

The factor structure of the Maslach Burnout Inventory Human Services Survey across a sample of client service employees

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ABSTRACT

The negative consequences of burnout in the client service environment point to the importance of further research into the manner in which the unique challenges faced by client service employees translate into the development of burnout. Research into the nature of burnout in the client service environment is, however, hampered due to the paucity of appropriate measures of burnout specific to this environment. To overcome this challenge, the application of the Maslach Burnout Inventory Human Services Survey (MBI-HSS) for use among client service employees is proposed. Previous studies that have applied the MBI-HSS to occupations outside the human service profession have, however, reported significant threats to the factor structure of the original instrument, suggesting that the three-factor model is not consistent across occupations. The aim of this study was therefore to explore the factor structure of the MBI-HSS when applied to a sample of client service professions. A convenience sample was used, and 100 client service employees, representing three client service organisations, participated in the study. The results of the study do not support the existence of three distinct burnout components when applying the MBI-HSS to a sample of client service employees. While the measures of emotional exhaustion and reduced personal accomplishment performed well in this sample, the results cast doubt on the meaningfulness of the depersonalisation indicators in the client service context.

Key words: burnout, emotional exhaustion, depersonalisation, personal accomplishment, client service

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Introduction

Burnout, characterised by feelings of emotional exhaustion, depersonalisation and reduced personal accomplishment, can prove detrimental to both the individual employee and the organisation. On the individual level, prolonged periods of burnout have been linked to depression (Glass & McKnight 1996), anxiety (Richardson, Burke & Leiter 1992) and diminished levels of self-esteem (Rosse, Boss, Johnson & Crown 1991). At the organisational level, burnout has been linked to a multitude of withdrawal behaviours including turnover intention (Choi, Cheong & Feinberg 2012; Surana & Singh 2012), absenteeism (Lewin & Sager 2009), reduced organisational commitment (Surana & Singh 2012) and job satisfaction (Tsigilis, Koustelios & Togia 2004) and a decrease in productivity and job performance (Leung, Chan & Dongyu 2011). Given that client service employees play a critical role in service organisations and contribute significantly to profitability by facilitating customer engagement and satisfaction (Lings, Durden, Lee & Cadogan 2014), the negative effects of burnout among client service employees can be particularly devastating to client service organisations. Burnout among client service employees has been shown to significantly reduce the quality of interpersonal work-related relationships (Singh, Goolsby & Rhoads 1994) resulting in compromised service levels and reduced levels of customer satisfaction (Yagil 2006).

Previous research on burnout in the client service environment has shown how client service employees are particularly susceptible to the development of stress and burnout (Babakus, Yavas & Ashill 2009; Griffith 2001; Low, Cravens, Grant & Moncrief 2001; Tsai & Huang 2002; Wegge, Vogt & Wecking 2007). According to Singh (2000), client service employees are generally underpaid, overworked and suffer considerable stress due to the fact that their performance is measured through the satisfaction of both the clients they serve and the management of the organisations for which they work. Since the client service employees' company is largely dependent on the client for business, clients are often able to exert considerable influence over client service employees through both formal and informal evaluations (Gettman & Gelfand 2007). Consequently, client service employees are exposed to a considerable amount of role conflict as they try to satisfy customer demands while simultaneously trying to comply with management expectations and organisational requirements (Chung & Schneider 2002; Rod & Ashill 2009; Singh 2000; Varca 2009). Chung and Schneider (2002: 71) put this succinctly when they state that "in manufacturing firms, there is only one distinct authority or boss, whereas in service firms, there is another master to serve – the customer".

The negative consequences of burnout in the client service environment, coupled with the prevalence of burnout in this environment, points to the importance of

further research into the manner in which the unique challenges faced by client service employees translates into the development of burnout. Research into the nature of burnout in the client service environment is, however, hampered due to a paucity of appropriate measures of burnout specific to this environment. Recent research into burnout in the client service environment reiterates the sentiments expressed by Cordes and Dougherty (1993) that the development of burnout in the client service environment is largely attributed to the interpersonal nature of client service work (Borgogni, Consiglio, Alessandri & Schaufeli 2012; Buunk, Peiro, Rodriguez & Bravo 2007; Snyder & Claffey 2011; Vanheule, Lievrouw & Verhaeghe 2003; Vanheule & Verhaeghe 2004, 2005). It is therefore important that a measure of burnout in this environment should capture the unique interpersonal components of service work. While the Maslach Burnout Inventory Human Services Survey (MBI-HSS) provides an adequate measure of these interpersonal components through the use of its depersonalisation scale, it is only specified for use among human service professionals who deal with the psychological, physical and social problems of service recipients (Maslach & Jackson 1996). When applied outside of the so-called human service professions, reports indicate that the factor structure of the MBI-HSS becomes unstable (Boles, Dean, Ricks, Short & Wang 2000; Evans & Fischer 1993). A number of other burnout measures are available for application across any occupational group, but due to the generic nature of their items, they do not emphasise the service relationship, nor do they make reference to the interpersonal nature of service work. In light of these considerations, burnout research among client service employees may be inhibited due to a lack of adequate instrumentation with which to measure burnout in this context. To overcome this challenge, the use of the MBI-HSS among client service employees is proposed. The aim of this study is therefore to explore the factor structure of the MBI-HSS when applied to a sample of client service employees.

