BURNOUT IN A CUSTOMER SERVICES ENVIRONMENT

C. Campbell Hons. B.A.

Mini-dissertation submitted in partial fulfilment of the requirements for the degree Magister Artium in Industrial Psychology at the Potchefstroomse Universiteit vir Christelike Hoër Onderwys

Supervisor: Prof. S. Rothmann
August 2003
Potchefstroom
COMMENTS

The reader is reminded of the following:

- The references and the editorial style as prescribed by the *Publication Manual (4th edition)* of the American Psychological Association (APA) were followed in this dissertation. This practice is in line with the policy of the Programme in Industrial Psychology of the PU for CHE to use APA style in all scientific documents as from January 1999.

- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the *South African Journal of Industrial Psychology* (which agrees largely with the APA style) was used, but the APA guidelines were followed in constructing tables.
ACKNOWLEDGEMENTS

I want to thank the following people for their contributions, in whichever way, to this mini-dissertation:

- My Lord and Saviour, for blessing me with the ability to realise this project.
- Prof. S. Rothmann, my supervisor, for his positive input and willingness to help despite is busy schedule, and also for his contribution to the statistical processing of the data.
- Johan Blaauw, for the professional language editing
- My family and friends, for their love and support.
- The Ferdinand Postma Library staff for their assistance.
- Medscheme’s customer service department, for their assistance throughout the project.
# TABLE OF CONTENTS

## CHAPTER 1: INTRODUCTION

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Problem statement</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Research objectives</td>
<td>5</td>
</tr>
<tr>
<td>1.2.1 General objectives</td>
<td>5</td>
</tr>
<tr>
<td>1.2.2 Specific objectives</td>
<td>5</td>
</tr>
<tr>
<td>1.3 Research method</td>
<td>6</td>
</tr>
<tr>
<td>1.3.1 Literature review</td>
<td>6</td>
</tr>
<tr>
<td>1.3.2 Empirical study</td>
<td>6</td>
</tr>
<tr>
<td>1.3.2.1 Research design</td>
<td>6</td>
</tr>
<tr>
<td>1.3.2.2 Study population</td>
<td>7</td>
</tr>
<tr>
<td>1.3.2.3 Measuring instruments</td>
<td>7</td>
</tr>
<tr>
<td>1.3.2.4 Statistical analysis</td>
<td>8</td>
</tr>
<tr>
<td>1.4 Division of chapters</td>
<td>10</td>
</tr>
<tr>
<td>1.5 Chapter summary</td>
<td>10</td>
</tr>
</tbody>
</table>

## CHAPTER 2: RESEARCH ARTICLE

## CHAPTER 3: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Conclusions</td>
<td>43</td>
</tr>
<tr>
<td>3.2 Limitations</td>
<td>45</td>
</tr>
<tr>
<td>3.3 Recommendations</td>
<td>46</td>
</tr>
</tbody>
</table>

## REFERENCES

| References                           | 48   |
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Characteristics of the Participants</td>
<td>20</td>
</tr>
<tr>
<td>Table 2</td>
<td>Goodness-of-Fit Statistics for a one-factor MBI-GS Model</td>
<td>25</td>
</tr>
<tr>
<td>Table 3</td>
<td>Goodness-of-Fit Statistics for the Hypothesised MBI-GS Model</td>
<td>26</td>
</tr>
<tr>
<td>Table 4</td>
<td>Goodness-of-Fit Statistics for Model 2</td>
<td>27</td>
</tr>
<tr>
<td>Table 5</td>
<td>Descriptive Statistics, Alpha Coefficients and Inter-Item Correlations of the MBI-GS</td>
<td>29</td>
</tr>
<tr>
<td>Table 6</td>
<td>Wilk's Lambada Statistics</td>
<td>30</td>
</tr>
<tr>
<td>Table 7</td>
<td>Tukey Test Results between Satisfaction Level and Burnout Dimensions</td>
<td>31</td>
</tr>
<tr>
<td>Table 8</td>
<td>Differences between Customer Services Personnel based on Gender</td>
<td>31</td>
</tr>
<tr>
<td>Table 9</td>
<td>Differences between Customer Services Personnel based on Medical Condition</td>
<td>32</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Figure 1</td>
<td>The hypothesized 16-item three-factor MBI-GS model</td>
<td>26</td>
</tr>
<tr>
<td>Figure 2</td>
<td>The second model of the 15-item three-factor MBI-GS model</td>
<td>29</td>
</tr>
</tbody>
</table>
ABSTRACT

Title: Burnout in a customer services environment

Key terms: Burnout, validity, reliability, standardization, customer services

The recent worldwide shift in focus from goods production to service provision in Western countries has resulted in the expansion of the service sector. The front-line worker has become a central figure in the new workplace, forming an important link between the company and the customer. The nature of the interaction between customer service staff and clients influences the perceived quality of service rendered by the company. Call centre work requires a high degree of personal contact with the public and the performance of emotional labour. Previous research found emotional labour to be a significant predictor of burnout. Given the above scenario, the lack of empirical research that systematically investigates burnout in a customer services environment in South Africa is a source of concern.

The objectives of this study were to determine the construct validity and internal consistency of the Maslach Burnout Inventory – General Survey (MBI-GS) (Schaufeli, Leiter, Maslach & Jackson, 1996) in a customer services environment, and to compare the relationship of burnout with various demographic characteristics.

A cross-sectional survey design was used. The study population consisted of an accidental sample of customer services personnel (N = 228). The Maslach Burnout Inventory – General Survey (MBI-GS) was used to determine the level of burnout in the participants. A biographical questionnaire was used to gather additional information. Structural equation modelling (SEM) methods as implemented by AMOS were used to test the factorial model for the MBI-GS. Cronbach alpha coefficients and inter-item correlation coefficients were used to assess the internal consistency and construct validity of the MBI-GS. Descriptive statistics were used to analyse the data. T-tests and one-way analysis of variance (ANOVA) were used to determine differences between the sub-groups in the sample. Tukey tests were done to indicate which groups differed significantly when ANOVAS were done.
The results confirmed a three-factor model of burnout, consisting of Exhaustion, Cynicism and Professional Efficacy. All three factors showed acceptable internal consistencies. The results also showed that customer service staff who measured high on exhaustion and cynicism (compared with those who measured low) experienced less job satisfaction.

Recommendations for future research were made.
OPSOMMING

Titel: Uitbranding in 'n kléntediensomgewing
Sleutelterme: Uitbranding, betroubaarheid, geldigheid, standaardisering, kléntediens

Die huidige wêreldwyse verskuwing in fokus van goedereproduksie na dienslewering in Westerse lande het gelei tot die uitbreiding van die diensleveringsektor. Die frontlinie-werker het 'n sentrale figuur in die nuwe werkplek geword, en vorm 'n belangrike skakel tussen die maatskappy en die klént. Die aard van die kontak tussen kléntediens personeel en die klént beïnvloed die waargenome gehalte van die diens wat die maatskappy lewer. Oproepsentrumwerk vereis 'n hoë graad van persoonlike kontak met die publiek en die verrigting van emosionele arbeid. Vorige navorsing het gevind dat emosionele arbeid 'n belangrike aanduiding van uitbranding is. Met die voorgenoemde scenario as agtergrond is die tekort aan empiriese navorsing wat uitbranding in 'n kléntediensomgewing in Suid-Afrika sistematies ondersoek 'n bron van kommer.

Die doelstellings van hierdie studie was om die konstrukgeldigheid en interne konsekwentheid van die Maslach-Uitbrandingsvraelys – Algemene Opname (MBI-GS) (Schaufeli, Leiter, Maslach & Jackson, 1996) in 'n kléntediensomgewing te bepaal, en om die verhouding tussen uitbranding en verskeie demografiese eienskappe te veregelyk.

'n Dwarsneee opname-ontwerp is gebruik. Die studiepopulasie het bestaan uit 'n toevallige steekproef van kléntediens personeel (N = 228). Die Maslach Uitbrandingsvraelys – Algemene Opname (MBI-GS) is as meetinstrument gebruik. 'n Biografiese vraelys is gebruik om addisionele inligting in te samel. Strukturele vergelykingsmodellering (SEM), soos geïmplementeer deur AMOS, is gebruik om die faktoriaalmodel vir die MBI-GS te toets. Cronbach-alfaëffisiënte en interitem-korrelasieëffisiënte is gebruik om die betroubaarheid en geldigheid van die MBI-GS te bepaal. Beskrywende statistiek is gebruik om die data te analiseer. T-toetse en eenrigtingvariansie-analise (ANOVA) is gebruik om verskille tussen verskillende subgroeppe in die steekproef te bepaal. Tukey-toetse is gedoen om aan te dui watter groepe betekenisvol verskil het wanneer ANOVAS uitgevoer is.
Die resultate het 'n 3-faktormodel van uitbranding bestaande uit Uitputting, Sinisme en Professionele Doeltreffendheid bevestig. Al drie faktore het aanvaarbare interne konsekwentheid getoon. Die resultate het ook aangedui dat kliëntedienspersoneel wat hoog meet op emosionele uitputting en sinisme (vergeleke met dié wat laag gemeet het) minder werkstevredenheid ervaar.

Aanbevelings vir toekomstige navorsing is aan die hand gedoen.
CHAPTER 1

INTRODUCTION

This mini-dissertation deals with burnout in a customer services environment.

This chapter focuses on the problem statement, research objectives and research method. The chapter starts out with a problem statement, giving an overview of previous related research conducted on burnout and on a customer services environment, linking it with this research project and its research objectives. A discussion of the research method follows, with details regarding the empirical study, research design, study population, measuring instruments and statistical analysis. It concludes with a chapter summary giving an overview of the chapters that comprise this mini-dissertation.

