# THE UNIVERSITY OF WARWICK

University of Warwick institutional repository: http://go.warwick.ac.uk/wrap

This paper is made available online in accordance with publisher policies. Please scroll down to view the document itself. Please refer to the repository record for this item and our policy information available from the repository home page for further information.

To see the final version of this paper please visit the publisher's website. Access to the published version may require a subscription.

Author(s): Leslie J. Francis, Peter Hills and Peter Kaldor Article Title: The Oswald Clergy Burnout Scale: Reliability, Factor Structure and Preliminary Application Among Australian Clergy

Year of publication: 2008 Link to published version: http://dx.doi.org/10.1007/s11089-008-0165-7 Publisher statement: (The original publication is available at www.springerlink.com)

# The Oswald Clergy Burnout Scale: Reliability, Factor Structure and Preliminary Application among Australian Clergy

Leslie J Francis<sup>1</sup> Peter Hills<sup>2</sup> Peter Kaldor<sup>3</sup>

**Abstract** This study assesses the Oswald Clergy Burnout Scale (OCBI), the psychometric properties of which have not been previously described. Analysis of responses from a large number (N = 3,012) of ministers in charge of Australian congregations showed that the scale's internal reliability was satisfactory, and that the scale could be represented by two factors, identified as the personal and social aspects of burnout respectively. This structure was supported by confirmatory factor analysis. Several demographic and job-related variables that might relate to burnout were regressed on the total, personal and social factor scores. Age is the predominant (negative) predictor of burnout as measured by the total scale and the personal factor scores. All variables predict burnout as measured by the social factor. However, in all models, the predictor variables account for no more than 5% of the total variance. These findings suggest that demographic factors and working conditions are poor predictors of burnout among clergy.

**Keywords** Key words: Burnout, Clergy stress, Confirmatory factor analysis, Oswald Clergy Burnout Inventory.

<sup>&</sup>lt;sup>1</sup>Leslie J Francis (Contact)
Professor of Religions and Education
Warwick Religions and Education Research Unit
Institute of Education
University of Warwick
Coventry
CV4 7AL
E-mail: 1.j.francis@bangor.ac.uk
<sup>2</sup> Peter Hills
Welsh National Centre for Religious Education, University of Wales, Bangor, UK
<sup>3</sup> Peter Kaldor
NCLS Research, Sydney South, New South Wales, Australia

## Introduction

The term "burnout" was first used in a psychological context by Freudenberger (1974) to describe the progressive decline in energy, motivation and commitment of young, volunteer helpers in a community care centre for young drug addicts. This decline took place over a year or so and was accompanied by a range of adverse physical and psychosomatic symptoms. Freudenberger and Richelson (1980) later defined burnout as a state of fatigue or frustration brought about by devotion to a cause, a way of life or a relationship that failed to produce the expected reward. Burnout came to be recognised as a form of sub-acute occupational stress common among workers in the social services sector. Maslach and Jackson (1981a) defined burnout as a state of physical emotional and mental exhaustion marked by chronic depletion and chronic fatigue, feelings of helplessness and hopelessness, and by development of negative self-concept and negative attitudes towards work, life and other people. They also proposed (1981b) that the three dimensions of emotional exhaustion, depersonalisation, and lack of personal accomplishment could explain the burnout syndrome in the helping professions. Emotional exhaustion was recognised as fatigue caused by extensive interactions with others; depersonalisation was characterised by the development of an uncaring and cynical attitude towards others; lack of personal accomplishment was indicated by deterioration in self-competence and a decreased personal satisfaction with one's achievements.

