout Inventory (MBI) a valid measure of mental health burnout within the Australian culture and in what ways does it need to be refined?

Methodology:

A cross sectional survey design was used in this study. A 23-item demographic questionnaire that included postcode, gender, age, levels of qualifications obtained, work setting, duration of service, social support, marital status, area of work, length of service, duration of shift work, overtime, future choice of job, further study, present position held and number of children was administered. The demographic questionnaire was designed by the authors taking into consideration the variables most commonly mentioned in the literature. All items were operationally defined to make it easier for the participants to understand and answer appropriately.

The Maslach & Jackson Burnout Inventory (MBI) (1986) was also administered. The MBI has 22 items designed to assess three aspects of the burnout syndrome, emotional exhaustion, depersonalisation and personal accomplishment.

Inclusion Criteria:

Participants were required to meet the following criteria to be eligible for inclusion in this study:

- (a) be registered mental health nurses
- (b) work in Australia in either a rural or metropolitan setting
- (c) have at least one year's mental health nursing experience
- (d) work in any mental health setting (institutional or non-institutional).

Participants were drawn from four Australian states. New South Wales and Victoria because they represent large urban population densities, while Queensland and Western Australia

provide a wider representation of rural geographic regions. All four states include metropolitan and rural areas as well as institutional and non-institutional settings. For a number of practical reasons, it was not possible to include all other states in the research project. Time, cost and travel constraints were important factors in this decision. Nevertheless, the sample was considered to be representative of the population framework outlined above.

Four hundred questionnaires were posted and 319 were returned, a response rate of 80%. Babbie, (1990) indicates that a response rate of 50% is adequate for analysis and reporting, at least 60 % is good and 70% very good for most purposes.

Data Collection

Participating institutions were contacted by an initial phone call followed by a formal letter seeking permission and explaining the nature and purpose of this study. All participants were sent a cover letter explaining the study and seeking their consent to participate. Each participating institution had an identified person nominated to collect completed questionnaires. Other participants posted their completed questionnaires in a pre-paid addressed envelope to the researchers. Sixteen mental health institutions participated embracing mental health nursing staff employed within a number of different psychiatric units, hospitals, and community settings, within metropolitan and rural areas of Australia.

Ethics Procedures

Special permission was granted from one of the organisation's Area Health Ethics Committee. The remainder had their own internal Ethics Committees, which gave permission for the questionnaires to be distributed and collected by one contact person identified in each institution.

Results:

The data analysis was undertaken utilising descriptive and inferential statistics using the SPSS Version 18.0. Statistical Procedures used for the purposes of this study included the:-

- One-way multivariate analyses of variance
- Two-way multivariate analyses of variance
- Stepwise Discriminant Analysis and
- All Means tests

Analysis of Research Questions One

In addressing the research question central to this study, analyses were undertaken utilising a number of procedures. Firstly, a series of one-way multivariate analyses (MANOVA) was conducted to identify differences between a number of background variables i.e. qualification (levels of nursing qualification including any post basic qualification), age, gender, living alone or with family or partner/friends) and present work duration against the frequency and intensity of the revised Maslach and Jackson Burnout Inventory (MBI). (Appendix One, Table 1 reports the One Way Manova Results).

The next step was to undertake two-way multivariate analyses of variance on responses that showed significant results on the one-way multivariate analyses to the revised M.B.I. The results indicated that the two independent variables that produced significant results were Gender and Qualification. However, because the sample in this study was selected to compare the responses of mental health nurses in rural and metropolitan (RUMET) Australia the variable (RUMET) was also included in the next set of two way multivariate analyses of variance. (Appendix One, Table 2 reports the Two Way Manova Results).

Because of the nature of the sample used in this study it was not possible to obtain equal numbers of subjects across the various levels of the independent variables. Thus, a series of discriminant analyses were undertaken to compare the upper and lower thirds of subjects on each of the six independent variables, rural/metropolitan, (RUMET), gender, qualifications, age, present work duration, and living on subjects' MBI scores. Further a set of logit analyses were undertaken to confirm the results of the discriminant analyses (Appendix 1, Table 3). In each case the results of these two sets of analyses led to similar conclusions.

Analysis of Research Question Two

The research study specifically addresses the problem of burnout among mental health nurses in rural settings in comparison to those working in metropolitan settings and to examine the validity of the MBI within the Australian context.

In addressing the second research question it was found that the MBI was a valid and reliable tool in measuring the burnout among the mental health nurses in Australia when slightly modified to readily transfer to an Australian context.