1.1 PROBLEM STATEMENT

The worldwide shift in focus from goods production to service provision in Western countries has resulted in the expansion of the service sector. The front-line worker has become a central figure in this new workplace, with work in many rapidly growing occupations in advanced societies being service-related and people-centred (Frenkel, Tam, Korczynski, Shire & Tam, 1999). Call centre staff form an important link between the company and the customer, and the role they play in the management of customer relations should not be underestimated. The perceived quality of service as rendered by a call centre is greatly influenced by the nature of the interaction (Pececi & Rosenthal, 1997). Research has shown that the manner in which call centre staff display their feelings towards customers has a critical effect on the quality of service transactions (Ashforth & Humphrey, 1993).

Organizations want to manage this link, and requirements in terms of the displaying of behaviour that conforms with organizationally established norms are common in most areas of interactive service work (Macdonald & Siriani, 1996). Call centre work requires a high degree of personal contact with the public and the performance of emotional labour (Hochschild, 1979). Emotional work or emotional labour can be defined as the psychological processes necessary to regulate organizationally desired emotions as part of one's job (Zapf,
in press). This entails the displaying of emotions that comply with certain norms and standards of the organization in terms of customer service (Morris & Feldman, 1997). Expressing appropriate emotions during face-to-face or voice-to-voice interactions is a job demand of many employees in the service industry (Zapf et al., 2001).

The customer service employee is caught between satisfying management and customers and the meeting of productivity and quality goals (Singh, 2000). Research indicates that even though management wants to achieve both high customer service quality and customer processing levels, it is processing outputs that take precedence over service quality (Kinnie et al., 1999). The greater pressure in terms of productivity can be seen in the efforts to increase the number of calls taken per call centre agent, and to reduce both customer call time and wrap-up time (Taylor, 1998; Taylor & Bain, 1999). Employees are often monitored for productivity, and these conflicting demands can lead to role conflict for employees and lessen their ability to provide high quality service (Knights & McCabe, 1998).

Customer satisfaction is seen as the overriding goal in Total Quality Management (TQM), which is just one of a number of managerial attempts to reconstruct work organizations in ways that are customer-focused (Taylor, 1998). The customer as third party in the work process results in further pressure on the call centre agent, with the customer being asked to provide feedback, and also having the power to lodge complaints. The customer can add tension by being abusive and having unreasonable demands (Macdonald & Sirianni, 1996). Employees are often encouraged to suppress their true feelings and detach themselves emotionally from hostile or difficult customers, in an effort to protect themselves against abuse and ill treatment (Frenkel et al., 1998). The discrepancy between what employees might feel towards customers and the emotions they are required to display (emotional dissonance) may prove difficult to resolve and may lead to considerable anxiety (Wharton, 1993).

Burnout can be defined as a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding (Schaufeli & Greenglass, 2001). Burnout was originally restricted to the helping professions, but is now recognised as a phenomenon found in a variety of occupational groups (Cordes & Dougherty, 1993). Burnout research has indicated that burnout has negative outcomes for the individual and the organization. Burned-out workers show a lack of commitment and are less capable of
providing adequate services, especially in terms of decision-making and initiating involvement with clients (Fryer, Poland, Bross & Krugman, 1988; Levert, Maslach, 1982). Burnout leads to workers being too depleted to give of themselves in a creative, co-operative fashion (Sammut, 1997).

Burnout is a metaphor that is commonly used to describe a state or process of mental exhaustion (Schaufeli & Enzmann, 1998). Maslach and Schaufeli (1993) reviewed various definitions of burnout and concluded that these definitions shared the following five elements: a) there is a predominance of fatigue symptoms, such as mental or emotional exhaustion, tiredness and depression; b) Various atypical physical distress symptoms may occur; c) burnout symptoms are work-related; d) the symptoms manifest themselves in "normal persons" who did not suffer from psychopathology before; and e) decreased effectiveness and impaired work performance occur because of negative attitudes and behaviours (Schaufeli, Bakker, Hoogduin, Schaap & Kladler, 2001).

The most influential development in terms of scientific exploration of the burnout construct was the development of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986). The Maslach Burnout Inventory (MBI; Maslach et al., 1996) is currently the most widely used research instrument to measure burnout. It has been used in over 90% of empirical research (Schaufeli & Enzmann, 1998). Three versions of the MBI were developed, namely the MBI-GS (General Survey), MBI-ED (Educators) and MBI-HSS (Human Services Survey). The dimensions of burnout are conceptualised differently, depending on the nature of the job concerned. In the helping professions (including education), three dimensions of burnout are distinguished, namely emotional exhaustion, depersonalisation and low personal accomplishment. In jobs other than the helping professions the dimensions of burnout is labelled as exhaustion, cynicism and low professional efficacy (Maslach et al., 1996).

Zapf, Siefert, Schmutte, Mertini and Holz (2001) found that the high emotional demands resulting from interaction with clients, i.e. emotional work (the requirement to display organizationally desired emotions) were a significant predictor of all three burnout subscales. Their analysis of interaction effects of emotional dissonance (the requirement to display emotions that are not felt) and stressors showed that for service professionals the coincidence of these stressors led to exaggerated levels of emotional exhaustion and depersonalization. Other research studies on emotional dissonance also consistently found correlations with
emotional exhaustion (Nerdinger & Roper, 1999; Schaubroeck & Jones, 2000; Zerbe, 2000). Respondents in the research may be more likely to develop higher levels of emotional exhaustion and depersonalization under conditions of combined high emotional dissonance and stressor conditions.

Exhaustion is a core component of burnout (Jackson et al., 1986; Maslach, 1982). Exhaustion is considered to be the first stage in the burnout process and provides a critical point for managerial intervention (Gaines & Jermier, 1983). Human service providers cope with exhaustion by depersonalizing their relationship with others, which in turn undermines their accomplishments and results in negative evaluations of their work (Leiter & Maslach, 1988). Interaction between the service provider and the customer is a critical determinant of exhaustion (Maslach, 1982; Maslach & Jackson, 1981, 1984). Research has shown that the level of exhaustion is affected by the frequency of interpersonal interactions (Maslach, 1982). This can be seen in helping and caring professions and in customer-service occupations where the strain of frequent and often intense contact with people can result in anxiety and frustration, and in feelings of being used and worn out (Maslach & Jackson, 1981; Perlman & Hartmen, 1982).

No research on burnout and gender pertaining to customer service personnel could be found. Research on gender and burnout for other occupations reveals no clear-cut distinction. In research examining sex differences in burnout, men and women often occupy different occupational roles, which could result in a confusing of sex and occupation (Schaufeli & Greenglass, 2001). Other research indicates that men experience higher scores on depersonalization than women (Greenglass, Pantony & Burke, 1988). A study by Maslach, Schaufeli and Leiter (2001) also found a small but consistent difference in that women scored slightly higher on exhaustion and men on depersonalization.

Research on ethnicity is limited, but a study by Maslach (1982) on ethnic background and burnout indicated that fewer American black people sustained burnout than did American white people.

Current employment trends such as restructuring, downsizing and mergers have a huge impact on today's workplace. Recent changes in the global economy have resulted in employment conditions that have made many more workers vulnerable to occupational
burnout relating to job insecurity (Schaufeli et al., 2001). The prospect of demotion, or even the long-term prospect of eventual job loss, can be associated with decreased psychological well-being (Roskies & Louis-Guerin, 1990). The influence of violation of the psychological contract when employees perceive their job security to be threatened due to downsizing could result in workers feeling betrayed and, as a result, experiencing anger, cynicism and hostility (Schaufeli et al., 2001). Research from a study of nurses experiencing hospital downsizing indicated that their anger and cynicism increased concomitant with a deterioration of their jobs, an increase in job insecurity and the reported impact of restructuring (Greenglass & Burke, 2000). There was reason to believe that different burnout levels would occur in the different schemes in the current study, as the schemes were experiencing different levels of change related to restructuring. Winnubst (1993) points to the role of organizational stressors in the development of burnout, such as role conflict and future ambiguity, which are just a few of the stressors that accompany a restructuring process.

Research also indicates that stress and burnout are significant factors in the development of both physical and psychological illness (McGrath, Houghton, & Reid, 1989). Following this, there could be a link between medical condition as a demographic variable and burnout.

Given the above discussion, the lack of empirical research that systematically investigates burnout in a customer services environment in South Africa is a source of concern. Burnout research in South Africa has been limited by poorly designed and controlled studies, and a lack of sophisticated statistical analysis (Rothmann, 2002).

A reliable and valid instrument is required in the measurement of burnout in order to conduct empirical research, and it is also needed for the purpose of individual assessment. The original version of the MBI has been adapted for use outside the helping professions in the form of the MBI-GS (Schaufeli et al, 1996). The MBI-GS has not yet been validated for people working in a customer services environment. Furthermore, limited information regarding the internal consistency and construct validity of the MBI-GS is available (Rothmann, 2002).

The objectives of this study were to determine the construct validity and internal consistency of the MBI-GS in a customer services environment, and to compare the relationship of burnout with various demographic characteristics.
1.2 RESEARCH OBJECTIVES

1.2.1 General objective

The general objective of this research is to standardize the MBI for call centre agents in a customer services environment, and to compare the relationship of burnout with various demographic characteristics.

1.2.2 Specific objectives

The specific objectives of the research are:

- to determine the internal consistency and construct validity of the MBI for customer service personnel in a customer services environment;
- to compare the relationship of burnout with various demographic groups, namely race, gender, scheme, satisfaction level, years in position and medical condition.