To accomplish this, the relevant literature on the burnout concept is reviewed. This is followed by a discussion of the factor structure of the MBI-HSS and the measurement of burnout in the client service environment. Finally, the results, study limitations and directions for future research are discussed.

Literature review

The burnout construct

The central role that interpersonal stressors play in the development of burnout was captured in the earliest conceptualisations of the burnout syndrome (Maslach & Pines 1977). Because early research into burnout was conducted primarily within

the human service professions, burnout was initially conceptualised as comprising two components, namely the individual stress dimension of emotional exhaustion and the interpersonal dimension of depersonalisation (Maslach & Pines 1977; Pines & Maslach 1978). Later, a third component (reduced personal accomplishment) was added, resulting in a multi-dimensional construct (Maslach & Jackson 1981). The emotional exhaustion component refers to cases where individuals are over-extended and depleted of both emotional and physical resources. The depersonalisation component captures the negative detached feelings one develops towards others at work in an effort to conserve physical and emotional resources, while the self-evaluation component in the form of reduced personal accomplishment is characterised by feelings of incompetence and a lack of achievement (Maslach, Schaufeli & Leiter 2001).

While the majority of studies confirm that burnout indeed comprises three distinct components (Loera, Converso & Viotti 2014; Pisanti, Lombardo, Lucidi, Violani & Lazzari 2012; Shepherd, Tashchian & Ridnour 2011), support has been found for two, three, four and even five components (Worley, Vassar, Wheeler & Barnes 2008). Green, Walkey and Taylor (1991), Holland, Michael & Kim (1994) and Shirom (2003) propose a two-factor conceptualisation comprising emotional exhaustion and depersonalisation and maintain that reduced personal accomplishment may, in fact, be an outcome of burnout, rather than a distinct component of the syndrome. Little additional support has been found for this two-dimensional conceptualisation, although it is generally accepted that emotional exhaustion and depersonalisation constitute the core dimensions of the burnout construct (Demerouti, Bakker, Nachreiner & Schaufeli 2001).

Densten (2001) proposed a five-factor structure where emotional exhaustion and depersonalisation are split into two factors each. According to Densten (2001), emotional exhaustion comprises both psychological strain and somatic strain aspects, while depersonalisation relates to both depersonalisation of the job and depersonalisation of others. A test of the conceptual and psychometric properties of the MBI did, however, disconfirm this hypothesis (Densten 2001).

The developmental sequence of the three dimensions of burnout has also received considerable attention within the scientific community, resulting in divergent perspectives. The most frequently reported perspective suggests that the three dimensions of burnout are related through a temporal developmental process commencing with the development of emotional exhaustion and culminating in a reduced sense of personal accomplishment (Brouwers & Tomic 2014; Maslach & Jackson 1986; Taris, Le Blanc, Schaufeli & Schreurs 2005; Toppinen-Tanner, Kalimo & Mutanen 2002). Individuals experiencing emotional exhaustion attempt

to cope with excessive job demands by trying to conserve resources. In so doing, the individual may withdraw both physically and psychologically from work, resulting in the development of a cynical and detached attitude towards the client – referred to as depersonalisation. This withdrawal ultimately results in a discrepancy between the individual's current attitude towards work and his or her original expectations of performance, resulting in a sense of decreased personal accomplishment (Taris et al. 2005).

This perspective has been challenged by a number of scholars. Posig & Kickul (2003) found that while the hypothesised path between emotional exhaustion and depersonalisation is significant, the relationship between depersonalisation and diminished personal accomplishment was not significant. Similarly, Önder and Basim (2008) conclude that while emotional exhaustion is related to depersonalisation, feelings of reduced personal accomplishment are not linearly related to emotional exhaustion or personal accomplishment. Golembiewski and Munzenrider (1984, 1988) suggest that depersonalisation occurs first, followed by feelings of reduced personal accomplishment and then emotional exhaustion. According to Golembiewski and Munzenrider (1984), a certain degree of detachment from work and the depersonalisation of service recipients is necessary in some service occupations, such as the medical professions. Continued depersonalisation, however, begins to interfere with performance, affecting perceptions of personal accomplishment. The chronic perpetuations of the conditions described above could eventually result in the development of emotional exhaustion.

Lewin and Sager (2007) maintain that the sequencing of the three components of burnout may be dependent on aspects related to specific occupational contexts. According to them, the stressors associated with the human service profession are different from those associated with other professions. As a result, the sequencing of the burnout components may differ across occupations. In the sales profession, for instance, personal and organisational accomplishment is measured through the creation of revenue and profit. In the helping professions, accomplishment is measured through caring for, educating and rehabilitation of one's service recipients. Consequently, most people that enter the helping professions do so with the expectation that intrinsic rewards will be the primary source of personal accomplishment. In the sales profession, however, personal accomplishment is generally derived from the attainment of extrinsic rewards, such as sales profit quotas.

