



BISHOP
GROSSETESTE
UNIVERSITY

[BG Research Online](#)

Sofologi, M., Efstratopoulou, M. and Dunn, T.J. (2018). Predicting burnout syndrome in Greek mental health professionals. *Journal of Social Service Research*.

This is an Accepted Manuscript published by Taylor and Francis in its final form on 28 August 2018 at <https://doi.org/10.1080/01488376.2018.1480556> .

This version may differ slightly from the final published version.

Copyright is retained by the author/s and/or other copyright holders.

End users generally may reproduce, display or distribute single copies of content held within BG Research Online, in any format or medium, for personal research & study or for educational or other not-for-profit purposes provided that:

- The full bibliographic details and a hyperlink to (or the URL of) the item's record in BG Research Online are clearly displayed;
- No part of the content or metadata is further copied, reproduced, distributed, displayed or published, in any format or medium;
- The content and/or metadata is not used for commercial purposes;
- The content is not altered or adapted without written permission from the rights owner/s, unless expressly permitted by licence.

For other BG Research Online policies see <http://researchonline.bishopg.ac.uk/policies.html>.

For enquiries about BG Research Online email bgro@bishopg.ac.uk.

Predicting burnout syndrome in Greek mental health professionals

Maria Sofologi², Maria Efstratopoulou¹, & Thomas Dunn¹

¹Bishop Grosseteste University, School of Social Sciences, UK

²Aristotle University of Thessaloniki, Department of Psychology, Greece,

Abstract

The aim of this research study was to explore predictors of burnout in clinicians working across different mental health settings in Greece. The Maslach & Jackson Inventory (MBI; Maslach & Jackson, 1981) was used to evaluate burnout syndrome and assess the relationship between demographic factors (age, children, education & job experience) and each sub-factor (emotional exhaustion, depersonalisation & personal accomplishment) of the MBI. Results revealed that out of three burnout factors, emotional exhaustion (EE) and personal accomplishment (PA) demonstrated one significant predictor each whereas depersonalisation (DP) showed no significant predictors. In addition, job experience (years in the job) was found to be a significant predictor of emotional exhaustion in clinical staff. Further analysis showed no significant differences across job type for emotional exhaustion, depersonalisation, and personal accomplishment. The findings are discussed with a focus on prevention and coping strategies for clinicians working in mental health settings.

Corresponding author:

Dr. Maria A. Efstratopoulou

School of Social Sciences

Longdales Road

LN13DY, Lincoln, UK

maria.efstratopoulou@bishopg.ac.uk

Early research investigating burnout was largely conducted in the caring professions (e.g. Freudenberg, 1974; Maslach, 1976), where the pathway of burnout was conceptualised within an interpersonal context, rather than it being considered an individual stress response (Maslach, Schaufeli, & Leiter, 2001). As such, burnout is hypothesised to be highly prevalent in caring professions where the interactions with patients (Kilfedder, Power, & Wells, 2001; Tillet, 2003) can be emotionally demanding. A review by Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, (2012) indicated the prevalence of high levels of burnout for staff working in mental health settings to range from 21% to 67%. The samples included in Morse et al.'s (2012) review represented community mental health workers, directors of community mental health centers, social workers, general mental health workers, and forensic mental health workers (Oddie & Ousley, 2007; Rohland, 2000; Siebert, 2005). Thus, it is evident that burnout exists for a range of professions working within mental health services. While research indicates that working in a 'critical occupation' can increase workers' exposure to traumatic experiences, it is apparent from the literature that not all staff members experience trauma reactions as a result of their work. This suggests that other mechanisms may exist to help staff manage their work experiences, thus increasing their resilience to encountering difficult work situations (Clarke, 2008, which may be linked to managing their experience of burnout.

Burnout has important implications for staff, service users and organisations. For staff, burnout has been negatively associated with emotional and physical wellbeing (Edwards & Burnard, 2003), lowering morale and producing negative responses to service user behaviour (Rose, Horne, Rose, & Hastings, 2004). Furthermore, service users cared for by burned-out staff experience deterioration in the quality of their care, reduced contact with staff, lower levels of staff willingness to help (Rowe & Sherlock, 2005), and a lack of empathic response to their needs (Fagin, Brown, Bartlett, Leary, & Carson, 1995; Fagin, Carson, Leary, De Villiers, Bartlett, O'Malley, West, &

McElfatrick, 1996). Moreover, these service users are subject to disruption of their continuity of care (Boyer & Bond, 1999) and a reduction in collaborative and attentive care (Corrigan, 1990). Additionally, negative attitudes of staff have been linked to poorer outcomes for service users (Gowdy, Carlson, & Rapp, 2003) and poor user satisfaction with services (Garman, Corrigan, & Morris, 2002).