1.3 RESEARCH METHOD

The research method consisted of a literature review and an empirical study.

1.3.1 Literature review

The literature review focused on previous research on burnout and the measurement of burnout. An overview is given of how burnout is conceptualized in the literature, and on the findings in terms of measuring burnout.

1.3.2 Empirical study

1.3.2.1 Research design

A survey design was used to achieve the research objectives. The specific design was the cross-sectional design, with a sample being drawn from a population at one time
(Shaughnessy & Zechmeister, 1997). This design is ideally suited when the aim of the study is descriptive and predictive by nature (Shaughnessy & Zechmeister, 1997). The use of a cross-sectional design in burnout research has been criticized by Schaufeli and Enzmann (1998), who rather recommend experiments and longitudinal studies when possible. However, a cross-sectional design is the most appropriate design for the validation of the MBI-GS. Structural equation modelling was used to address the problems associated with this design (Byrne, 2001)

1.3.2.2 Study population

The study population consisted of an accidental sample of customer services personnel ($N = 228$). The majority of the sample consisted of inbound call centre agents. The second largest group consisted of customer service administrators, who supported the call centre agents with their administrative function and who were also in contact with clients (outbound). The sample also included client liaison officers, who dealt with clients face-to-face and also telephonically. The rest of the sample consisted of people in a managerial function in customer services, as well as other support staff who were all required to deal with customers in outbound contact in the case of a query.

1.3.2.3 Measuring instruments

The MBI-GS (Schaufeli et al., 1996) was used to determine the level of burnout in the participants. A biographical questionnaire was also used to gather biographical information.

The MBI-GS (Schaufeli, et al., 1996) has three subscales: Exhaustion (Ex) (five items, e.g. "I feel used up at the end of the workday"), Cynicism (Cy) (five items, e.g. "I have become less enthusiastic about my work") and Professional Efficacy (PE) (six items, e.g. "In my opinion, I am good at my job"). Together the subscales of the MBI-GS provide a three-dimensional perspective on burnout. All items are scored on a 7-point frequency rating scale ranging from "0: (never) to "6" (daily). High scores on Ex and Cy and low scores on PE are indicative of burnout. Internal consistencies (Cronbach alpha coefficients) reported by Schaufeli et al. (1996) varied from 0,87 to 0,89 for Exhaustion, 0,73 to 0,84 for Cynicism and 0,76 to 0,84 for Professional Efficacy. Test-retest reliabilities after one year were 0,65 (Exhaustion), 0,60 (Cynicism) and 0,67 (Professional Efficacy) (Schaufeli et al., 1996). Storm and Rothmann
(2002) confirmed the three-factor structure of the MBI-GS in a sample of 2,396 SAPS members, but recommended that Item 13 should be dropped from the questionnaire. Structural equivalence of the MBI-GS for different race groups in the SAPS was confirmed. The following Cronbach alpha coefficients were obtained for the MBI-GS: Exhaustion: 0.88; Cynicism: 0.79; and Professional Efficacy: 0.78 (Storm & Rothmann, 2002).

A questionnaire was developed to gather information about the demographic characteristics of the participants. This questionnaire gave participants the option of supplying their name and employee number. Other information that was gathered included age, gender, years in current position (to assess advancement), educational qualifications, marital status, satisfaction with relationship with significant other, language, self-rated performance, self-rated job satisfaction, medical conditions, use of prescription and over-the-counter medicine, reasons for medication, number of alcoholic drinks per week, smoking behaviour, number of cigarettes per day, other drug use and exercise behaviour.

1.3.2.4 Statistical analysis

The statistical analysis was carried out with the help of the SAS-program (SAS Institute, 2000). Cronbach alpha coefficients and inter-item correlation coefficients were used to assess the reliability and validity of the MBI-GS (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) were used to analyse the data.

Structural equation modelling (SEM) methods as implemented by AMOS (Arbuckle, 1997) were used to test the factorial model for the MBI-GS, using the maximum likelihood method. Hypothesized relationships were tested empirically for goodness of fit with the sample data. The $\chi^2$ statistic and several other goodness-of-fit indices summarize the degree of correspondence between the implied and observed covariance matrices. A large $\chi^2$ relative to the degrees of freedom indicates a need to modify the model to fit the data better. Researchers have addressed the $\chi^2$ limitations by developing goodness-of-fit indices that take a more pragmatic approach to the evaluation process. One of the first fit statistics to address this problem was the $\chi^2$/degrees of freedom ratio (CMIN/DF) (Wheaton, Muthén, Alwin & Summers, 1977). These criteria, commonly referred to as "subjective" or "practical" indices of fit, are typically used as adjuncts to the $\chi^2$ statistic.
The hypothesized relationships with the data are also tested for goodness of fit using the following goodness-of-fit statistics: Adjusted Goodness-of-Fit Index (AGFI); Parsimony Goodness-of-Fit Index (PGFI); Normed Fit Index (NFI); Comparative Fit Index (CFI); and Tucker Lewis Index (TLI).

To overcome the problem of sample size, Browne and Cudeck (1993) suggested using the Root Mean Square Error of Approximation (RMSEA) and the 90% confidence interval of the RMSEA. The RMSEA estimates the overall amount of error; it is a function of the fitting function value relative to the degrees of freedom. The RMSEA point estimate should be 0,05 or less and the upper limit of the confidence interval should not exceed 0,08. Hu and Bentler (1999) suggested a value of 0,06 to be indicative of good fit between the hypothesized model and the observed data. MacCallum, Browne, and Sugawara, (1996) recently elaborated on these cut-off points and noted that RMSEA values ranging from 0,08 to 0,10 indicate mediocre fit, and those greater than 0,10 indicate poor fit.

T-tests and one-way analysis of variance (ANOVA) were used to determine differences between the sub-groups in the sample. Tukey tests were done to indicate which groups differed significantly when ANOVAS were done. The following formula is used to determine the practical significance of differences ($d$) when t-tests are used (Steyn, 1999):

$$d = \frac{\text{Mean}_A - \text{Mean}_B}{\text{SD}_{\text{MAX}}}$$

where

$\text{Mean}_A$ = Mean of the first group  
$\text{Mean}_B$ = Mean of the second group  
$\text{SD}_{\text{MAX}}$ = Highest standard deviation of the two groups

The following formula is used to determine the practical significance of means of more than two groups (Steyn, 1999):

$$d = \frac{\text{Mean}_A - \text{Mean}_B}{\text{Root MSE}}$$
where

\[ Mean_A = \text{Mean of the first group} \]
\[ Mean_B = \text{Mean of the second group} \]
\[ \text{Root MSE} = \text{Root Mean Square Error} \]

A cut-off point of 0.50 (medium effect) (Cohen, 1988) is set for the practical significance of differences between means.

1.4 DIVISION OF CHAPTERS

The chapters are presented as follows in this mini-dissertation:

Chapter 1: Introduction
Chapter 2: Research article
Chapter 3: Conclusions and recommendations

1.5 CHAPTER SUMMARY

Chapter 1 focused on the problem statement, objectives and research method of this study.

Chapter 2 encompasses the complete study. The results of the statistical analysis are reported, indicating their practical significance. The findings of the study are also discussed in brief.
CHAPTER 2

RESEARCH ARTICLE
A PSYCHOMETRIC ANALYSIS OF THE MASLACH BURNOUT INVENTORY
- GENERAL SURVEY IN A CUSTOMER SERVICES ENVIRONMENT*

C. CAMPBELL
S. ROTHMANN

Workwell: Research Unit for People, Policy and Performance, Faculty of Economic and
Management Sciences, PU for CHE

ABSTRACT
The objectives of this research were to validate the Maslach Burnout Inventory – General
Survey (MBI-GS) for a customer services environment and to determine differences
between the burnout levels of various demographic groups. A cross-sectional survey
design was used. A sample ($N = 228$) was taken of customer services personnel. The
MBI-GS and a biographical questionnaire were administered. Structural equation
modelling confirmed a three-factor model of burnout, consisting of Exhaustion,
Cynicism and Professional Efficacy. All three factors showed acceptable internal
consistencies. The results obtained from comparing burnout levels of various
demographic groups showed that practically significant differences existed between
burnout in two demographic groups (based on satisfaction level and medical condition).

OPSOMMING
Die doelstelling van hierdie navorsing was om die Maslach-Uitbrandingsvraeys –
Algemene Oppname (MBI-GS) vir 'n kliëntediensomgewing te valideer en verskille tussen
die uitbrandingsvlakke van verskillende demografiese groepe te bepaal. 'n
Dwarsdeursnee opname-ontwerp is gebruik. 'n Steekproef ($N = 228$) is van
kliëntedienspersoneel geneem. Die MBI-GS en 'n biografiese vraeys is afgeneem.
Strukturele vergelykingsmodellering het 'n driefaktormodel van uitbranding bestaande uit
Uitputtering, Sinisme en Professionele Doeltreffendheid bevestig. Al drie faktore het
aanvaarbare interne konsekwenheid getoon. Die resultate verkry uit die vergelyking van
uitbrandingsvlakke van verskillende demografiese groepe het getoon dat daar prakties
betekenisvolle verskille tussen uitbranding in twee demografiese groepe bestaan
(gebaseer op vlak van tevredenheid en mediese toestand).

*The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at are those of the authors and are not necessarily to be attributed to the NRF.
provide feedback, and also having the power to lodge complaints. The customer can add tension by being abusive and having unreasonable demands (Macdonald & Sirianni, 1996). Employees are often encouraged to suppress their true feelings and detach themselves emotionally from hostile or difficult customers, in an effort to protect themselves against abuse and ill treatment (Frenkel et al., 1998). The discrepancy between what employees might feel towards customers and the emotions they are required to display (emotional dissonance) may prove difficult to resolve and may lead to considerable anxiety (Wharton, 1993).