When salespeople consistently fail to achieve performance targets, they are likely to lose confidence in their abilities, resulting in a perceived discrepancy between their performance expectations and their current reality. This discrepancy is likely to result in feelings of reduced personal accomplishment, which can eventually develop

into emotional exhaustion or depersonalisation, depending on to whom salespeople attribute responsibility for their reduced performance. If salespeople attribute responsibility for diminished personal accomplishment to themselves, they are likely to experience emotional drain and ultimately emotional exhaustion. If, however, they attribute responsibility for their diminished personal accomplishment to others, they may develop depersonalisation (Lewin & Sager 2007).

Lewin and Sager (2007) contend that in the sales profession, reduced personal accomplishment develops first, followed by either emotional exhaustion and depersonalisation or both. Shepherd et al. (2011) have, however, not found support for this sequence when applying it to an independent sample of sales professionals. They instead confirm the temporal sequence proposed by Maslach et al. (2001), namely that emotional exhaustion occurs first, followed by depersonalisation and then reduced personal accomplishment.

Measuring burnout among client service employees

In accordance with Maslach and Jackson's (1981) definition of burnout, which states that burnout occurs among individuals that do people work of some kind, the original MBI-HSS was developed for application in situations where the employee deals with the psychological, physical and social problems of service recipients (Maslach & Jackson 1996). These occupations are generally accompanied by the development of strong emotional feelings towards the client or service recipient. Once it was revealed that burnout can occur across various occupations, two additional Maslach Burnout Inventories were developed. The Maslach Burnout Inventory Educators survey (MBI-ES) was developed for use in the educational arena through the replacement of the word "recipients" with "students", while the Maslach Burnout Inventory General Survey (MBI-GS) can be applied across any job situation (Schaufeli 2003).

The MBI-GS differs substantially from the MBI-HSS in that it is applicable to occupational groups that do not have direct personal contact with service recipients or that only maintain casual contact with people at work (Schaufeli, Leiter, Maslach & Jackson 1996). Consequently, the 16 items of the MBI-GS do not emphasise the service relationship and do not make reference to people as the source of one's feelings towards work. The items of the exhaustion subscale are generic, without an emphasis on emotions towards service recipients. The depersonalisation subscale is replaced by a cynicism subscale, which reflects a distanced attitude towards work as opposed to personal relationships at work. The personal accomplishment subscale is replaced by a professional efficacy subscale, which encompasses both social and non-social

aspects of accomplishments at work (Maslach, Jackson & Leiter 1996; Schaufeli & Bakker 2004). As a result of these substantive changes from the original instrument, it has been argued that the MBI-GS defines burnout as a “crisis in one’s relationship with work, not necessarily in one’s relationship with people at work” (Schaufeli et al. 1996: 20).

A number of alternative burnout measures exist, but they too do not take the relational aspects of service work into account. The Burnout Measure (BM), arguably the second most widely applied burnout measure (after the MBI-HSS), measures burnout as comprising three kinds of exhaustion, namely emotional, cognitive and physical exhaustion (Pines & Aronson 1988). Although the instrument was designed for application outside the human service professions, it has been extensively criticised on the grounds that it is difficult to discriminate some of its items from similar constructs such as depression and fatigue (Enzmann, Schaufeli, Janssen & Rozeman 1998). Furthermore, like the MBI-GS, the BM does not include a measure associated with the interpersonal nature of service work.

Developed in Germany, the Oldenburg Burnout Inventory (OLBI) includes only two factors, namely exhaustion and disengagement from work (Demerouti, Bakker, Vardakou & Kantas 2003). Exhaustion is operationalised as including physical, affective and cognitive exhaustion, hence rendering it applicable to occupations that require physical work (Demerouti et al. 2003). Disengagement refers to the act of distancing oneself from work and “experiencing negative attitudes towards work object, work context and one’s work in general” (Demerouti et al. 2003). According to Schaufeli (2003), the OLBI is currently the only viable alternative to the MBI-GS in general work settings, but does unfortunately not include a measure of the interpersonal nature of client service work.

The Copenhagen Burnout Inventory (CBI) is the most recently developed burnout measure. The CBI is based on the conceptualisation of burnout as consisting of three components, namely work-related burnout, personal burnout and client-related burnout (Kristensen, Borritz, Villadsen & Christensen 2005). The developers of the CBI conceptualise burnout as comprising mainly fatigue and exhaustion, and do not include the withdrawal/depersonalisation component of burnout (Schaufeli & Taris 2005). While the client-related component refers to exhaustion attributed to client interaction, it does not make reference to the depersonalisation of clients. Furthermore, the definition of “client” in the instrument is rather broad, and includes reference to co-workers, students, trainees or pupils. With the exception of a recent study conducted by Smit (2011), the CBI has also not been validated for use within the South African context.