The popular interest in burnout has stimulated the production of several burnout inventories, for example, Blostein, Eldridge, Kilty, and Richardson (1985), Ford, Murphy, and Edwards (1983), Freudenberger and Richelson (1980), Pines, Aronson, and Kafry (1981). However, the most widely used and investigated measure is the Human Services Survey of the Maslach Burnout Inventory (MBI: Maslach & Jackson, 1981b), a self-report scale that was constructed around the hypothesised burnout dimensions of emotional exhaustion, depersonalisation and reduced personal accomplishment. Normative values for the three dimensions were established with data collected from a representative range of workers in the social sector, including nurses, social workers, teachers, police officers and psychologists. Subsequent factor analytic examinations, for example by Fimian and Blanton (1987), Green and Walkey (1988), Gold, Roth, Wright, Michael, and Chen (1992), Soederfeldt, Soederfeldt, Warg, and Ohlson (1996) and Tang (1998) have provided supportive evidence for the threedimensional structure of burnout among various samples of human service personnel. However there is no consensus on the dimensionality of the MBI, alternative factorisations have led others to maintain that the MBI contains one (Garden, 1987), two (Brookings, Bolton, Brown, & McEvoy, 1985; Corcoran, 1985; Dignam, Barrera, & West, 1986), four (Firth, McIntee, McKeown, & Britton, 1985; Powers & Gose, 1986) or five (Densten, 2001) dimensions.

The MBI was designed for use with those whose work involves intensive contacts with other people and its items were phrased with reference to interactions with clients and service users. In recent years, the concept of burnout has also been applied to the study of work-related stress in other occupational groups. Various derivative scales have been devised by adapting the wording of individual items to be more appropriate to specific groups, for example, aircraft maintenance technicians (Leiter & Robichaud, 1997), athletes (Readeke & Smith, 2001) private sector computing staff (Golembiewski, Munzenrider, & Carter, 1983; Evans & Fisher, 1993), university teaching staff (Pretorius, 1994) and students (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002).

Another area that has attracted particular literature interest is the measurement and incidence of burnout among ministers of religion (Warner & Carter, 1984; Strümpfer & Bands, 1996; Rodgerson & Piedmont, 1998; Stanton-Rich & Isola, 1998; Francis & Rutledge, 2000). Several texts have argued that clergy, like social workers, are particularly susceptible

to this form of occupational stress because, like social workers, their work is essentially people-based. Additionally, Sanford (1982) drew attention to the repetitious nature of the work of the ministry, the realisation that the work can never be finished, the difficulty of knowing whether it is having any results and the requirement to project a public *persona* that is emotionally exhausting to maintain. Coate (1989) argued that ministers find it difficult to admit to stress, feeling that they should be more able to cope with it than their secular counterparts. Davey (1995) drew attention to the difficulties experienced by the clergy in matching performance to role expectations and considered that clergy are particularly susceptible to feeling overworked and unappreciated, and that their particular skills will be overlooked and underused.

Hills, Francis, and Rutledge (2004) have examined the performance of a 30-item version of the MBI with items appropriately reworded to be relevant to the work and work experiences of the clergy. In its initial form the scale was not entirely satisfactory, but successive exploratory and confirmatory analyses combined with the stepwise removal of ambiguous or poorly fitting items produced a refined 20-item, three factor scale with satisfactory psychometric properties. However, the three Maslachian factors were strongly intercorrelated and, when the scale was used to explore a range of possible correlates of burnout as measured by the refined scale, much of the variance in the data was accounted for by the intercorrelations among the three dimensions. Nevertheless, it was possible to demonstrate that the major dimensions of personality (extraversion, neuroticism, psychoticism) and several demographic and work-related variables were significant predictors of the three Maslachian dimensions of burnout. Of these, individual differences in personality were stronger predictors of aspects of burnout than were the demographic and work-related variables. This observation is consistent with other recent work (Francis, Louden, & Rutledge, 2004; Rutledge & Francis, 2004), which has also shown that individual differences in

personality are stronger correlates of burnout than are demographic and job-related variables among both Anglican and Roman Catholic parochial clergy. However, the substantial intercorrelations amongst the dimensions represented in the Maslach scale remain a limitation to the scale's use in exploring potential contributory factors of burnout.

Oswald (1991) devised a specific instrument for the measurement of clergy burnout, which is of special interest in that it was constructed empirically from items that relate directly to the work of the clergy and was not constrained by any hypothetical considerations of the nature of burnout in other professions. The Oswald scale was administered as part of a large-scale multi-denominational survey conducted among Australian church leaders in 1996 (Kaldor & Bullpit, 2001) and selected items were used in the formulation of the Scale of Emotional Exhaustion in Ministry (Francis, Kaldor, Shevlin, & Lewis, 2004). However, the psychometric properties of the full Oswald Scale remain unexplored. It is the aim of this paper to examine the psychometric properties of the Oswald Clergy Burnout Inventory and then to employ this instrument to explore the strength of some demographic and work-related factors to predict individual differences in levels of clergy stress in Australia.