Burnout can be defined as a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding (Schaufeli & Greenglass, 2001). Burnout was originally restricted to the helping professions, but is now recognised as a phenomenon found in a variety of occupational groups (Cordes & Dougherty, 1993). Burnout research has indicated that burnout has negative outcomes for the individual and the organization. Burned-out workers show a lack of commitment and are less capable of providing adequate services, especially in terms of decision-making and initiating involvement with clients (Fryer, Poland, Bross & Krugman, 1988; Maslach, 1982). Burnout leads to workers being too depleted to give of themselves in a creative, co-operative fashion (Sammut, 1997).

Burnout is a metaphor that is commonly used to describe a state or process of mental exhaustion (Schaufeli & Enzmann, 1998). Maslach and Schaufeli (1993) reviewed various definitions of burnout and concluded that these definitions shared the following five elements: a) there is a predominance of fatigue symptoms, such as mental or emotional exhaustion, tiredness, and depression; b) various atypical physical distress symptoms may occur; c) burnout symptoms are work-related; d) the symptoms manifest themselves in "normal persons" who did not suffer from psychopathology before; e) decreased effectiveness and impaired work performance occur because of negative attitudes and behaviours (Schaufeli, Bakker, Hoogduin, Schaap & Kladler, 2001).

The most influential development in terms of scientific exploration of the burnout construct was the development of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986). The Maslach Burnout Inventory (MBI; Maslach et al., 1996) is currently the most widely used research instrument to measure burnout. It has been used in over 90% of empirical
research (Schaufeli & Enzmann, 1998). Three versions of the MBI were developed, namely the MBI-GS (General Survey), MBI-ED (Educators) and MBI-HSS (Human Services Survey). The dimensions of burnout are conceptualised differently, depending on the nature of the job concerned. In the helping professions (including education), three dimensions of burnout are distinguished, namely emotional exhaustion, depersonalisation and low personal accomplishment. In jobs other than the helping professions the dimensions of burnout is labelled as exhaustion, cynicism and low professional efficacy (Maslach et al., 1996).

Zapf, Siefert, Schmutte, Mertini and Holz (2001) found that the high emotional demands resulting from interaction with clients, i.e. emotional work (the requirement to display organizationally desired emotions) was a significant predictor of all three burnout subscales. Their analysis of interaction effects of emotional dissonance (the requirement to display emotions that are not felt) and stressors showed that for service professionals, the coincidence of these stressors led to exaggerated levels of emotional exhaustion and depersonalization. Other research studies on emotional dissonance also consistently found correlations with emotional exhaustion (Nerdinger and Roper, 1999; Schaubroeck & Jones, 2000; Zerbe, 2000). Respondents in the research may be more likely to develop higher levels of emotional exhaustion and depersonalization under conditions of combined high emotional dissonance and stressor conditions.

Exhaustion is a core component of burnout (Jackson et al., 1986; Maslach, 1982). Exhaustion is considered to be the first stage in the burnout process and provides a critical point for managerial intervention (Gaines & Jermier, 1983). Human service providers cope with exhaustion by depersonalizing their relationship with others, which in turn undermines their accomplishments and results in negative evaluations of their work (Leiter & Maslach, 1988). Interaction between the service provider and the customer is a critical determinant of exhaustion (Maslach, 1982; Maslach & Jackson, 1981, 1984). Research has shown that the level of exhaustion is affected by the frequency of interpersonal interactions (Maslach, 1982). This can be seen in helping and caring professions and in customer-service occupations, where the strain of frequent and often intense contact with people can result in anxiety and frustration, as well as in feelings of being used and being worn out (Maslach & Jackson, 1981; Perlman & Hartmen, 1982).
Given the above discussion, the lack of empirical research that systematically investigates burnout in a customer services environment in South Africa is a concern. Burnout research in South Africa has been limited by poorly designed and controlled studies, and a lack of sophisticated statistical analysis (Rothmann, 2002).

A reliable and valid instrument is required in the measurement of burnout in order to conduct empirical research, and is also needed for the purpose of individual assessment. A recent trend in burnout research is the adaptation of the original version of the MBI for use outside the human services. This new version was called the MBI-General Survey (MBI-GS: Schaufeli, Leiter, Maslach & Jackson, 1996). The concept of burnout and its measurement were broadened to include all employees and not only those who do "people work" (Maslach & Leiter, 1997). However, the MBI-GS has not yet been validated for people working in a customer services environment. Furthermore, limited information is available regarding the internal consistency and construct validity of the MBI-GS (Rothmann, 2002).

The objectives of this study were to determine the construct validity and internal consistency of the MBI-GS and to compare the relationship of burnout with various demographic characteristics.

The Maslach Burnout Inventory – General Survey (MBI-GS)

Initial burnout research focused on people in the helping professions (Schaufeli & Enzmann, 1998). This resulted in the development of the MBI as an instrument to measure burnout. However, research and practice have shown that burnout exists in other professions as well. Research using the MBI in measuring burnout in the non-helping professions found that scores differed from norms established within the helping professions. A further deviation was that the three factors, namely Emotional Exhaustion, Depersonalization and reduced Personal Accomplishment were not maintained. Emotional Exhaustion and Depersonalization subscales tended to combine into one factor (Maslach, Jackson & Leiter, 1997).

The MBI-GS was developed to address the need for a measuring instrument that can be used outside the helping professions (Schaufeli, Leiter, Maslach & Jackson, 1996). The MBI-GS measures parallel dimensions to those in the MBI, the difference being the items not explicitly referring to working with people. The MBI-GS subscales consist of the following:
Exhaustion (Ex), Cynicism (Cy) and Professional Efficacy (PE) (Schaufeli et al., 1996). Exhaustion refers to feelings of being overextended and depleted of one's emotional and physical resources. Cynicism is seen as a negative, callous or detached response to various aspects of the job. Professional efficacy is described as a feeling of competence, productivity and achievement at work.

A strong resemblance between the two versions of the MBI has been reported, and this ensures maximum comparability and generalizability of results obtained from one occupational group to another (Taris et al., 1999). The three dimensions of the MBI-GS are also interrelated: Cynicism is highly related to Exhaustion ($0.44 < r < 0.61$), and also strongly related to Professional Efficacy ($-0.38 < r < -0.57$) (Schaufeli et al., 1996). Taking this into consideration, it appears that burnout can be measured validly across a range of different occupations, despite the differences between human service occupations and non-contactual professions (Storm & Rothmann, 2002).

The MBI-GS has evidenced satisfactory internal consistencies ranging from $0.73$ (Cynicism) to $0.91$ (Exhaustion) (Leiter & Schaufeli, 1996). Reliability analyses showed that the Exhaustion and Professional Efficacy subscales were sufficiently internally consistent, but that one Cynicism item should be removed in order to increase internal consistency beyond the criterion of $0.70$ (Schutte, Toppinen, Kalimo & Schaufeli, 2000).

Four studies were found that used the MBI-GS in South African samples. In a sample of senior managers in a manufacturing industry, Rothmann and Jansen van Vuuren (2002) found satisfactory alpha coefficients: Exhaustion $= 0.79$; Cynicism $= 0.84$ (after item 13 had been omitted); and Professional Efficacy $= 0.84$. Rothmann and Malan (2003) found higher alphas (Exhaustion $= 0.89$; Cynicism $= 0.76$; and Professional Efficacy $= 0.85$) while Rothmann, Jackson and Kruger (2003) found lower alphas for Cynicism ($0.72$ after item 13 had been omitted) and Professional Efficacy ($0.69$). Storm and Rothmann (2003) found alpha coefficients of $0.88$ (Exhaustion), $0.78$ (Cynicism) and $0.79$ (Professional Efficacy) on a sample of 2396 police officers in South Africa. This being taken into account, it can be expected that the MBI-GS will be sufficiently internally consistent.

Confirmatory factor analysis done by Schutte et al. (2000) showed that the three-factor model was clearly superior to alternative one-factor and two-factor models. Schaufeli, Salanova,
González-Romá and Bakker (2002) confirmed these findings. Leiter and Schaufeli (1996) employed confirmatory factor analysis using linear structural equation modelling and also confirmed a three-factor structure. Similar results were obtained by Taris et al. (1999).

Confirmatory factor analyses by Rothmann and Jansen van Vuuren (2002), Malan and Rothmann (2003) and Rothmann et al. (2003) consistently showed low loadings of item 13 of the MBI-GS on Cynicism. Storm and Rothmann (2003) used structural equation modelling (SEM) methods as implemented by AMOS (Arbuckle, 1997) to test the factorial model for the MBI-GS on a random, stratified sample in the South African Police Services (N=2,396). Prior to testing the three-factor model of burnout, a one-factor model was tested. However, the one-factor model showed poor fit, while a three-factor model, using 15 of the original items and including correlated errors between Item 1 and Item 2 and between Item 9 and Item 10, resulted in a good fit. It seems reasonable to expect that a three-factor model will be obtained in this study.

**Burnout and demographic characteristics**

No research on burnout and gender pertaining to customer service personnel could be found. Research on gender and burnout for other occupations reveals no clear-cut distinction. In research examining sex differences in burnout, men and women often occupy different occupational roles, which could result in a confusion of sex and occupation (Schaufeli & Greenglass, 2001). Other research indicates that men experience higher scores on depersonalization than women (Greenglass, Pantony & Burke, 1988). A study by Maslach, Schaufeli and Leiter (2001) also found a small but consistent difference in that women scored slightly higher on exhaustion and men on depersonalization.