Problem statement and research question

The MBI-HSS remains the only burnout measure validated in the South African context that measures the relational aspect of service work (Fourie 2004; Jordaan, Spangenberg, Watson & Fouché 2007; Naudé & Rothmann 2004; Van der Colff & Rothmann 2009). As noted earlier, the MBI-HSS was developed for use among human service professionals that provide a care or treatment for service recipients; it is not regarded as appropriate for application among employees working outside of the human service profession (Maslach & Jackson 1996). Studies that have applied the MBI-HSS to occupations outside the human service profession report significant threats to the factor structure of the original instrument, suggesting that the three-factor model is not consistent across occupations (Garden 1987; Gryskiewicz & Buttner 1992; Leiter, Clark & Durup 1994). In particular, the depersonalisation and emotional exhaustion subscales tend to collapse into a single factor when applying the original MBI outside of the human services. For example, when measuring burnout among a sample of graduate business students, Garden (1987) found that the depersonalisation component did not emerge. Similarly, when testing the factor structure of the MBI on a sample of computer company employees, Evans and Fischer (1993) found that the depersonalisation factor did not form a coherent or meaningful factor in the non-human service sample.

According to Garden (1987), the reason for this may be that the job demands typical of the human service professions differ from the job demands found in other occupations, resulting in a different response profile on the MBI. It has also been argued that the emotional exhaustion factor represents the only intrinsic dimension of burnout, and that the depersonalisation is an artefact of the human service professions (Evans & Fischer 1993).

While depersonalisation has traditionally been linked to the human service occupations that maintain close interpersonal relations with clients (Maslach et al. 2001), on theoretical grounds one cannot argue that depersonalisation is not a valid stress-related outcome in other service-orientated jobs, such as client service employees, where interpersonal relationships are important. Furthermore, research shows that it is the very interpersonal nature of most service work that contributes to burnout in the service setting (Buunk et al. 2007; Vanheule et al. 2003; Vanheule & Verhaeghe 2004, 2005). The measurement of burnout in the client service environment should therefore take the interpersonal nature of client service work into account. Since the MBI-HSS remains the only viable burnout measure that takes this aspect of service work into account, the use of the MBI-HSS when measuring burnout among client service employees is proposed.

The aim of the current research is to explore the factor structure of the MBI-HSS when applied to client service professions, and is guided by the following research question:

Would the MBI-HSS yield a three-factor structure when applied to a sample of South African client service employees?

Research methodology

Research design

A cross-sectional quantitative survey design was used to achieve the research objective.

Participants

Two hundred and seventeen employees from a non-probability convenience sample of three large South African client service organisations (referred to in this paper as Company M, Company F and Company T) were invited to participate in the study.

Company M is an international marketing research company with regional offices throughout South Africa. At the time of the research, the company had approximately 65 client service employees in employment including research executives, account executives and business managers. Forty-seven inbound call centre consultants formed the sample for Company F, a large insurance company offering commercial, personal, agricultural and corporate insurance. The 47 client service consultants are responsible for registering claims, driving the claims process and dispatching support services to clients in need. Company T provides information and communication technology-based business solutions and services for companies in the mining, petrochemical, communication and healthcare industries. With regional offices across Africa and Europe, the company provides technology infrastructure, business applications, network consulting and integration and information systems outsourcing. The sample of 105 employees from Company T included customer engineers, network engineers and team leaders who provide IT support and services.

While all respondents assume a client-facing, boundary-spanning role and interact with clients on a daily basis, it should be noted that the employee–client interface utilised by each of the three companies differs. In the case of Company F, client service employees engage with the client either telephonically or electronically. At no stage of the client interaction do they establish face-to-face contact with the client. Respondents from Company T and Company M, however, establish face-to-face, electronic and telephonic contact with the client.

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A total of 100 responses were returned, resulting in a total response rate of 46 per cent. The response rates for each of the three companies included in the sample differed substantially, with Company M reflecting a response rate of 35 per cent (23 responses out of a sample of 65); Company T a response rate of 54 per cent (57 responses out of a sample of 105) and Company F a response of 43 per cent (20 responses out of a sample of 47).

Fifty-five per cent of respondents were male, and the mean age of respondents was 32 years ($SD=8.85$), suggesting that the respondents are relatively young. The largest cohort of respondents was aged between 20 and 31, comprising 58 per cent of the sample. Only three per cent of the sample were black, while 18 per cent were coloured. One per cent classified themselves as Indian and 73 per cent as white. The sample is therefore not representative of the South African population from a population group perspective, since the majority of South Africans are black. The majority of respondents (71 per cent) have a post-matric qualification, suggesting that the findings of the study could be generalisable to white collar service workers. More than half of respondents (57 per cent) had been with their organisations for five years or less, while the mean number of years working in a client service environment was 8.84 ($SD=6.88$).