In order to determine whether there were any differences between the factor loadings of this study compared to the loadings originally determined by Maslach and Jackson (1986), an item factor loading was carried out on both the frequency and intensity subscales of the M.B.I. (Appendix 1 Tables 4A and Table 4B). Items were considered to contribute to a factor if their loadings were greater than or equal to 0.40, the arbitrary criterion originally set by Maslach and Jackson (1986).

There were some discrepancies between the two sets of findings. Item 4 on the Personal Accomplishment Scale of the MBI, *I can easily understand how my recipients feel about things* persistently loaded on more than one factor on both the frequency and intensity subscales in the present study. Because this was an ambiguous finding it was decided to delete Item 4, thereby enhancing the conceptual integrity and reliability of the scale. It was also noted that Item 16, *working with people directly puts too much stress on me on the*

Emotional Exhaustion Scale in Maslach's Inventory was more closely related to one of the other subscales, the Depersonalisation Subscale in the present study. After examining the content of this variable in the factor analysis, it was decided to shift Item 16 from the Emotional Exhaustion Subscale to the Depersonalisation Subscale. This was true for both the frequency and the intensity ratings. It was also observed by Maslach and Jackson (1986) to be the lowest loading on their original subscale of Emotional Exhaustion.

Reliability

The reliability of the new 21 item scale within an Australian context was determined using Cronbach's coefficient alpha. (Appendix 1, Table 5). The reliability coefficients for each of the subscales ranged from 0.72 to 0.88 and were virtually identical to those originally obtained by Maslach and Jackson (1986).

In order to determine the reliability of the new 21 item scale within an Australian context, measures of internal consistency were calculated using Cronbach's coefficient alpha (Mehrens & Lehmann, 1991). The reliabilities of the revised subscales were comparable to those obtained by Maslach and Jackson in their original study.

Table 4A reports the Item factor loading for the present study in comparison with the original Maslach Burnout Inventory-Frequency Scale.

Table 4 B reports the Item factor loading for the present study in comparison with the original Maslach Burnout Inventory- Intensity Scale

Table 5 reports the comparison of Reliability Coefficients (Cronbach alphas) for the present study and Maslach and Jackson's Study. The reliability coefficients obtained for the revised subscales were consistent with the adjustments made in these scales as a result of the factor analysis.

It may be concluded, therefore, that the present results generally confirm the original reliability coefficients obtained by Maslach and Jackson (1986) even though the populations differed and included both metropolitan and rural subjects within an Australian context.

Discussion:

Comparisons between burnout among mental health nurses in Australia in rural and urban settings does not appear to have been studied extensively. However, an Australian study by Hegney and McCarthy (2000) examined some of the factors responsible for the levels of satisfaction in rural areas as compared to metropolitan areas. This interesting study also highlighted that strategies for recruitment and retention for nurses in rural areas have a different focus compared to their metropolitan counterparts. The study found that although rural nurses enjoyed their work and reported overall satisfaction with the nature of their work of recent more rural nurses are becoming more dissatisfied with their job because of work stress. This study although of an exploratory nature within an Australian context does add to the growing body of knowledge on burnout in mental health nursing in Australia.

The issue of gender differences in understanding stress and burnout is intriguing and has been commented on by many writers and researchers. The results of individual studies are conclusive but most of them find no significant relationship between the components of

burnout and gender. However, a recent study of burnout in psychiatric nursing by Kilfedder *et al* (2001) found that male nurses reported more depersonalization than female nurses and this is in line with findings of Schaufeli & Buunk (1999). Similarly, an Australian study among 43 mental health nurses in regional hospitals found a significant relationship between emotional competency and personal self-doubt in male nurses only but no association was found between emotional competency and experienced emotions. The female nurses, displayed high negative affectivity (focusing on the negative view of most things) and this was thought to be associated more with the type of emotions they experienced in stressful situations (Humpel *et al.* 2001). This study not only showed that the relationship between emotions and stress among mental health nurses need to be taken seriously but that males and females differed in their emotions experienced. The relationships between affectivity, organizational stressors and the perception of stressors and strains in relation to burnout have also been examined and results not only give support to the construct of emotional competency but also appear to reinforce the notion that nurses who have more doubt about their professional abilities appear to experience less positive and more negative emotions.