## Method

#### Participants

As part of the 1996 National Church Life Survey in Australia, postal questionnaires were sent to the church leaders in 6900 congregations in 20 Anglican and Protestant denominations. The questionnaires included items relating to a variety of topics relevant to ministerial roles and practice, personal beliefs, and personal reactions to stress including the Oswald Clergy Burnout Inventory. The present study is based on the responses of 3,012 ordained/paid ministers in charge of congregations (2,748 men, 264 women) who returned fully completed questionnaires. Ages ranged from 23 to 85 (M = 48.4, SD 10.0) years and most respondents (92%) were married. Graduates accounted for 57% of all replies; 39% had been in professional or senior management positions before entering theological college, and 66% had been members of the ordained/paid ministry for more than 10 years.

#### Measures

In addition to providing demographic information, respondents completed the Oswald Clergy Burnout Inventory, which consists of 16 items exploring the incidence of, and reactions to, work-related stress. Each item is to be answered on a six-point polar scale for which high and low anchors are provided. For example the item "The extent to which fatigue and irritation are part of my daily experience" is anchored by "Cheerfulness, high energy much of the time" (1) and "tired and irritated much of the time" (6). Total burnout scores are computed from the aggregate scores of all items and a high score indicates greater perceived stress. In the present study, one item, "The extent to which sexual activity seems more trouble than it is worth", was omitted, in case any sensitivity to reporting sexual activity might have resulted in the return of fewer fully completed questionnaires. Since some of the items in the inventory are long, the items are hereinafter labelled by the scale option used to anchor the highest point of the appropriate item scale, for example, the above-mentioned item is labelled as "Tired and irritated much of the time".

Respondents also answered a series of questions about their feelings of life and the ministry on seven-point scales. The questions with their high and low anchor points were: "What are your feelings about life as a whole?" (delighted/terrible); "What level of stress do you experience in your work" (low stress/high stress); "Have you ever thought of leaving the ministry?" (never/constantly); "What is your level of overall effectiveness?" (very low/very high"; and, "How different is the reality of your work as a minister from your original expectations?" (little different/greatly different).

#### **Results and discussion**

Scale reliability and exploratory factor analysis

Table 1 presents data relevant to the items that comprise the OCBI scale and to its internal reliability. The scale reliability values, Cronbach  $\alpha = .90$ , Spearman Brown split-half coefficient = .88, indicate that the complete scale exhibits a high degree of internal consistency. All of the item means are well below the midpoint of the scale, 3.5, which suggests that overall respondents do not experience high levels of burnout.

The data were next subjected to exploratory factor analysis. The Keiser-Meyer-Olkin measure of sampling adequacy, a measure of factorisability, has an unusually high value of .94; Kaiser (1974) characterised values in excess of .90 as "marvellous". Principal components analysis extracted two factors with eigen values > 1, which together accounted for 50.5% of the total variance. These factors were rotated by an oblique method (Direct Oblimin,  $\delta = 0$ ) that does not constrain the factors to be uncorrelated, and the rotated solution, which explained 50.5% of the total variance is shown in table 2. Inspection of the items comprising each factor suggests that the first and larger factor consists of various personal aspects of burnout, whereas the smaller factor is concerned with negative social behaviours towards others. Two items "Cynical about attenders" and "Loss of enthusiasm for my job" load more or less equally on both factors, possibly because these items are ambiguous in that they can be interpreted both personally and socially. This ambiguity may contribute to the modest correlation observed between the two factors, r = .43, which is not otherwise surprising given the tentative interpretations of the factors respectively as personal aspects (feelings) of burnout and their associated negative social behaviours towards others.