Research on ethnicity is limited, but a study by Maslach (1982), on ethnic background and burnout indicated that fewer American black people sustained burnout than did American white people.

Current employment trends such as restructuring, downsizing and mergers have a huge impact on today’s workplace. Recent changes in the global economy have resulted in employment conditions that have made many more workers vulnerable to occupational burnout relating to job insecurity (Schaufeli et al., 2001). The prospect of demotion, or even
the long-term prospect of eventual job loss, can be associated with decreased psychological well-being (Roskies & Louis-Guerin, 1990). The influence of violation of the psychological contract when employees perceive their job security to be threatened due to downsizing could result in workers feeling betrayed and, as a result, experiencing anger, cynicism and hostility (Schaufeli et al., 2001). Research from a study of nurses experiencing hospital downsizing indicated that their anger and cynicism increased concomitant with a deterioration of their jobs, an increase in job insecurity and the reported impact of restructuring (Greenglass & Burke, 2000) There was reason to believe that different burnout levels would occur in the different schemes in the current study, as the schemes were experiencing different levels of change related to restructuring. Winnubst (1993) points to the role of organizational stressors in the development of burnout, such as role conflict and future ambiguity, which are just a few of the stressors that accompany a restructuring process.

Research also indicates that stress and burnout are significant factors in the development of both physical and psychological illness (McGrath, Houghton, & Reid, 1989). Following this, there could be a link between medical condition as a demographic variable and burnout.

In the light of the above discussion, the following hypotheses are proposed:

H1: Burnout, as measured by the MBI-GS, is a three-dimensional construct and the MBI-GS shows high internal consistency.

H2: There is a relationship between burnout and various demographic characteristics, namely race, gender, scheme, satisfaction level, years in position and medical condition.

METHOD

Research design

A survey design was used to achieve the research objectives. The specific design was the cross-sectional design, where a sample is drawn from a population at one time (Shaughnessy & Zechmeister, 1997). This design is ideally suited when the aim of the study is descriptive and predictive by nature (Shaughnessy & Zechmeister, 1997). The use of a cross-sectional design in burnout research has been criticized by Schaufeli and Enzmann (1998), who rather recommend experiments and longitudinal studies when possible. However, a cross-sectional
design is the most appropriate design for the validation of the MBI-GS. Structural equation modelling was used to address the problems associated with this design (Byrne, 2001)

Study population

The study population consisted of an accidental sample of customer services personnel ($N = 228$). The majority of the sample consisted of inbound call centre agents. The second largest group consisted of customer service administrators, who support the call centre agents with their administrative function and who were also in contact with clients (outbound). The sample also included client liaison officers, who dealt with clients face-to-face and also telephonically. The rest of the sample consisted of people in a managerial function in customer services, as well as other support staff who were all required to deal with customers in outbound contact in the case of a query.

Table 1 presents some of the characteristics of the participants.
Table 1

**Characteristics of the Participants**

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>White</td>
<td>32.60</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>30.40</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>20.70</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>13.66</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>2.64</td>
</tr>
<tr>
<td>Position</td>
<td>Call centre agent</td>
<td>53.92</td>
</tr>
<tr>
<td></td>
<td>Customer services administration</td>
<td>25.34</td>
</tr>
<tr>
<td></td>
<td>Supervisor</td>
<td>5.53</td>
</tr>
<tr>
<td></td>
<td>Client liaison officer</td>
<td>4.61</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>1.38</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9.22</td>
</tr>
<tr>
<td>Education</td>
<td>Grade 10</td>
<td>10.95</td>
</tr>
<tr>
<td></td>
<td>Grade 11</td>
<td>3.48</td>
</tr>
<tr>
<td></td>
<td>Grade 12</td>
<td>69.15</td>
</tr>
<tr>
<td></td>
<td>Technical college diploma</td>
<td>6.47</td>
</tr>
<tr>
<td></td>
<td>Technikon diploma</td>
<td>5.47</td>
</tr>
<tr>
<td></td>
<td>University degree</td>
<td>2.99</td>
</tr>
<tr>
<td></td>
<td>Postgraduate degree</td>
<td>1.49</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>30.97</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>69.03</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>42.22</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>34.67</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>16.89</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>4.44</td>
</tr>
<tr>
<td></td>
<td>Remarried</td>
<td>1.78</td>
</tr>
</tbody>
</table>

The sample was mostly female (69.03%) and single (42.22%), and most participants had a high school education. The mean age of participants was 33.3 years, while the mean length of work experience in the current position was 2.16 years.

**Measuring battery**

The MBI-GS (Schaufeli et al., 1996) was used in this study. Furthermore, a biographical questionnaire was used.

The MBI-GS (Schaufeli et al., 1996) measures respondents' relationships with their work on a continuum from engagement to burnout. The MBI-GS has three subscales: Exhaustion (Ex)
(five items, e.g. "I feel used up at the end of the workday"), Cynicism (Cy) (five items, e.g. "I have become less enthusiastic about my work") and Professional Efficacy (PE) (six items, e.g. "In my opinion, I am good at my job"). Together the subscales of the MBI-GS provide a three-dimensional perspective on burnout. Internal consistencies (Cronbach alpha coefficients) reported by Schaufeli et al. (1996) varied from 0.87 to 0.89 for Exhaustion, 0.73 to 0.84 for Cynicism and 0.76 to 0.84 for Professional Efficacy. Test-retest reliabilities after one year were 0.65 (Exhaustion), 0.60 (Cynicism) and 0.67 (Professional Efficacy) (Schaufeli et al., 1996). All items are scored on a 7-point frequency rating scale ranging from 0 ("never") to 6 ("daily"). High scores on EX and CY, and low scores on PE are indicative of burnout. Storm and Rothmann (2002) confirmed the three-factor structure of the MBI-GS in a sample of 2396 SAPS members, but recommended that Item 13 be dropped from the questionnaire. Structural equivalence of the MBI-GS for different race groups in the SAPS was confirmed. The following Cronbach alpha coefficients were obtained for the MBI-GS: Exhaustion: 0.88; Cynicism: 0.79; Professional Efficacy: 0.78 (Storm & Rothmann, 2002).

A questionnaire was developed to gather information about the demographic characteristics of the participants. This questionnaire gave participants the option of supplying their name and employee number. Other information that was gathered included age, gender, years in current position (to assess advancement), educational qualifications, marital status, satisfaction with relationship with significant other, language, self-rated performance, self-rated job satisfaction, medical conditions, use of prescription and over-the-counter medicine, reasons for medication, number of alcoholic drinks per week, smoking behaviour, number of cigarettes per day, other drug use and exercise behaviour.

**Statistical analysis**

The statistical analysis was carried out with the help of the SAS-program (SAS Institute, 2000). Cronbach alpha coefficients and inter-item correlation coefficients were used to assess the reliability and validity of the MBI-GS (Clark & Watson, 1995). Descriptive statistics (e.g. means, standard deviations, skewness and kurtosis) were used to analyse the data.

Structural equation modelling (SEM) methods as implemented by AMOS (Arbuckle, 1997) were used to test the factorial model for the MBI-GS, using the maximum likelihood method. SEM is a statistical methodology that takes a confirmatory (i.e. hypothesis-testing) approach
to the analysis of a structural theory bearing on some phenomenon (Byrne, 2001). Several aspects of SEM set it apart from the older generation of multivariate procedures (Byrne, 2001). Firstly, it takes a confirmatory rather than an exploratory approach to data analysis. Furthermore, by demanding that the pattern of inter-variable relations be specified a priori, SEM lends itself well to the analysis of data for inferential purposes. Secondly, although traditional multivariate procedures are incapable of either assessing or correcting for measurement error, SEM provides precise estimates of these error variance parameters. Thirdly, SEM procedures can incorporate both unobserved (latent) and observed variables.

Hypothesized relationships are tested empirically for goodness of fit with the sample data. The $\chi^2$ statistic and several other goodness-of-fit indices summarize the degree of correspondence between the implied and observed covariance matrices. Jöreskog and Sörbom (1993) suggest that the $\chi^2$ value may be considered more appropriately as a badness-of-fit rather than as a goodness-of-fit measure in the sense that a small $\chi^2$ value is indicative of good fit. However, because the $\chi^2$ statistic equals $(N - 1)F_{\text{min}}$, this value tends to be substantial when the model does not hold and the sample size is large (Byrne, 2001). A large $\chi^2$ relative to the degrees of freedom is more commonly found, and indicates a need to modify the model to fit the data better (Jöreskog & Sörbom, 1993). Researchers have addressed the $\chi^2$ limitations by developing goodness-of-fit indices that take a more pragmatic approach to the evaluation process. One of the first fit statistics to address this problem was the $\chi^2$/degrees of freedom ratio ($CMIN/DF$) (Wheaton, Muthén, Alwin & Summers, 1977). These criteria, commonly referred to as "subjective" or "practical" indices of fit, are typically used as adjuncts to the $\chi^2$ statistic.