Results of the One Way Manova analysis (see Appendix 1 Table 1), indicate Gender and Qualification were the only two factors that showed any significance as measured by the revised MBI. Males experienced a higher level of depersonalisation on the frequency and intensity subscale scores of the MBI. Likewise, the more and higher the level of qualifications the greater the level of depersonalisation experienced on the frequency subscale score of the MBI. There were no significant findings for the Emotional Exhaustion and Personal Accomplishment subscales. It is interesting to note this spurious result. It could be attributed to the notion that males could be more singular in their orientation towards their jobs meaning

that they stayed longer in a job and did not change their work place as often as compared to females. Females could be more flexible towards their career because of their home commitments and their role as mothers and orientation and therefore perhaps experienced less depersonalisation. Males reported more depersonalisation than females, which is a commonly reported gender difference (Shaufeli & Buunk 1999, Kilfedder et al 2001).

The two ways Manova results (see Appendix 1 Table Two), indicate that in comparing the rural and metropolitan mental health nurses there was surprisingly males experienced a higher level of burnout in both geographical settings. Furthermore, the results demonstrated that both metropolitan and rural mental health nurses did experience burnout in varying levels and degrees, as indicated in the literature.

There were however, no significant results in the two way MANOVA analysis. On the face value it would appear as a likely influential variable, but this was not the case. In spite of the searching, two ways MANOVA analysis using RUMET (rural and metropolitan) was not significant. There could be a number of reasons for this finding. Firstly, the nature of work and the type of clients that mental health nurses care for, in both the geographical areas, may not differ a great deal.

We expected to find some differences in the level of burnout experienced by mental health nurses within the rural and metropolitan settings within Australia. However, the findings indicated otherwise and in terms of education and training it could be that mental health nurses have an enhanced set of psychological and interaction skills due to the nature of their daily work. Thirdly, it could be because the lack of managerial and personal support is no different in both these areas. Such lack of resources is associated with poor staff attitudes and

behaviour, lack of personal support and supervision. This is congruent with the findings of Kipping (2000). It is therefore, noteworthy that there was no difference found in this study.

The results in the discriminant analyses (Appendix 1 Table 3), indicated that the only other significant finding was that the variable Age was an influencing factor in terms of emotional exhaustion on the frequency subscale of the MBI. The younger participants had higher scores on their emotional exhaustion (frequency rating of the MBI). The younger age range was 30 years and younger. There could be a number of reasons for this finding. It could be because younger mental health nurses have fewer life experiences and level of social and emotional maturity to cope with the demands of clients with emotional and behavioural disturbances. This finding resonates with the findings in the literature. The study by (Kilfedder *et al* et al., 2001) determined variables such as “initial shock” of the job, a lack of adaptation to or insecurity in working life, a perception or more role ambiguity, or the fact that those remain longer are those who did not burn out early. These could be determinants in the younger age group within an Australian context. Although the result for this study in the discriminant analyses support this finding, emotional exhaustion was identified as the influencing variable as compared to depersonalisation on the MBI subscale scores.

In addressing the second research question of the study the use of the MBI with mental health nurses within an Australian context found that it did not readily transfer to an Australian context, and therefore it was refined. The (Cronbach alphas) results of 0.72 and 0.88, however, clearly suggest and confirm the original reliability coefficients obtained by Maslach and Jackson in spite of the minor differences. In view of this, in answering the first research question it can be concluded that the Maslach Burnout Inventory was a valid and reliable

measure of mental health nurses' burnout within an Australian context when slightly reformulated (Appendix 1 Tables 4A , and Table 4B).

Limitations of the Study

This study has a number of limitations. The results can only be applicable to mental health nurses within four states in Australia. Unless a longitudinal study is undertaken any causal explanation must remain tentative and be interpreted with caution for only a longitudinal study can determine the exact cause of burnout experienced over a period of time. The use of self-report measures could also be construed as a limitation due to social desirability responses and self-disclosure issues.

Summary and Recommendations

The findings in this study indicate that in administering and examining the use of the MBI with mental health nurses within an Australian context, this study found that it did not readily transfer to an Australian context, and was therefore refined. Nevertheless, the Cronbach alphas of 0.72 and 0.88, clearly suggest and confirm the original reliability coefficients obtained by Maslach and Jackson in spite of the minor differences.

There is a need to undertake longitudinal studies of mental health nurses to provide better evidence for the casual relationship between the process of burnout and various personal and social/organizational variables. More research needs to be undertaken about group and organizational coping processes. Furthermore, employers may need to consider the level of qualification(s) when employing mental health nurses. As the MBI did not readily transfer to an Australian context, further work needs to be done in Australia using the MBI to gain further insight into this issue.

This research studied mental health nurses at one point in time. To date, no comprehensive comparative studies have been undertaken that follow the course of burnout over a period of time within the same group over that period of time.. The findings from this study indicate that burnout is experienced by mental health nurses in both metropolitan and rural areas within Australia. However, individual reasons for this would be somewhat more complex to identify and difficult to infer from this study.