#### Confirmatory factor analysis

The two-factor solution found by exploratory factor analysis was further tested by

confirmatory factor analysis and the results are reported in table 3, along with a variety of absolute, comparative and parsimonious goodness of fit indicators. The two factor model obtained by exploratory factor analysis provided a reasonable fit to the data; the root mean square residual (RMR) was comfortably below the recommended value of .05 and with the exception of the Tucker Lewis Index (TLI) and the two parsimonious fit indices, the remaining values are above the recommended value of .90. However, examination of the modifications indices for this solution offered some scope for improvement and suggested that the error terms of two pairs of items were substantially correlated. The item pairs were a) "Tired and irritated much of the time" and "Constantly irritated by physical ailments" and b) "Spending less time with church members" and "Fixed and rigid with church members". Given the semantic similarity of the item pairs, it was reasonable to allow the error terms to covary. Table 3 shows that the introduction of these two covariances resulted in an increased goodness of fit overall; the RMR was improved and with the exception of the parsimonious normed fit index (PNFI) all indicators reached or exceeded the recommended value of .90. The PNFI is a conservative measure of fit because it takes into account the complexity of the model as indicated by the associated degrees of freedom, but its observed value, .763, remains lower than the usually accepted value of  $PNFI \ge .8$ . However, the alternative adjusted goodness of fit measure, AGFI, is satisfactory. Among the absolute indicators, the  $\chi^2/df$  value is frequently used as a primary measure of fit, which should be close to unity for correct models, although Wheaton, Muthén, Alwin, and Summers (1977) considered that values up to three are acceptable. However, this index is known to be adversely affected by large samples (Yadama & Pandey, 1995) as in the present study. When the analysis of the final model was repeated on a smaller, randomly chosen sample of 200 participants, the  $\chi^2/df$  value fell to 2.42, which is within the range considered to indicate an adequate correspondence between the model and data. It can, therefore, be concluded that the Oswald Clergy Burnout Inventory

is a scale with satisfactory internal consistency and a clearly demonstrable factor structure.

#### Associations with work related variables

The questionnaire also included items that allowed participants to comment on various aspects of their satisfactions/dissatisfactions with their ministries and life in general. Table 4 reports the correlations between these items and the total burnout scores and the two factor scores for the personal and social aspects of burnout respectively. All correlations were substantial and highly significant and the strongest were observed for feelings about life as a whole, levels of stress and thoughts on leaving the ministry. There was a closer correspondence between the correlations for the overall burnout score and the personal aspects of burnout (factor 1) than for the social aspects (factor 2) and, since the items are more personally than socially related, this is supportive of the identification of the two factors. These results also provide evidence of the concurrent validity of the OCBI.

Multiple linear regressions were also conducted to explore the effects of some demographic (gender, age, marital status) and job-related (years ordained, congregation size, years with congregation, number of congregations served, hours of work with congregations) variables which might reasonably be expected to predict aspects of burnout. Some of these variables might be inter-linked; for example, clergy responsible for larger and more numerous congregations would tend to be older and more experienced. The analyses were therefore carried out by stepwise regression, which extracts IVs sequentially according to the size of their contribution in accounting for the total variance existing in the data. Separate regressions were conducted for the aggregate burnout scores and the factor scores for each of the burnout factors. The results are collected in table 5.

Only four of the possible predictors fulfilled the statistical requirements for stepwise regression for the overall burnout scores, of which congregation size and age were the most

important and both negatively related to burnout. It would therefore appear that burnout is less apparent in those clergy responsible for larger congregations, perhaps because a large congregation obviates the need for maintaining the close working relationships with a limited number of people, which may be a source of stress in a small parish. The negative relationship with age, also found in other studies including Byrne (1991), McCarthy (1985) and van der Ploeg, van Heeuwen and Kwee (1990), suggests that burnout decreases with advancing years. There are several possible reasons for this. Younger clergy may entertain unreasonable expectations of their ministry, whereas more experienced clergy have learned methods of coping that result in the amelioration of the signs of burnout. It is also possible that those clergy particularly susceptible to burnout are more likely to find alternative and less stressful employment early in their ministry and these will not be represented in the current experimental sample. Inspection of the standardised regression coefficients, zero-order and part correlations for age and congregational size indicate that the observed effects are not strongly correlated. Years ordained and number of congregations served were also significant predictors of the total burnout scores, but inspection of the corresponding  $R^2$  values indicated that their contributions were small.