A discussion of various Goodness-of-Fit statistics used in the analyses will now follow. The standardized RMR represents the average value across all standardized residuals, and ranges from zero to 1.00. A well-fitting model will require a value of 0.05 or less (Byrne, 2001). The Goodness of Fit Index (GFI) indicates the relative amount of the variances/co-variances in the sample predicted by the estimates of the population. It usually varies between 0 and 1 and a result of 0.90 or above indicates a good model fit. The Adjusted Goodness-of-Fit Index (AGFI) is a measure of the relative amount of variance accounted for by the model, corrected for the degrees of freedom in the model relative to the number of variables. The GFI and AGFI can be classified as absolute indices of fit because they basically compare the
hypothesized model with no model at all (Hu & Bentler, 1995). Although both indices range from zero to 1.00, the distribution of the AGFI is unknown, therefore no statistical test or critical value is available (Jöreskog & Sörbom, 1986). The parsimony goodness-of-fit index (PGFI) addresses the issue of parsimony in SEM (Mulaik et al., 1989). The PGFI takes into account the complexity (i.e., number of estimated parameters) of the hypothesized model in the assessment of overall model fit and provides a more realistic evaluation of the hypothesized model. Mulaik et al. (1989) suggested that non-significant \( \chi^2 \) statistics and goodness-of-fit indices in the 0.90s accompanied by PGFIs in the 0.50s are not unexpected; however, values > 0.80 are considered to be more appropriate (Byrne, 2001).

The next group of goodness-of-fit statistics can be classified as incremental or comparative indices of fit. The Normed Fit Index (NFI) is used to assess global model fit. The NFI represents the point at which the model being evaluated falls on a scale running from a null model to perfect fit. This index is normed to fall on a 0 to 1 continuum. Marsh, Balla and Hau (1996) suggest that this index is relatively insensitive to sample sizes. The Comparative Fit Index (CFI) represents the class of incremental fit indices in that it is derived from the comparison of a restricted model (i.e., one in which structure is imposed on the data) with that of an independence (or null) model (i.e., one in which all correlations among variables are zero) in the determination of goodness-of-fit. The Tucker-Lewis Index (TLI) (Tucker & Lewis, 1973), is a relative measure of covariation explained by the model that is specifically developed to assess factor models. For these fit indices (NFI, CFI and TLI), it is more or less generally accepted that a value of less than 0.90 indicates that the fit of the model can be improved (Hoyle, 1995), although a revised cut-off value close to 0.95 has recently been advised (Hu & Bentler, 1999).

To overcome the problem of sample size, Browne and Cudeck (1993) suggested using the Root Mean Square Error of Approximation (RMSEA) and the 90% confidence interval of the RMSEA. The RMSEA estimates the overall amount of error; it is a function of the fitting function value relative to the degrees of freedom. The RMSEA point estimate should be 0.05 or less in order to indicate good fit, and the upper limit of the confidence interval should not exceed 0.08. Hu and Bentler (1999) suggested a value of 0.06 to be indicative of good fit between the hypothesized model and the observed data. MacCallum, Browne and Sugawara
(1996) recently elaborated on these cut-off points and noted that RMSEA values ranging from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit.

T-tests and one-way analysis of variance (ANOVA) were used to determine differences between the sub-groups in the sample. Tukey tests were done to indicate which groups differed significantly when ANOVAS were done. The following formula was used to determine the practical significance of differences ($d$) when t-tests were used (Steyn, 1999):

$$d = \frac{Mean_A - Mean_B}{SD_{MAX}}$$

where

$Mean_A = $ Mean of the first group

$Mean_B = $ Mean of the second group

$SD_{MAX} = $ Highest standard deviation of the two groups

The following formula was used to determine the practical significance of means of more than two groups (Steyn, 1999):

$$d = \frac{Mean_A - Mean_B}{Root \ MSE}$$

where

$Mean_A = $ Mean of the first group

$Mean_B = $ Mean of the second group

$Root MSE = $ Root Mean Square Error

A cut-off point of 0.50 (medium effect) (Cohen, 1988) was set for the practical significance of differences between means.
RESULTS

Structural equation modelling (SEM) methods as implemented by AMOS (Arbuckle, 1997) were used to test the factorial model for the MBI-GS. Before performing SEM, the frequency distribution of the items of the MBI-GS was checked in order to assess deviations from normality, and multivariate outliers were removed. It was assumed that the $\chi^2$ goodness-of-fit statistics are not likely to be inflated if the skewness and kurtosis for individual items do not exceed the critical values of 2.00 and 7.00 respectively (West, Finch & Curran, 1995).

Data analyses proceeded as follows: First, a quick overview of model fit was done by looking at the overall $\chi^2$ value, together with its degrees of freedom and probability value. Global assessments of model fit were based on several goodness-of-fit statistics (GFI, AGFI, PGFI, NFI, TLI, CFI and RMSEA); secondly, given findings of an ill-fitting initially hypothesized model, analyses proceeded in an exploratory mode. Possible misspecifications as suggested by the so-called modification indices were looked for, and eventually a revised, respecified model was fitted to the data.

**Hypothesized model**

A one-factor model was tested. However, a statistically significant $\chi^2$ value of 352.625 (df = 104; $p = 0.00$) revealed a very poor overall fit. All other indices indicated a poor fit between a hypothesized one-factor model and the data. Table 2 presents fit statistics for the test of this model.

Table 2  
*Goodness-of-Fit Statistics for a One-factor MBI-GS Model*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>GFI</th>
<th>AGFI</th>
<th>PGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>352.63</td>
<td>3.39</td>
<td>0.82</td>
<td>0.76</td>
<td>0.62</td>
<td>0.68</td>
<td>0.71</td>
<td>0.75</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Following the above-mentioned procedure, the full hypothesized three-factor model consisting of all 16 items was tested (see Figure 1). Table 3 presents fit statistics for the test of this model.
Figure 1. The hypothesized 16-item three-factor MBI-GS model

Table 3

*Goodness-of-Fit Statistics for the Hypothesized Three-Factor MBI-GS Model*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>Stand. RMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>PGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>145.53</td>
<td>1.44</td>
<td>0.05</td>
<td>0.93</td>
<td>0.90</td>
<td>0.69</td>
<td>0.87</td>
<td>0.95</td>
<td>0.96</td>
<td>0.04</td>
</tr>
</tbody>
</table>

The statistically significant $\chi^2$ value of 145.53 (df = 101; $p = 0.00$) revealed a relatively poor overall fit of the originally hypothesized MBI model. However, both the sensitivity of the likelihood ratio test to sample size and its basis on the central $\chi^2$ distribution, which assumes that the model fits perfectly in the population, have been reported to lead to problems of fit. Jöreskog and Sörbom (1993) pointed out that the use of $\chi^2$ is based on the assumption that the model holds exactly in the population, which is a stringent assumption. A consequence of this assumption is that models that hold approximately in the population will be rejected in a large sample. Furthermore, the hypothesized model (Model 1) was also not that good from a practical perspective. The PGFI value lower than 0.80, and NFI value lower than 0.95 indicated areas that could be improved on in terms of fit. It is apparent that some
If one looked at the regression weights, one parameter, which represents the cross-loading of Item 13 on the Efficacy factor, stood apart from the rest and accounts for substantial misspecification of the hypothesized factor loading. This might be caused by the ambivalence of the particular item. To pinpoint possible areas of misfit, modification indices were examined. The constrained parameters exhibiting the highest degree of misfit lay in the error covariance matrix and represent a correlated error between item 1 and item 2 (MI = 7.44). Following Byrne (2001), errors of two item pairs were allowed to correlate, and based on the modification indices and theoretical considerations, Model 2 was re-specified with these parameters freely estimated.

Post hoc analyses

Given rejection of the initially postulated model, the focus shifted from model test to model development (exploratory factor analysis). Considering the high cross-loading of Item 13, it was decided to re-specify the model with this item deleted. All subsequent analyses are now based on the 15-item revision, which is labelled here as Model 2. The fit statistics are presented in Table 4.

Table 4

<p>| Goodness-of-Fit Statistics for Model 2 |</p>
<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>$\chi^2$/df</th>
<th>Stand. GFI</th>
<th>AGFI</th>
<th>PGFI</th>
<th>NFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>113.09</td>
<td>1.33</td>
<td>0.05</td>
<td>0.94</td>
<td>0.91</td>
<td>0.66</td>
<td>0.90</td>
<td>0.97</td>
<td>0.04</td>
</tr>
</tbody>
</table>

The fit statistics in Table 4 indicate a good fit for the re-specified model. Although the NFI value is still lower than 0.95, is it an improvement on model 1. All the other fit statistics indicate excellent fit of the measurement model to the data. Since this model fit was satisfactory and the results agreed with the theoretical assumptions underlying the structure of the MBI-GS, no further modifications of the model were deemed necessary. The correlations between the three burnout dimensions are as follows: EX and CY show the highest
correlation of 0.77, followed by EX and PE with a correlation of -0.33, and CY and PE with a correlation of -0.33.

The second model of the MBI-GS structure is shown in Figure 2. In summary, this model was based on 15 of the original 16 items and included a correlated error between Item 1 and Item 2 and between Item 9 and Item 10.

![Diagram of the second model of the MBI-GS structure]

**Figure 2.** The second model of the 15-item three-factor MBI-GS model

The descriptive statistics, alpha coefficients and inter-item correlations of the three factors of the MBI-GS are given in Table 5.
Table 5

Descriptive Statistics, Alpha Coefficients and Inter-Item Correlations of the MBI-GS

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>r(Mean)</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaustion</td>
<td>15,97</td>
<td>7,69</td>
<td>-0,19</td>
<td>-0,94</td>
<td>0,54</td>
<td>0,85</td>
</tr>
<tr>
<td>Cynicism</td>
<td>10,40</td>
<td>5,70</td>
<td>0,10</td>
<td>-0,76</td>
<td>0,39</td>
<td>0,72</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>31,09</td>
<td>4,24</td>
<td>-0,92</td>
<td>0,46</td>
<td>0,26</td>
<td>0,67</td>
</tr>
</tbody>
</table>

The scores on the three factors of the MBI-GS are normally distributed. The Cronbach alpha coefficients of the scales are considered to be acceptable compared to the guideline of $\alpha > 0,70$ (Nunnally & Bernstein, 1994). However, one scale, namely Professional Efficacy, showed an alpha coefficient somewhat lower than the guideline of 0,70. Furthermore, the inter-item correlations are considered acceptable compared to the guideline of $0,15 < r < 0,50$ (Clark & Watson, 1995). It appears that the scales have acceptable levels of internal consistency.