The most influential burnout definition describes burnout as a three dimensional construct composed of emotional exhaustion (EE), depersonalisation (DP), and professional accomplishment/efficacy (PA) (Maslach et al., 2001). The standard measuring instrument (Schaufeli, 2003) is the Maslach Burnout Inventory (MBI) which currently has three distinct versions in use. Early research on burnout described it as a syndrome characterising professions that involve demanding interpersonal interactions (Maslach et al., 2001). Thus the first two forms tend to be addressed to healthcare professionals: Human Services Survey (MBI-HSS) (Maslach et al., 1981, 1986) and teachers: Educators Survey (MBI-ES) (Maslach et al., 1986). Both MBI-HSS and MBI-ES became widely used and their factorial validity has often been tested with studies offering divergent results. The MBI-HSS' three-factor structure has been validated on samples of healthcare professionals (Hallberg & Sverke, 2004) and social workers (Kim & Ji, 2009).

While this tool has been widely implemented and recognised for its use across a range of settings, its development and the definition of burnout have been criticised for their atheoretical nature. Since its original development, a number of researchers have proposed developmental models of burnout, in an effort to provide a framework for understanding this phenomenon. Developmental models of burnout Initial explorations of burnout began through bottom-up approaches investigating personal experiences of the workplace through qualitative research designs (Freudenberger, 1974; Maslach, 1976). Since these initial explorations, theoretical models of burnout

have developed, along with an increasing number of empirical studies (Maslach et al., 2001).

The aim of this study is to explore the factors that could predict burnout in clinicians working in different mental health settings in Greece. The Maslach & Jackson Inventory (MBI; Maslach et al., 1981) was used to evaluate burnout syndrome and assess the relationship between demographic factors (age, children, education & job experience) and each sub-factor (emotional exhaustion, depersonalisation & personal accomplishment) of the MBI.

Method

Assessment instrument (MBI)

The MBI—HSS was designed for use with staff working in ‘human services’ (i.e., services that aim to meet human needs, such as the medical profession). Maslach et al. (1986) hypothesised that this population was at greater risk of developing burnout due to close and frequent interactions that focus on clients’ problems. Problems can include psychological, social, or physical difficulties, which are often experienced in the context of strong emotional reactions. As problems are often complex, it follows that effective solutions can also be complex. The development of burnout becomes increasingly likely when frequently working with complex problems in the context of strong emotional reactions. The MBI is a 22-item self-report measure designed to ascertain the level of burnout that is experienced by an individual. It assesses three core components of burnout: Emotional Exhaustion (EE), Depersonalisation (DP) and Personal Accomplishment (PA). EE is a measure of feeling emotionally impoverished by one’s work, whereas DP is a measure of impersonal response towards service users. PA relates to feelings of competence and achievement in one’s work. Each of these core components is measured separately and assessed along a continuum that can be categorised as ranging from low, to moderate, to high experiences of each component.

High levels of burnout are present as scores increase on the EE and DP subscales and decrease on the PA subscale. Average levels of burnout are thought to be present when moderate scores are obtained across each subscale. The MBI has demonstrated good prior psychometric properties with reliability coefficients in the region of 0.81 and 0.92 for EE, 0.57 and 0.82 for DP and 0.50 and 0.86 for PA (Aluja, Blanch & Garcia, 2005; Kim et al., 2009; Maslach et al., 1981; Richardsen & Martinussen, 2005).

Results

Descriptive statistics & reliability analysis

Participant demographics can be seen in Table 1. As has been previously noted, a small number of varying items in the MBI can demonstrate weak factor loadings on certain latent factors (see Loera, Converso & Viotti, 2014 for an overview). For this reason, a confirmatory factor analysis was carried out to assess the dimensionality of the MBI in the current sample (see Figure 1). Items fourteen and twenty-two were removed from all further analysis due to weak or negative loadings with their hypothesized latent factors. These items have demonstrated similarly weak loadings previously (Lee, Chein, Yen, 2013). The reduced MBI items were shown to load well onto the three distinct factors (emotional exhaustion, depersonalisation & personal accomplishment). The direction and strength of relationships between the three latent factors is reflective of that seen in previous samples (Loera et al., 2014; Pisanti, Lombardo, Lucidi, Vviolanti & Lazzari, 2013). For example, personal accomplishment shows a negative relationship with depersonalisation and emotional exhaustion, and emotional exhaustion has a positive relationship with depersonalisation (see Figure 1). Owing to the relatively small sample size and low degrees of freedom, fit statistics (e.g., RMSEA) tend not to be informative and are therefore not reported for the CFA (Kenny, Kaniskan, & McCoach, 2014). In light of this, further reliability estimates in the form of McDonald's Omega (Dunn, Baguley, & Brunsten, 2013) are calculated to assess the

internal consistency of each sub-factor. Results show good levels of consistency among sub-factor items (see Table 2).