The results for factor one (personal aspects of burnout) were broadly similar to those for overall burnout, except that hours of work was an additional significant positive predictor. Age was again the strongest predictor, followed by congregation size and hours, which were of similar magnitude. The positive relationship with hours worked indicates that burnout is more likely to be *personally* felt by clergy who need or choose to work long hours. Inspection of the raw data indicates that 80% of respondents report working for 40 or more hours/week. Years ordained and number of congregations served are again significant but weak predictors of feelings of burnout.

For factor 2 (social aspects of burnout), all of the possible predictor variables achieved

significance, but hours of work was dominant and accounted for over half of the variance explained by the regression model. However, the direction of the relationship is the reverse of that observed for factor 1; that is those clergy who work longer hours display fewer signs of burnout, a finding that is statistically well supported by the corresponding zero-order and part correlations. Prima facie, it would appear that those who work longer hours, experience greater feelings of burnout, but display them less. To explore possible explanations for this unexpected finding, the Pearson correlations were calculated between reported hours of work and each of the items in the social factor. The two strongest correlations were for the items "Withdrawn and detached", r(2988) = -.19, p < .001 and "Marking time until retirement", r(2988) = -.12, p < .001. All other correlations were much smaller, p < |.05|. It would therefore appear that those clergy who experience burnout most, tend to become more socially isolated from their work and their congregations and so work shorter hours. Otherwise, this is the only model in which gender and marital status meet the statistical criteria for selection, and their standardised regression coefficients suggest that men are more likely to exhibit burnout related behaviours than women, and that burnout is more likely to be shown by single, than married clergy. However, these effects, although significant, are small in magnitude and might be more apparent then real.

Overall, it needs to be borne in mind that despite the high significance levels observed for some predictors, the observed  $R^2$  values are small: .036, .051, .035 for the aggregate scores, and the personal and social factors respectively. The regression models used therefore explain < 5% of the total variance. This suggests that the demographic and job-related variables examined in this study do not make a large contribution to burnout.

# Conclusions

This study assesses the properties and utility of the Oswald Clergy Burnout Scale (OCBI), the

psychometric properties of which appear not to have been previously described in the psychological literature. The instrument demonstrated highly satisfactory scale reliability, and exploratory factor analysis afforded two clear factors that were identified as the personal and social aspects of burnout respectively. The exploratory solution gave satisfactory results when submitted to confirmatory factor analysis. Correlation of the scale and its factors with several independent and relevant items supported the identification of the factors as personal and social respectively, and provided evidence for the concurrent validity of the instrument.

Multiple linear regression was used to examine the extent to which a number of demographic and job-related variables that have been proposed as important precursors of clergy burnout did predict burnout. Some of these variables were significant predictors, but all were extremely small in magnitude. This finding strengthens the view that, in so far as members of the clergy may be particularly susceptible to burnout, its occurrence is more likely to be associated with individual differences in personality and personal predispositions, as already demonstrated in the studies by Rutledge and Francis (2004), and Hills, Francis, and Rutledge (2004) using other measures of clergy burnout.

It is hoped that the availability of an alternative measure of clergy burnout with good psychometric properties as described in the present study, will allow a more precise examination of the prevalence of occupational stress among the clergy and a clearer understanding of the relative importance of job-related and other precursors of burnout.

#### Note

Peter Hills was Honorary Research Fellow at the Welsh National Centre for Religious Education, University of Wales, Bangor. Sadly, he died prior to publication of this article. This article is dedicated to his memory.