Measuring instruments

Burnout was measured using the MBI-HSS (Maslach & Jackson 1996), which measures burnout according to three dimensions, namely emotional exhaustion (EX), depersonalisation (DP) and reduced personal accomplishment (RPA). While the MBI-HSS was developed for use among human service professionals that provide care or treatment to service recipients, it has been adapted to a range of occupational situations through the substitutions of the word “recipients” with an appropriate alternative (Golembiewski, Boudreau, Munzenrider & Lou 1996; Singh et al. 1994). In the present study, the word “recipients” was replaced with “clients”. Emotional exhaustion was measured using nine items (e.g. ‘I feel used up at the end of the workday’), while depersonalisation was measured using five items (e.g. ‘Working with clients directly puts too much stress on me’). Reduced personal accomplishment was measured through eight items (e.g. ‘I have accomplished many worthwhile things in this job’).

Each of the 22 items measures burnout on a seven-point frequency scale ranging from ‘never’ to ‘every day’ (Maslach & Jackson 1996). The MBI-HSS provides burnout scores along a continuum ranging from high to low burnout. A high degree of burnout is reflected by high scores on the emotional exhaustion and depersonalisation scales and low scores on the personal accomplishment scale. Scores are considered high

when they are in the upper third of the normative distribution. Average scores are situated in the middle third, while low scores are situated in the lower third (Maslach & Jackson 1996).

The internal reliability coefficients for all three subscales of the MBI-HSS are high, with emotional exhaustion, depersonalisation and reduced personal accomplishment displaying averages across studies of 0.88, 0.71 and 0.78 respectively (Aguayo, Vargas, De la Fuente & Lozano 2011). Standard errors of measurement are reflected as 3.80, 3.16 and 3.73 for emotional exhaustion, depersonalisation and personal accomplishment respectively (Maslach et al. 1996). The convergent validity of the instrument is reasonable, with emotional exhaustion and depersonalisation displaying correlations exceeding 0.5 with other burnout self-report measures. Correlations between these measures and the personal accomplishment component are lower at $r = 0.3$ (Schaufeli & Enzmann 1998). The test-retest reliability of the instrument tends to be reliable over time, with the MBI-HSS displaying test-retest coefficients of between 0.60 and 0.82 across short periods of up to a month, but then dropping slightly when the periods are longer (Schaufeli & Enzmann 1998).

The use of the MBI-HSS has been scientifically validated in the South African context, albeit among human service professionals (Fourie 2004; Jordaan et al. 2007; Naudé & Rothmann 2004; Van der Colff & Rothmann 2009). While researching burnout among nurses caring for people with Alzheimer's disease, Heyns, Venter, Esterhuysen & Odendaal (2003) established internal consistencies ranging from 0.73 to 0.61 on all three dimensions. In a study that aimed to validate the MBI-HSS among emergency medical technicians, the three factor structure of the instrument was confirmed with acceptable internal consistencies (Naudé & Rothmann 2004). Jordaan et al. (2007) also confirmed the three-factor structure on a sample of 238 clinical and counselling psychologists with internal consistencies of 0.91, 0.78 and 0.64 for emotional exhaustion, depersonalisation and personal accomplishment respectively. Most recently, Van der Colff and Rothmann (2009) confirmed the three-factor structure among registered nurses in South Africa, with Cronbach's alphas for emotional exhaustion (0.88), depersonalisation (0.72) and personal accomplishment (0.71) displaying strong internal consistencies.

Research procedure

Permission for the study was obtained from each of the participating organisations. As recommended by Cavusgil and Elvey-Kirk (1998) and Yammarino, Skinner and Childers (1991), each of the potential respondents was e-mailed an introductory letter outlining the purpose of the research and informing them that they would be posted a copy of the survey. Respondents were informed that participation in

the research was completely voluntary and that all responses would be treated as confidential.

Approximately one week after e-mailing all potential respondents the introductory letter to the survey, each respondent was posted a survey questionnaire and a pre-paid return envelope addressed the researcher's private bag. Respondents were given three weeks to complete the questionnaire and post it back to the researcher. Three follow-up e-mail reminders were sent to all potential respondents in an effort to increase the response rate.

Statistical analysis

Statistical analysis of the data was conducted using the Statistical Package for the Social Sciences version 22 (SPSS for Windows 2013). Prior to the commencement of the statistical analysis, all the personal accomplishment items were re-coded in the opposite direction to conform to the direction of the negatively phrased emotional exhaustion and depersonalisation items. By the Central Limit Theorem, normality of distributions was assumed (Lacey & Philipp 1990) and tested using normal probability plots, box plots and stem and leaf plots. Principal component analysis with oblimin rotation was performed on all 22 items of the instrument (Matsunaga 2010) to determine whether the item loadings conformed to the three-factor structure proposed by Maslach and Jackson (1996). Factor loadings greater than 0.5 were regarded as sufficient for inclusion (Hair, Anderson, Tatham & Black 1998). Once a satisfactory item structure was identified, the reliability of each scale was tested using the Cronbach's alpha coefficient. As suggested by Nunnally and Bernstein (1994), a Cronbach's alpha of greater than 0.7 was regarded as sufficient.