These results provide support for Hypothesis 1.

Next, MANOVA and ANOVA analyses followed to determine the relationship between burnout and various demographic characteristics, such as different race and gender groups, different call centres, varying levels of satisfaction experienced, years in current position and medical condition. Demographic characteristics were first analysed for statistical significance using Wilk's Lambda statistics. The results of these comparisons are reflected in Table 6

Table 6

Wilk's Lambda Statistics

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>Den DF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>0,95</td>
<td>1,29</td>
<td>9</td>
<td>520,97</td>
<td>0,24</td>
</tr>
<tr>
<td>Scheme</td>
<td>0,94</td>
<td>1,10</td>
<td>6</td>
<td>200,00</td>
<td>0,37</td>
</tr>
<tr>
<td>Satisfaction level</td>
<td>0,79</td>
<td>4,30</td>
<td>12</td>
<td>561,19</td>
<td>0,00*</td>
</tr>
<tr>
<td>Years in position</td>
<td>0,99</td>
<td>0,34</td>
<td>6</td>
<td>430</td>
<td>0,91</td>
</tr>
</tbody>
</table>

* Statistically significant difference: $p < 0,01$
In an analysis of Wilk's Lambda values, no difference could be found between race, scheme group and years in position. A statistically significant difference was found between satisfaction level and burnout \( (p < 0.01) \) The relationship between burnout and satisfaction level was further analysed to determine practical significance using ANOVA, followed by Tukey HSD tests, and the results are given in Table 7.

Table 7

_Tukey Test Results between Satisfaction Level and Burnout Dimensions_

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>( p )</th>
<th>( d )</th>
<th>Root MSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaustion</td>
<td>22.70*</td>
<td>18.00</td>
<td>15.78</td>
<td>14.12</td>
<td>11.32*</td>
<td>0.01*</td>
<td>1.47</td>
<td>7.74</td>
</tr>
<tr>
<td>Cynicism</td>
<td>14.22*</td>
<td>12.32</td>
<td>10.85</td>
<td>8.14</td>
<td>7.55*</td>
<td>0.01*</td>
<td>1.17</td>
<td>5.72</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>33.14</td>
<td>31.75</td>
<td>30.83</td>
<td>30.43</td>
<td>30.03</td>
<td>0.01*</td>
<td>-</td>
<td>4.22</td>
</tr>
</tbody>
</table>

* Statistically significant \( (p < 0.01) \)

a Practically significant differences from division (in row) where b (medium effect, \( d \geq 0.5 \)) or c (large effect, \( d \geq 0.8 \)) are indicated

Columns 1–5 represent a five point scale indicating levels of satisfaction with current position, with 1 representing "very unsatisfied" ranging to 5, representing high job satisfaction levels. The results indicated in Table 7 show that employees with low levels of satisfaction experience practically significant higher levels of Exhaustion than employees with high levels of job satisfaction. Employees with low levels of job satisfaction also experience practically significant higher levels of Cynicism than employees who indicated high levels of job satisfaction. No practically significant differences were found in terms of Professional Efficacy.

Table 8 shows the difference between customer service personnel based on gender.
Table 8

*Differences between Customer Services Personnel based on Gender*

<table>
<thead>
<tr>
<th>Item</th>
<th>Male</th>
<th>Female</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>15,53</td>
<td>7,73</td>
<td>16,21</td>
<td>7,78</td>
<td>-0,60</td>
</tr>
<tr>
<td>Cynicism</td>
<td>9,44</td>
<td>5,63</td>
<td>10,85</td>
<td>5,71</td>
<td>-1,70</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>31,39</td>
<td>4,22</td>
<td>30,86</td>
<td>4,31</td>
<td>0,81</td>
</tr>
</tbody>
</table>

Table 8 shows that no statistically or practically significant differences were obtained regarding the three dimensions of burnout and gender.

The differences between customer services personnel based on medical condition is shown in Table 9.

Table 9

*Differences between Customer Services Personnel based on Medical Condition*

<table>
<thead>
<tr>
<th>Item</th>
<th>With Medical Condition</th>
<th>Without Medical Condition</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>18,54</td>
<td>7,63</td>
<td>15,87</td>
<td>7,61</td>
<td>1,68</td>
</tr>
<tr>
<td>Cynicism</td>
<td>13,54</td>
<td>6,11</td>
<td>9,96</td>
<td>5,47</td>
<td>3,09</td>
</tr>
<tr>
<td>Professional Efficacy</td>
<td>29,54</td>
<td>5,27</td>
<td>31,18</td>
<td>4,13</td>
<td>-1,83</td>
</tr>
</tbody>
</table>

Table 9 shows that a practically significant difference (medium effect) exists between Medical Condition and Cynicism. It seems that employees with a medical condition experience more mental distance (i.e. cynicism) towards their work compared with employees who have no medical condition.

**DISCUSSION**

The aim of this study was to test the psychometric qualities of the MBI-GS for customer services personnel, and to compare the relationship of burnout with various demographic characteristics. The psychometric properties of the MBI-GS were firstly tested. Reliability
analyses revealed that all three subscales were sufficiently internally consistent. A three-factor structure was confirmed using the structural equation modelling approach, which is consistent with research findings across various samples, occupational groups and countries (Leiter & Schaufeli, 1996; Schaufeli et al., 2002; Schutte et al., 2000; Taris et al., 1999; Storm & Rothmann, 2002).

Two observed correlations found between the MBI-GS scales were within the range of the American test manual (Schaufeli et al., 1996, p. 24). Exhaustion and professional efficacy correlated with −0.33, and Maslach et al. (1996) found correlations that ranged from −0.04 to −0.34. A correlation of −0.33 was found between cynicism and professional efficacy, and test-manual correlations ranging from -0.38 to -0.57, were found. The correlations between exhaustion and cynicism showed the highest correlation of 0.77, but differed from the test manual correlation ranging from 0.44 to 0.61 for these two scales.

Based on both conceptual and empirical grounds, item 13 ("I just want to do my job and not be bothered") was deleted from the original MBI-GS, resulting in a 15-item scale. This is consistent with the study of Schutte et al. (2000), where this item was also excluded in a cross-national study on the factorial validity of the MBI-GS. According to these authors, problems might be caused by the ambivalent nature of this item. On the one hand, a high score may indicate disengagement and social isolation by closing oneself off from contacts with others at work. On the other hand, a higher score may indicate strong motivation and engagement: one concentrates on the task and does not want to be interrupted. Therefore, although the deletion of item 13 was part of the post hoc analyses and validation is needed in future studies, the decision to eliminate this item is consistent with previous research (Schutte et al., 2000; Storm & Rothmann, 2002) and should not be regarded as a model specification for the sole purpose of data fitting.

Furthermore, error terms within subscales were also allowed to correlate in order to improve model fit. Although correlated error terms may be derived from specified characteristics of either respondents or the items of a survey, they represent systematic rather than random measurement error in item responses. They may derive from characteristics specific either to the items or the respondents (Aish & Jöreskog, 1990). For example, if these parameters reflect item characteristics, they may represent a small omitted factor. However, as may be the case here, correlated errors may represent respondent characteristics that reflect bias such
as yea-/nay-saying, social desirability (Aish & Jöreskog, 1990), as well as a high degree of overlap in item content (when an item, although worded differently, essentially asks the same question) (Byrne, 2001).

The second objective of the study was to investigate the relationship between burnout and various demographic characteristics. No statistically significant differences were found between race, scheme group and years in position. A statistically significant difference was found between satisfaction level and burnout. This relationship between burnout and satisfaction level was further analysed to determine practical significance. The results indicated that employees with low levels of satisfaction experienced practically significant higher levels of exhaustion than employees with high levels of satisfaction. Employees with low levels of satisfaction also experienced practically significant higher levels of cynicism than employees who indicated high levels of satisfaction. No practically significant differences were found in terms of professional efficacy.

According to Maslach (1998), negative correlations are often found between burnout and job satisfaction. Zedeck, Maslach, Mosier and Skitka (1988) concluded that burnout and job dissatisfaction are clearly linked. However, the nature of the link between burnout and job dissatisfaction is a matter of speculation. It is not clear whether burnout causes people to be dissatisfied with their jobs, or whether job dissatisfaction causes burnout. Also, burnout and job dissatisfaction may be caused by another factor, such as poor working conditions.

No practically significant differences were obtained regarding the three dimensions of burnout and gender. A practically significant difference was found between Medical Condition and Cynicism, supporting the work of McGrath et al. (1989) on the role of burnout and stress in the development of illness.

In conclusion, this study could serve as reference for customer services personnel regarding burnout levels in a customer services environment. The three-factor structure of the burnout construct is largely confirmed and its subscales are internally consistent. Based on the results obtained in this study, it seems as if the MBI-GS is a suitable instrument for measuring burnout of customer service personnel in a customer services environment. Therefore, the MBI-GS opens up further possibilities for burnout research in South Africa in other non-contactual occupations.
A limitation of this study was that it relied exclusively on self-report measures. This causes a particular problem in validation studies that use self-report measures exclusively, in that it increases the likelihood that at least part of the shared variance between measures can be attributed to method variance (Schaufeli et al., 1993). Another limitation is the sampling procedure, and future studies could benefit using a stratified random-sample design, which would enable generalization of findings to the total study population. The sample was also too small to determine the structural equivalence of the MBI-GS for different race or language groups.