In view of this, future research into the reasons for the phenomenon of burnout, using qualitative research methods could be undertaken to explore the phenomena of burnout among mental health nurses across Australia. Obviously such research presents an opportunity to gather rich narrative data that explain the phenomena of burnout.

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Appendix 1 (Tables 1-5)

TABLE 1A

Item factor loading for the present study in comparison with the original Maslach Burnout Inventory-Frequency Scale

VARIABLES				
Emotional Exhaustion		I	II	III
1.	I feel emotionally drained from my work	.81 (.74)	.07 (.06)	.09 (.02)
2.	I feel used up at the end of the workday	.85 (.73)	-.15 (.04)	.08 (.03)
3.	I feel fatigued when I get up in the morning. and have to face up another day on the job	.72 (.66)	.04 (.18)	-.14(.15)
6.	Working with people all day is really a strain for me	.53 (.61)	.42 (.22)	-.08(-.10)
8.	I feel burned out from my job	.75 (.84)	.23 (.19)	-.09(-.09)
13.	I feel frustrated by my job	.55 (.65)	.37 (.23)	.03 (-.12)
14.	I feel I'm working too hard on my job	.44 (.56)	.23 (.08)	.29(.07)
20.	I feel like I'm at the end of my rope	.64 (.65)	.23 (.21)	.10(.08)
Depersonalisation				
5.	I feel I treat some recipients as if they were impersonal objects	.17 (.11)	.58 (.67)	-.05(-.09)
10.	I've become more callous toward people since I took this job	.09 (.23)	.72 (.66)	-.06(-.13)
11.	I worry that this job is hardening me emotionally	.17 (.37)	.69 (.55)	-.08(-.10)
15.	I don't really care what happens to some recipients	.01 (.12)	.53 (.62)	-.13(-.16)
16.	*Working with people directly puts too much stress on me	.39 (.54)	.51 (.31)	-.05(-.06)
22.	I feel recipients blame me for some of their problems	.03 (.13)	.54 (.41)	.24(-.04)
Personal Accomplishment				
7.	I deal very effectively with the problems of my recipients	.18 (-.01)	-.17 (-.07)	.51(.54)
9.	I feel I'm positively influencing other people's lives through my work	-.09 (-0.2)	-.06 (-.17)	.67(.58)
12.	I feel very energetic	-.39 (-.30)	.14 (-.04)	.51 (.43)
17.	I can easily create a relaxed atmosphere with my recipients	.08 (-.06)	-.13 (-.08)	.63(.51)
18.	I feel exhilarated after working closely with Recipients	-.18 (.00)	.20 (-.23)	.59 (.55)
19.	I have accomplished many worthwhile things in my job	-.06 (-.10)	.14 (-.17)	.70(.57)
21.	In my work, I deal with emotional problems very calmly	.27 (-.07)	-.26 (.07)	.61 (.59)
Note: * Item 16 was included in the Emotional Exhaustion subscale in the original M.B.I. Item 4 from the Personal Accomplishment subscale has been deleted				

TABLE 1B**Item factor loading for the present study in comparison with the original Maslach Burnout Inventory- Intensity Scale**

VARIABLES		Intensity		
		I	II	III
Emotional Exhaustion				
1.	I feel emotionally drained from my work	.80 (.70)	-.0 (.07)	.02(.08)
2.	I feel used up at the end of the workday	.82 (.70)	-.15 (.70)	.07(.05)
3.	I feel fatigued when I get up in the morning and have to face up another day on the job	.79 (.60)	-.04 (.26)	.10(-.11)
6.	Working with people all day is really a strain for me.	.55 (.60)	.32 (.20)	.04(.06)
8.	I feel burned out from my job	.76 (.81)	.14 (.23)	.05(.02)
13.	I feel frustrated by my job	.65 (.64)	.21 (.27)	.02 (.06)
14.	I feel I'm working too hard on my job	.43 (.55)	.27 (.08)	.25 (.07)
20.	I feel like I'm at the end of my rop	.57 (.60)	.28 (.27)	-.00 (-.11)
Depersonalisation				
5.	I feel I treat some recipients as if they were impersonal objects	.17 (.16)	.53 (.62)	-.02(.10)
10.	I've become more callous toward people since I took this job	.10 (.16)	.75 (.74)	-.05 (-.1
11.	I worry that this job is hardening me Emotionally	.21 (.27)	.65 (.61)	.13 (.11)
15.	I don't really care what happens to some recipients	.13 (.23)	.77 (.52)	-.01(.11)
16.	*Working with people directly puts too much stress on me	.47 (.47)	.35 (.31)	-.01(.05)
22.	I feel recipients blame me for some of their problems	.10 (.21)	.45 (.40)	.19(-.01)
Personal Accomplishment				
7.	I deal very effectively with the problems			
8.	of my recipients	.20 (.03)	-.23 (-0.1)	.65(.58)
9.	I feel I'm positively influencing other people's lives through my work	-.06 (.00)	.07 (-.15)	.63 (.63)
12.	I feel very energetic	-.11 (-.05)	.00 (.02)	.61 (.44)
17.	I can easily create a relaxed atmosphere with my recipients	.03 (-.04)	-.02 (-.11)	.67 (.55)
18.	I feel exhilarated after working closely with my recipients	-.09 (.10)	.29 (-.14)	.56 (.52)
19.	I have accomplished many worthwhile things in my job	-.08 (-.07)	.06 (-.13)	.73(.56)
21.	In my work, I deal with emotional problems very calm	.12 (-.09)	-.18 (.07)	.64 (.52)
Note:				
Item 16 was included in the Emotional Exhaustion subscale in the original M.B.I.				
Item 4 has been deleted from the Personal Accomplishment subscale				