Results

To examine the factor structure of the MBI-HSS for the sample of client service employees, the 22 items were subject to principal component analysis. Prior to performing the principal component analysis, the suitability of the data for factor analysis was assessed. The Kaiser-Meyer-Olkin value was 0.85, exceeding the recommended value of 0.5 (Kaiser 1974, as cited in Dziuban & Shirkey 1974), and Bartlett's test of sphericity (Bartlett 1950) reached statistical significance, supporting the factorability of the correlation matrix (Dziuban & Shirkey 1974).

The exclusive use of eigenvalues greater than one to determine the number of underlying factors in a questionnaire has been questioned (Floyd & Widaman 1995). A scree plot inspection was therefore conducted and revealed three distinct

components. For the first round of principal component analysis, a three-factor solution was specified. Six eigenvalues greater than one were identified, and the cumulative proportion of variance explained by the three factors representing the highest eigenvalues stood at 55 per cent, with component one contributing 32.61 per cent, component two contributing 15.18 per cent and component three contributing 7.15 per cent.

To aid with the interpretation of the analysis, oblimin rotation was performed (Matsunaga 2010). As recommended by Hair et al. (1998) factors loadings smaller than 0.5 were suppressed due to the size of the sample (N=100).

The factor loadings presented in Table 1 show considerable divergence from the original factor structure of the MBI-HSS.

Eight of the nine emotional exhaustion factors loaded on component one (emotional exhaustion), with the exception of V16 ('Working with clients all day is really a strain for me') which loaded on component three (depersonalisation). Seven of the eight reduced personal accomplishment items loaded on component two (reduced personal accomplishment), with the exception of V12 ('I feel very energetic') which loaded on component one with the emotional exhaustion items. Component three (depersonalisation) proved unstable, as only two of the original five depersonalisation items loaded on component three. Variables V10 ('I've become more callous towards people since I took this job') and V22 ('I feel my clients blame me for some of their problems') failed to load on any component, while V11 ('I worry that this job is hardening me emotionally') loaded on component one (emotional exhaustion).

Based on conceptual and empirical grounds, the five problematic items discussed above were removed, and a second round of principal component analysis was performed on the remaining 17 items. A three-factor solution was again specified. The Kaiser-Meyer-Olkin value was 0.84, exceeding the recommended value of 0.60, and Bartlett's (Bartlett 1950) test of sphericity reached significance. The three components accounted for 59 per cent of the variance in the data space, with component one (emotional exhaustion) accounting for 33 per cent of the variance, component two (reduced personal accomplishment) accounting for 18.4 per cent of the variance and component three (depersonalisation) accounting for 7.5 per cent of the variance. As indicated in Table 2, all eight remaining emotional exhaustion items loaded on component one, while all seven remaining reduced personal accomplishment items loaded on component two. Only two of the original depersonalisation items were retained in the second round of principal component analysis, both of which loaded on component three.

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Table 1: Rotated pattern matrix of modified MBI-HSS: 22 items (N=100)

		Component 1	Component 2	Component 3
Item	Factor on which item was expected to load	Factor loadings		
V3	Emotional exhaustion	.869		
V8	Emotional exhaustion	.856		
V1	Emotional exhaustion	.784		
V2	Emotional exhaustion	.773		
V14	Emotional exhaustion	.729		
V12	Reduced personal accomplishment	.681		
V20	Emotional exhaustion	.667		
V13	Emotional exhaustion	.599		
V11	Depersonalisation	.575		
V6	Emotional exhaustion	.519		
V17	Reduced personal accomplishment		.786	
V9	Reduced personal accomplishment		.771	
V19	Reduced personal accomplishment		.711	
V7	Reduced personal accomplishment		.667	
V18	Reduced personal accomplishment		.663	
V21	Reduced personal accomplishment		.560	
V4	Reduced personal accomplishment		.553	
V5	Depersonalisation			.641
V16	Emotional exhaustion			.573
V15	Depersonalisation			.553
V10	Depersonalisation			
V22	Depersonalisation			

Factor structure of Maslach Burnout Inventory Human Services Survey

Table 2: Rotated pattern matrix of modified MBI-HSS: 17 items (N=100)

		Component 1	Component 2	Component 3
Item	Factor on which item was expected to load	Factor loadings		
V8	Emotional exhaustion	.906		
V1	Emotional exhaustion	.860		
V2	Emotional exhaustion	.843		
V3	Emotional exhaustion	.825		
V14	Emotional exhaustion	.772		
V6	Emotional exhaustion	.663		
V20	Emotional exhaustion	.603		
V13	Emotional exhaustion	.600		
V9	Reduced personal accomplishment		.786	
V17	Reduced personal accomplishment		.773	
V19	Reduced personal accomplishment		.714	
V18	Reduced personal accomplishment		.697	
V7	Reduced personal accomplishment		.695	
V21	Reduced personal accomplishment		.604	
V4	Reduced personal accomplishment		.497	
V5	Depersonalisation			.843
V15	Depersonalisation			.684

Reliability analysis revealed Cronbach's alpha coefficients of 0.907 for component one (emotional exhaustion) and 0.813 for component two (reduced personal accomplishment), indicating acceptable levels of internal consistency (Nunnally & Bernstein 1994). At 0.650, the Cronbach's alpha coefficient for component three (depersonalisation) was below the recommended level of 0.7.