RECOMMENDATIONS

Based on the results of this study, it is recommended that the MBI-GS be used to assess burnout in a customer services environment. However, item 13 should be omitted when administering the questionnaire.

Although this study found the MBI-GS to be reliable and confirmed the three-factor structure, it is suggested that future research should focus on the MBI-GS in other customer services samples in South Africa to verify the current findings. Further research is also needed in other occupations to establish norms for burnout levels other than in a customer service environment. Future studies should use large samples and adequate statistical techniques (e.g. structural equation modelling). Large sample sizes might provide increased confidence that study findings would be consistent across other similar groups. In future studies, structural equation modelling could be used to test the construct equivalence of the MBI-GS. In testing for these equivalencies, sets of parameters (i.e. factor loading paths, factor variances/covariances and structural regression paths) could be tested for by increasing restrictions in every step.

Even though few practically significant differences were found between burnout regarding different demographic groups, it seems necessary to examine group differences in burnout in other occupational groups as well, which can provide information for tailoring programmes and services to specific groups.
REFERENCES


Enzmann, D., Schaufeli, W. B., & Girault, N. (1995). The validity of the Maslach Burnout Inventory in three national samples. In L. Bennett, D. Mills and M. Ross (Eds.), *Health workers and AIDS: Research, intervention and current issues in burnout and response* (pp. 131-150). Chur: Harwood


CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

The purpose of this chapter is to provide an analysis and discussion of the literature and the results of the empirical study. Conclusions are drawn with regard to the research objectives. The first part of this chapter encompasses a summary of the main findings of the research. Furthermore, recommendations for the organization are made and limitations of the present study are discussed. Finally, research opportunities that emanate from this research are presented.

3.1 CONCLUSIONS

The general objective of this research was to validate the MBI for customer service personnel in a customer services environment, and to determine the relationship of burnout with various demographic characteristics. The following conclusions can be made from this study:

**Burnout** is a syndrome consisting of three essential characteristics, namely exhaustion, cynicism and reduced professional efficacy. Exhaustion refers to the depletion or draining of emotional and physical resources, cynicism points to the development of negative, callous or excessively detached responses toward various aspects of the job and a lack of professional efficacy refers to feelings of incompetence as well as a lack of achievement and productivity at work.

**MBI-GS** is a measuring instrument used to measure burnout in non-contactual professions. The MBI-GS subscales consist of the following: Exhaustion (Ex), Cynicism (Cy) and Professional Efficacy (PE) (Schaufeli et al., 1996). The three dimensions of the MBI-GS are interrelated: Cynicism is highly related to Exhaustion \( (0,44 < r < 0,61) \), and also strongly related to Professional Efficacy \( (-0,38 < r < -0,57) \) (Schaufeli et al., 1996). The MBI-GS has evidenced satisfactory internal consistencies ranging from 0,73 (Cynicism) to 0,91 (Exhaustion) (Leiter & Schaufeli, 1996). Reliability analyses showed that the Exhaustion and Professional Efficacy subscales were sufficiently internally consistent, but that one Cynicism...
The following conclusions can be drawn in respect of the empirical objectives of this study:

The psychometric properties of the MBI-GS were firstly tested. Reliability analyses revealed that all three subscales were sufficiently internally consistent. A three-factor structure was confirmed using the structural equation modelling approach, which is consistent with research findings across various samples, occupational groups and countries (Leiter & Schaufeli, 1996; Schaufeli et al., 2002; Schutte et al., 2000; Taris et al., 1999; Storm & Rothmann, 2002).

The scores on the three factors of the MBI-GS are normally distributed. The Cronbach alpha coefficients of the scales are considered to be acceptable compared to the guideline of $\alpha > 0.70$ (Nunnally & Bernstein, 1994). However, one scale, namely Professional Efficacy, showed an alpha coefficient somewhat lower than the guideline of 0.70. Furthermore, the inter-item correlations are considered acceptable compared to the guideline of $0.15 < r < 0.50$ (Clark & Watson, 1995). It appears that the scales have acceptable levels of internal consistency. The MBI-GS had relatively normal distributions, with low skewness and kurtosis.

Two observed correlations found between the MBI-GS scales were within the range of the American test manual (Schaufeli et al., 1996, p. 24). Exhaustion and professional efficacy correlated with $-0.33$, and Maslach et al. (1996) found correlations that ranged from $-0.04$ to $-0.34$. A correlation of $-0.33$ was found between cynicism and professional efficacy, and test-manual correlations ranging from $-0.38$ to $-0.57$, were found. The correlations between exhaustion and cynicism showed the highest correlation of 0.77, but differed from the test manual correlation ranging from 0.44 to 0.61 for these two scales.

Based on both conceptual and empirical grounds, item 13 ("I just want to do my job and not be bothered") was deleted from the original MBI-GS, resulting in a 15-item scale. This is consistent with the study of Schutte et al. (2000), where this item was also excluded in a cross-national study on the factorial validity of the MBI-GS. Therefore, although the deletion...
of item 13 was part of the post hoc analyses and validation is needed in future studies, the decision to eliminate this item is consistent with previous research (Schutte et al., 2000; Storm & Rothmann, 2002) and should not be regarded as a model specification for the sole purpose of data fitting.

Furthermore, error terms within subscales were also allowed to correlate in order to improve model fit. Although correlated error terms may be derived from specified characteristics of either respondents or the items of a survey, they represent systematic rather than random measurement error in item responses. They may derive from characteristics specific either to the items or the respondents (Aish & Jöreskog, 1990). For example, if these parameters reflect item characteristics, they may represent a small omitted factor. However, as may be the case here, correlated errors may represent respondent characteristics that reflect bias such as yea-/nay-saying, social desirability (Aish & Jöreskog, 1990), as well as a high degree of overlap in item content (when an item, although worded differently, essentially asks the same question) (Byrne, 2001).

The second objective of the study was to investigate the relationship between burnout and various demographic characteristics. No statistically significant differences were to be found between race, scheme group and years in position. A statistically significant difference was found between satisfaction level and burnout. This relationship between burnout and satisfaction level was further analysed to determine practical significance. The results indicated that employees with low levels of Satisfaction experienced practically significant higher levels of Exhaustion than employees with high levels of Satisfaction. Employees with low levels of Satisfaction also experienced practically significant higher levels of Cynicism than employees who indicated high levels of Satisfaction. No practically significant differences were found in terms of Professional Efficacy.

No practically significant differences were obtained regarding the three dimensions of burnout and gender. A practically significant difference was found between Medical Condition and Cynicism, supporting the work of McGrath et al. (1989) on the role of burnout and stress in the development of illness.

In conclusion, this study could serve as reference for customer services personnel regarding burnout levels in a customer services environment. The three-factor structure of the burnout
construct is largely confirmed and its subscales are internally consistent. Based on the results obtained in this study, it seems as if the MBI-GS is a suitable instrument for measuring burnout of customer service personnel in a customer services environment.

3.2 LIMITATIONS

As the data was collected from different business units at different points in time, unique organizational characteristics and/or historical events may have affected the findings. Also, because of the average educational level of respondents, as well as the array of language and cultural groups included in the study, the interpretation of questions could have differed vastly among participants.

A limitation of this study was that it relied exclusively on self-report measures. This causes a particular problem in validation studies that use self-report measures exclusively, in that it increases the likelihood that at least part of the shared variance between measures can be attributed to method variance (Schaufeli et al., 1993). Another limitation is the sampling procedure, and future studies could benefit using a stratified random-sample design, which would enable generalization of findings to the total study population.

3.3 RECOMMENDATIONS

Recommendations pertaining to the specific organization used in this study, as well as recommendations for future research, are made in this section.

3.3.1 Recommendations to the organization

Managers and employees should become aware of the causes and symptoms of burnout. This could help them become aware of their own and others' exhaustion, cynicism and low professional efficacy, so that interventions can take place before the effects of burnout are too serious. A preventative approach to burnout is recommended.

Even though few practically significant differences were found between burnout regarding different demographic groups, it seems necessary to examine group differences in burnout in
other occupational groups as well, which can provide information for tailoring programmes and services to specific groups.

Based on the results of this study, it is recommended that the MBI-GS be used to assess burnout in a customer services environment. However, item 13 should be left out when administering the questionnaire.

### 3.3.2 Recommendations for future research

Although this study found the MBI-GS to be reliable and confirmed the three-factor structure, it is suggested that future research should focus on the MBI-GS in other customer services samples in South Africa to verify the current findings. Further research is also needed in other occupations to establish norms for burnout levels other than in a customer service environment.

Future studies should use large samples and adequate statistical techniques (e.g. structural equation modelling). Large sample sizes might provide increased confidence that study findings would be consistent across other similar groups. The use of longitudinal studies in future research would make inferences in terms of cause and effect possible.
REFERENCES


Enzmann, D., Schaufeli, W. B., & Girault, N. (1995). The validity of the Maslach Burnout Inventory in three national samples. In L. Bennett, D. Mills and M. Ross (Eds.), *Health workers and AIDS: Research, intervention and current issues in burnout and response* (pp. 131-150). Chur: Harwood


Winnubst, J. (1993) Organizational structure, Social support and Burnout. In W. B. Schaufeli, C. Maslach and T. Marek (Eds.), Professional burnout: Recent developments in theory and research (pp. 19-32). Washington, DC: Taylor and Francis