# References

- Blostein, S., Eldridge, W., Kilty, K., & Richardson, V. (1985). A multidimensional analysis of the concept of burnout. *Employee Assistance Quarterly*, *1*, 55-66.
- Brookings, J. B., Bolton, B., Brown, C. E., & McEvoy, A. (1985). Self-reported job burnout among female human service professionals. *Journal of Occupational Behavior*, 6, 143-150.
- Byrne, B. M. (1991). The Maslach Burnout Inventory validating factorial structure and invariance across intermediate, secondary and university educators. *Multivariate Behavioral Research*, 26, 583-605.
- Coate, M. A. (1989). *Clergy stress: The hidden conflicts in ministry*. London: Society for the Propagation of Christian Knowledge.
- Corcoran, K. J. (1985). Measuring burnout: A reliability and convergent validity study. Journal of Social Behaviour and Personality, 1, 107-112.

Davey, J. (1995). Burnout: Stress in ministry. Leominster: Gracewing.

- Densten, I. L. (2001). Re-thinking burnout. *Journal of Organizational Behaviour*, 22, 833-847.
- Dignam, J. T., Barrera, M., & West, S. G. (1986). Occupational stress, social support, and burnout among correctional officers. *American Journal of Community Psychology*, 14, 177-193.
- Evans, B. K., & Fisher, D. G. (1993). The nature of burnout: A study of the three-factor model of burnout in human service and non-human service samples. *Journal of Occupational and Organizational Psychology*, 66, 29-38.
- Fimian, M. J., & Blanton, L. P. (1987). Stress, burnout, and role problems among teacher trainees and first year teachers. *Journal of Occupational Behaviour*, 8, 157-176.

Firth, H., McIntee, J, McKeown, P., & Britton, P. (1985). Maslach Burnout Inventory: Factor

structures and norms for British nursing staff. Psychological Reports, 57, 147-150.

- Ford, D. L., Murphy, C. J., & Edwards, K. L. (1983). Exploratory development and validation of a perceptual burnout inventory: Comparison of corporate sector and human services professionals. *Psychological Reports*, 52, 995-1006.
- Francis, L. J., Kaldor, P., Shevlin, M., & Lewis, C. A. (2004). Assessing emotional exhaustion among the Australian clergy; Internal reliability and construct validity of the Scale of Emotional Exhaustion in Ministry (SEEM). *Review of Religious Research*, 45, 269-277.
- Francis, L J., Louden, S. H., & Rutledge, C. J.F. (2004). Burnout among Roman Catholic parochial clergy in England and Wales: Myth or reality? *Review of Religious Research*, 46, 5-19.
- Francis, L. J., & Rutledge, C. J. F. (2000). Are rural clergy in the Church of England under greater stress? *Research in the Social Scientific Study of Religion*, *11*, 173-191.

Freudenberger, H. J. (1974). Staff burn-out. Journal of Social Issues, 30, 159-166.

- Freudenberger, H. J., & Richelson, G. (1980). *Burnout: How to beat the high cost of success*. New York: Bantam Books.
- Garden, A. M. (1987). Depersonalisation: A valid measure of Burnout? *Human Relations, 40*, 545-560.
- Gold, Y., Roth, R. A., Wright, C. R., Michael, W. B., & Chen, C-Y. (1992). The factorial validity of a teacher burnout measure (Educator's Survey) administered to a sample of beginning teachers in elementary and secondary schools in California. *Educational and Psychological Measurement*, 52, 761-768.
- Golembiewski, R. T., Munzenrider, R. F., & Carter, D. (1983). Phases of progressive burnout and their worksite covariants: Critical issues in OD research and praxis. *Journal of Applied Behaviour Science*, 19, 461-481.