Table 3 presents the means and standard deviations for the emotional exhaustion and depersonalisation subscales.

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Table 3: Means and standard deviations: Emotional exhaustion and reduced personal accomplishment (N=100)

	Mean	Standard Deviation
Emotional exhaustion	20.17*	10.79
Reduced personal accomplishment	9.98**	6.89

* Scale runs from 0 to 48 where 0 = absence of burnout and 48 = high burnout.

** Scale runs from 0 to 42 where 0 = absence of burnout and 42 = high burnout.

Scores in the lower third of the normative distribution indicate low burnout. With mean scores of 20.17 (SD=10.78) for emotional exhaustion and 9.98 (SD=6.89) for reduced personal accomplishment, the sample of client service employees included in the current study presents low levels of reduced personal accomplishment and moderate levels of emotional exhaustion.

Discussion

As suggested at the outset of this paper, the negative consequences of burnout in the client service environment (Lings et al. 2014; Yagil 2006) point to the importance of finding a reliable and valid measure of burnout for use in the client service environment. While the MBI-GS has generally been regarded as the most appropriate measure of burnout among non-human service professionals, it neglects the unique interpersonal nature of service work (Shaufeli et al. 1996). To overcome this limitation, the MBI-HSS among client service employees is proposed, due to the fact that the MBI-HSS measures the interpersonal component of burnout through its depersonalisation subscale. Previous research suggests, however, that the depersonalisation subscale may become unstable when applied outside of the human service professions (Demerouti et al. 2003).

The present study therefore attempted to explore the factor structure of the MBI-HSS across a sample of client service employees in South Africa through the use of principal component analysis. The factor loadings of the first round of principal component analysis showed considerable divergence from the MBI-HSS factor structure originally proposed by Maslach and Jackson (1981). Five items failed to load on the components for which they were specified and were subsequently removed from the second round of principal component analysis. The data therefore support a two-factor structure comprising emotional exhaustion and reduced personal accomplishment when applying the MBI-HSS to a sample of client service employees. This finding is consistent with the work of Boles et al. (2000), Evans and Fischer (1993) and Garden (1987).

The results of the second round of principal component analysis (performed on the remaining 17 items), do not support the existence of three distinct burnout components when applying a modified version of the MBI-HSS to a sample of client service employees. While the measures of emotional exhaustion and reduced personal accomplishment performed well in this sample, the results cast doubt on the meaningfulness of the depersonalisation indicators in a sample of client service employees. Three of the five original depersonalisation factors had to be removed from the final round of principal component analysis, and while the remaining two items loaded strongly on component three, the internal reliability of the depersonalisation scale was not sufficient for further analysis.

The dimensionality of the MBI-HSS across a sample of client service employees is an important issue to consider, as it raises important questions regarding the construct definition of burnout across samples. According to Garden (1987), the job demands associated with the human service profession differ from the job demands found in other occupations, resulting in different response profiles across the MBI. Evans and Fischer (1993) take this argument a step further when they state that the emotional exhaustion factor represents the only intrinsic dimension of burnout, and that depersonalisation is an artefact of the human service professions. The present research has shown, however, that both emotional exhaustion and reduced personal accomplishment emerge as strong dimensions of burnout when applied to a sample of client service employees.

While it may be tempting to take the results of this study as support for a two-factor model of burnout in the client service environment, researchers and practitioners should be cautioned against this. While depersonalisation has traditionally been linked to the human service professions due to the fact that people in these occupations are required to maintain close or caring relations with service recipients (Pines & Maslach 1978), one cannot conclude that interpersonal relationships in non-human service professions are not important in the development of burnout. As we well know, the nature of client service work involves close interaction with clients, and research attests to the fact that it is the very interpersonal nature of most service work that contributes to the development of burnout in the service setting (Borgogni et al. 2012; Buunk et al. 2007; Vanheule et al. 2003; Vanheule & Verhaeghe 2004, 2005; Snyder & Claffey 2011).

Perhaps as a result of the different sequencing patterns of the three components across occupations, depersonalisation did not emerge as a distinct factor in this research. While Maslach and Jackson (1981) propose that emotional exhaustion, the individual state component of burnout, precedes both depersonalisation and feelings of reduced personal accomplishment, Lewin and Sager (2007) maintain that in

typical sales professions where a sense of accomplishment is largely derived through extrinsic rewards, reduced personal accomplishment occurs first, followed by either emotional exhaustion or depersonalisation, or both.