(See Table 2 below for Results Showing Comparison of Reliability Coefficients (Cronbach alphas)

Table 2

Results showing comparison of reliability coefficients (Cronbach alphas) between the present study and Maslach & Jackson's Study

Subscales	Present Study		Maslach & Jackson Study	
	Frequency	Intensity	Frequency	Intensity
Emotional Exhaustion	.88	.87	.90	.87
Depersonalisation	.75	.78	.79	.76
Personal Accomplishment	.72	.76	.71	.73

(See Table 3 below for the One Way Manova Results).

Key: (Maslach Burnout Inventory =M.B.I.)

Table 3
One Way Manova Results

Independent Variable	Dependent Variable	Result
Qualification	M.B.I. (Frequency Scores)	Significant The higher the qualification the greater the level of depersonalization
Gender	M.B.I. (Frequency Scores)	Significant Males experienced higher levels of depersonalisation
	M.B.I. (Intensity Scores)	Significant Males experienced higher levels of depersonalisation
Present Work Duration	M.B.I. (Frequency & Intensity Scores)	Not Significant
Age	M.B.I. (Frequency & Intensity Scores)	Not Significant
Living	M.B.I. (Frequency & Intensity Scores)	Not Significant

Results of the ONE WAY MANOVA findings indicate:-

- That the variable Gender and Qualification were the only two factors that showed any significance as measured by the revised MBI.
- Males experienced a higher level of depersonalisation on the frequency and intensity subscale scores of the MBI
- The more qualifications and higher the level the greater the level of depersonalisation experienced on the frequency subscale of the revised MBI.

See Table 4 below for Two Way Manova Results

Table 4

Two Way Manova Results

Independent Variable	Dependent Variable	Result
RUMET and Gender	M.B.I.(Frequency and Intensity scores)	No Significant Scores but Gender was significant as above
RUMET and Qualification	M.B.I.(Frequency and Intensity scores)	No Significant Scores but Qualification was significant as above

Results of the TWO WAY MANOVA findings indicate that:

- In comparing the Rural and Metropolitan Mental Health Nurses there was surprisingly no significant difference, except that males experienced higher levels of burnout in both geographical areas.
- Those with more and higher levels of qualifications experienced higher levels of burnout on both the frequency and intensity scores of the revised M.B.I. (for both geographical locations).

See Table 5 below for Discriminant Analyses Results

Table 5

Discriminant Analyses Results

Independent Variables	Dependent Variable	Result
Burnout, Gender, Qualification, Age, Present Work Duration	M.B.I. Emotional Exhaustion (Frequency Scores)	Age significant Younger subjects had higher (EE) scores
As Above	M.B.I. Depersonalisation (Frequency Scores)	Gender was significant
As Above	M.B.I. Personal Accomplishment (Intensity Scores)	No significant result
As Above	M.B.I. Emotional Exhaustion (Intensity Scores)	No significant result
As Above	M.B.I. Depersonalisation (Intensity Scores)	No significant result
As Above	M.B.I. Personal Accomplishment (Intensity Scores)	No significant result

Results of the Discriminant Analyses findings indicate that:-

- The only other new finding was that Age was an influencing factor in terms of emotional exhaustion on the frequency subscale of the revised MBI.
- The younger participants up till the age of 30 reported higher levels of emotional exhaustion
- Younger males experienced higher levels of depersonalisation