- Green, D. E., & Walkey, F. H. (1988). A confirmation of the three factor structure of theMaslach Burnout Inventory. *Educational and Psychological Measurement*, 48, 579-585.
- Hills, P., Francis, L. J., Rutledge, C. J. F. (2004). The factor structure of a measure of burnout specific to clergy, and its trial application with respect to some individual personal differences. *Review of Religious Research*, 46, 27-42.
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychmetrica, 39, 31-36.
- Kaldor, P., & Bullpit, B. (2001). Burnout in church leaders. Adelaide: Openbook.
- Leiter, M. P., & Robichaud, L. (1997). Relationships of occupational hazards with burnout: An assessment of measures and models. *Journal of Occupational Health Psychology*, 2, 35-44.
- Maslach, C., & Jackson, S. E. (1981a). The measurement of experienced burnout, *Journal of Occupational Behavior*, *2*, 99-113.
- Maslach, C., & Jackson, S. E. (1981b). *Maslach Burnout Inventory. Research Edition*. Palo Alto: CA, CPP, Inc.
- McCarthy, P. (1985). Burnout in psychiatric nursing. *Journal of Advanced Nursing*, *10*, 305-310
- Oswald, R. M. (1991). Clergy self-care: Finding a balance for effective ministry. New York: The Alban Institute, Inc.
- Pines, A. M., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to personal growth*. New York: Free Press.
- Powers, S., & Gose, K. F. (1986). Reliability and construct validity of the Maslach Burnout Inventory in a sample of university students. *Educational and Psychological Measurement*, 46, 251-255.
- Pretorius, T. (1994). Using the Maslach Burnout Inventory to assess educators' burnout at a university in South Africa. *Psychological Reports*, *75*, 771-777.

- Readeke, T. D., & Smith, A. L. (2001). Development and preliminary validation of an Athlete Burnout Measure. *Journal of Sports and Exercise Psychology*, *23*, 281-306.
- Rodgerson, T. E., & Piedmont, R.L. (1998). Assessing the incremental validity of the Religious Problem Solving Scale in the prediction of clergy burnout. *Journal for the Scientific Study of Religion*, 37, 517-527.
- Rutledge, C. J. F., & Francis, L. J. (2004). Burnout among male Anglican clergy in England: testing a modified form of the Maslach Burnout Inventory. *Research in the Social Scientific Study of Religion*, 15, 71-93.

Sanford, J. A. (1982). Ministry burnout. London: Arthur James.

- Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002).
   Burnout and engagement in university students: A cross-national study. *Journal of Cross Cultural Psychology*, 33, 464-481.
- Soederfeldt, M., Soederfeldt, B., Warg, L., & Ohlson, C. G. (1996). The factor structure of the Maslach Burnout Inventory in two Swedish human service organizations. *Scandinavian Journal of Psychology*, 37, 437-443.
- Stanton-Rich, H. M., & Isola. S. E. (1998). Burnout and leisure. Journal of Applied Social Psychology, 28, 1931-1950.
- Strümpfer, D. J. W., & Bands, J. (1996). Stress among clergy: An exploratory study of South African priests. *South African Journal of Psychology*, *26*, 67-75.
- Tang, C. S.-K. (1998). Assessment of burnout in Chinese human service professionals: A study of factorial validity and invariance. *Journal of Clinical Psychology*, 54, 55-58.
- van der Ploeg, H. M., van Heeuwen, J. J., & Kwee. M. G. T. (1990). Burnout among Dutch psychotherapists. *Psychological Reports*. 67, 107-112.
- Warner, J., & Carter, J. D. (1984). Loneliness, marital adjustment and burnout in pastoral and lay persons. *Journal of Psychology and Theology*, 12, 125-131.

- Wheaton, B., Muthén, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. In D. R. Heise (Ed,), *Sociological methodology* (pp. 84-136).
  San Francisco: Jossey-Bass.
- Yadama, G. N., & Pandey, S. (1995). Effect of sample size on goodness-of-fit indices in structural equation models. *Journal of Social Service Research*, 20, 49-70.

Mean	SD	Item	item/rest of test correlation	Alpha if item deleted
2.88	0.97	Tired and irritated much of the time	0.67	0.89
2.81	1.06	Frustrated in accomplishing personal tasks	0.62	0.89
2.72	1.13	Feel guilty much of the time	0.48	0.90
2.66	1.10	Feel empty and depleted	0.73	0.89
2.63	1.20	Feel alone and isolated	0.60	0.89
2.55	1.02	Loss of enthusiasm for my job	0.74	0.89
2.55	1.02	Cynical about attenders	0.63	0.89
2.40	0.93	Spending less time with church members	0.62	0.89
2.33	0.93	Humour cynical and sarcastic	0.51	0.89
2.30	1.00	Sad much of the time	0.66	0.89
2.29	1.17	Constantly irritated by physical ailments	0.43	0.90
2.22	0.79	Fixed and rigid with church members	0.52	0.89
2.11	0.86	Withdrawn and detached	0.39	0.90
2.04	0.85	Others are to blame for my feelings	0.48	0.90
2.00	1.07	Marking time until retirement or change of job	0.63	0.89