While the client service employees included in the current study are not representative of the sales profession, they do share similarities with traditional sales employees in that they are required to achieve certain extrinsic goals and objectives related to the service encounter. According to Lewin and Sager (2007), failure to achieve service performance expectations may result in feelings of reduced personal accomplishment. The subsequent development of emotional exhaustion and/or depersonalisation in service environments is dependent on the extent to which service employees attribute the cause of their failure to themselves or to the clients with whom they work (Lewin & Sager 2007).

Service employees working in emotionally charged environments, where there are insufficient resources to accomplish service-related tasks, may experience reduced personal accomplishment followed by emotional exhaustion. In service environments where failure is attributed to service constituents, depersonalisation is likely to occur. We can therefore tentatively speculate that the fact that depersonalisation did not emerge as a distinct factor in this sample is not necessarily evidence of the fact that depersonalisation is not a distinct component of burnout among client service employees. It could indicate that by virtue of the nature of the sample, the respondents in the current study work in service environments where attribution for failure is likely to be directed internally towards the service employee, rather than externally towards the client.

Limitations and recommendations

The fact that depersonalisation did not emerge as a distinct component should be interpreted with some caution. As suggested at the outset of this paper, previous research points out that the interpersonal nature of client service work should be considered when examining the nature of burnout in the client service environment. While the present research suggests that the generalisability of the depersonalisation dimension of burnout to a sample of client service employees is suspect on empirical grounds, the relevance of depersonalisation to the client service professions should be considered on conceptual and theoretical grounds. As Garden (1987) has pointed out, the depersonalisation concept is significantly more complex than originally thought, and may even be considered a multi-dimensional construct assuming different forms. In light of this, we would argue that further research is needed to examine both the conceptual and empirical nature of depersonalisation in the

client service environment. This might eventually require the development of a new depersonalisation scale for employees working in boundary-spanning client service roles.

As a convenience sample was used, there are limitations with respect to the generalisability of the study to the general client service employee population. Furthermore, there were differences in the employee–client interface utilised by each of the three companies, as well as the nature of service work conducted by each of the three companies included in the survey. Based on the data presented here, and the conclusions drawn from previous research that response profiles on the MBI are dependent on occupational contexts, it is recommended that future research examining the factor structure of the MBI-HSS in client service environments ensure greater homogeneity with regard to the nature of service work conducted by respondents. Researchers and practitioners are therefore cautioned against reducing burnout in the client service environment to a two-component construct before such research has been conducted.

Another limitation of the study involves the relatively small sample size in relation to the items analysed. Larger samples might provide increased confidence in the data and would facilitate the use of confirmatory factor analysis (Floyd & Widaman 1995).

Practical implications and conclusion

The negative effects of burnout in the client service environment, coupled with the prevalence of burnout in this industry, points to the importance of understanding how the unique challenges faced by client service employees contribute to the development of burnout. Research into the nature of burnout in the client service environment is, however, hampered due to a paucity of appropriate measures of burnout specific to the client service environment. Given the primary role that the interpersonal components of service work play in the development of burnout among client service employees, it is important that a measure of burnout in this environment should capture the interpersonal component. While the MBI-HSS captures the interpersonal component of service work through its depersonalisation scale, it was developed for exclusive use among human service professionals that provide care or treatment to recipients. Previous studies that have applied the MBI-HSS to occupations outside the human service professions report significant threats to the factorial structure of the original instrument, suggesting that a three-factor structure is not consistent across occupations.

Since the MBI-HSS is the only viable burnout measure that takes the interpersonal component of burnout into account, the present study set out to examine the factor

structure of the MBI-HSS when applied to a sample of client service employees. The findings of the present study do not support the existence of three distinct burnout components when applying the MBI-HSS to client service employees outside of the human service professions. While emotional exhaustion and reduced personal accomplishment emerged as distinct components of the burnout syndrome among client service employees, depersonalisation did not.

The dimensionality of burnout is important to consider when designing interventions aimed at inhibiting the development of burnout in the occupational context. If one accepts that burnout comprises dimensions that develop sequentially, then attempts to intervene in the development of burnout will benefit greatly by focusing on those dimensions that develop early in the burnout syndrome. Failure to take the sequential nature of the burnout dimensions into account will compromise the success of interventions aimed at inhibiting the development of burnout in the workplace.

Although the results of the current study suggest that the depersonalisation dimension of burnout may not be generalisable to a sample of client service employees, the relevance of an interpersonal dimension of burnout should be considered on conceptual grounds (Borgogni et al. 2012). As numerous scholars have pointed out, interpersonal stressors have explained more variance in burnout scores than job or organisational variables. Failure to recognise this interpersonal component in the measurement of burnout could therefore hamper efforts aimed at reducing burnout in the service environment. Scholars and practitioners committed to reducing burnout in the client service environment would therefore benefit from further exploration into the conceptualisation and measurement of the interpersonal component of burnout in the client service environment.

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