 Table 1
 Item means, standard deviations and scale reliability of the OCBI

Item	F1	F2	$h^2$
Tired and irritated much of the time	.74		.585
Constantly irritated by physical ailments	.73		.443
Sad much of the time	.71		.566
Feel guilty much of the time	.71		.430
Frustrated in accomplishing personal tasks	.64		.487
Feel empty and depleted	.63		.619
Feel alone and isolated	.55		.445
Others are to blame for my feelings	.55		.325
Humour cynical and sarcastic	.45		.337
Cynical about attenders	.43	.40	.492
Withdrawn and detached		.88	.660
Marking time until retirement or change of job		.63	.595
Spending less time with church members		.53	.531
Loss of enthusiasm for my job	.45	.52	.673
Fixed and rigid with church members		.43	.381
Eigen value	6.37	1.19	
% variance explained	42.5	8.0	

 Table 2
 Exploratory factor analysis of OCBI after principal components extraction and oblique rotation

Factor loadings < .35 not shown

F1 = personal aspects, F2 = social aspects

	Absolute						Compa	rative	Parsim	onious
Model	$\chi^2$	df	$\chi^2/df$	RMR	GFI	TLI	CFI	NFI	PNFI	AGFI
Two factor/15 item model	1732	89	19.46	.047	.923	.891	.908	.903	.765	.896
Allow 2 covariances	1425	87	16.37	.045	.938	.909	.925	.920	.763	.914

 Table 3
 Confirmatory factor analysis of Oswald Clergy Burnout Scale

RMR = root mean square residual, GFI = goodness of fit index,

TLI = Tucker-Lewis Coefficient, CFI = comparative fit index, NFI = normed fit index,

PNFI = parsimony normed fit index, AGFI = adjusted goodness of fit index.

	Total	Factor 1	Factor 2
	Burnout score		
Feelings about life as a whole (delighted/terrible)	.57	.56	.37
Level of stress (low stress/high stress)	.50	.57	.16
Thoughts on leaving the ministry (never/constantly)	.49	.46	.36
Overall effectiveness (very low/very high)	40	36	30
Reality different from expectations (little different/greatly different)	28	28	16

 Table 4
 Correlations between self-reported measures of satisfaction/stress and total burnout and burnout factor scores

All correlations significant at p < .001

F1 = personal aspects, F2 = social aspects

Predictor variable	$R^2$	$\frac{Adjusted}{R^2}$	$\Delta R^2$	β	Zero-order correlation	Part correlation
Aggregate Burnout sco	re					
Congregation size	.014	.014	.014***	124***	118	118
Age	.028	.027	.014***	186***	116	140
Years ordained	.033	.032	.005***	.093***	040	.070
Congregations served	.037	.036	.004**	.065***	.071	.064
Factor 1						
Age	.024	.024	.024***	194***	155	145
Congregation size	.037	.036	.013***	137***	109	128
Hours worked	.048	.047	.012***	.101***	.099	.096
Years ordained	.051	.049	.003**	.068**	076	.051
Congregations served	.053	.051	.002*	.049*	.067	.047
Factor 2						
Hours worked	.020	.020	.020***	150***	141	142
Congregations served	.024	.024	.004***	.062**	.049	.059
Gender	.028	.027	.004**	068***	052	063
Marital status	.031	.030	.004**	054**	037	051
Years with	.033	.031	.002*	041*	038	040
congregation Years ordained	.035	.032	.002*	.088***	.046	.064
Age	.037	.034	.002*	066*	.006	049
Congregation size	.038	.035	.002*	043*	078	040

 Table 5
 Stepwise regressions of some demographic and work-related variables on burnout and burnout factor scores

\*  $p \le .05$ , \*\*  $p \le .01$ , \*\*\*  $p \le .001$ .

Factor 1 = personal aspects, Factor 2 = social aspects