Table 1. Participant demographics

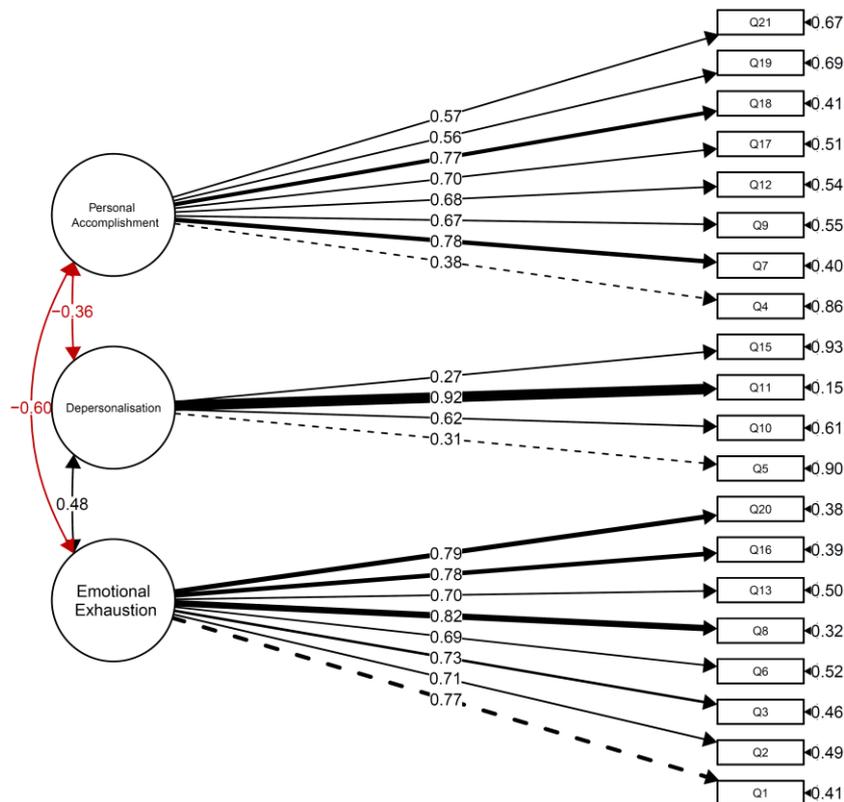
	Frequency	Mean (SD)
Gender		
Male	31%	
Female	69%	
Age		42.03 (8.25)
Marital status		
Married	4%	
Not married	64%	
Divorced	31%	
Number of children		0.98 (1.01)
Years in education		13.99 (2.20)
Mental health setting		
Day centre	11%	
Hospital	16%	
Protected Appa	2%	
Residential House	71%	
Work status		
Administrator	3%	
Care giver	38%	
Nurse	36%	
Psychiatrist	6%	
Psychologist	10%	
Social worker	6%	
Supervisor	2%	
Job experience (years)		9.60 (6.20)

Table 2. Descriptive & reliability statistics for the MBI

	Mean (SD)	Omega (95% CI)
Emotional exhaustion	17.26 (8.09)	0.83 (0.76-0.88)
Depersonalisation	7.83 (3.80)	0.75 (0.73-0.86)
Personal accomplishment	38.57 (7.00)	0.82 (0.72-0.87)
MBI total	63.57 (9.24)	--

Note: Omega is not calculated for MBI total due to established multi-dimensionality of the scale

Figure 1. Standardised estimates for the MBI latent factors



Examining predictors of burnout

Three structural equation models (SEM) were estimated to assess the relationship between demographic factors (age, children, education & job experience) and each sub-factor (emotional exhaustion, depersonalisation & personal accomplishment) of the MBI. Job role, having more than two factors, was assessed separately using a one-way ANOVA.

Out of three burnout factors, emotional exhaustion and personal accomplishment demonstrated one significant predictor each whereas depersonalisation showed no significant predictors. In light of this, only emotional exhaustion and personal accomplishment models are reported. Results show job experience (years in the job) to be a significant predictor of emotional exhaustion in clinical staff (see Figure 2). Specifically, as the number of years increased so did experiencing emotional exhaustion. In comparison, the age of the clinician, number of children they have and level of education had no significant impact on experiencing

emotional exhaustion (see Table 3). The second SEM model, treating personal accomplishment as the latent outcome variable, showed that the number of children a clinician has, to be a significant predictor of personal accomplishment in their job. In comparison, age, level of education and job experience did not impact an individual's level of personal accomplishment.

Table 3. Parameter estimates for demographics predicting sub-factors of burnout

	<i>Estimate</i>	<i>SE</i>	<i>z-value</i>	<i>P-value</i>
Emotional exhaustion ~				
<i>Age</i>	-0.01	0.01	-0.55	0.59
<i>Children</i>	-0.10	0.11	-0.05	0.34
<i>Education</i>	-0.07	0.05	-1.56	0.11
<i>Job experience</i>	0.06	0.02	3.21	<0.01
Personal accomplishment ~				
<i>Age</i>	-0.00	0.01	-0.55	0.82
<i>Children</i>	0.18	0.08	-0.05	<0.05
<i>Education</i>	0.04	0.03	-1.56	0.20
<i>Job experience</i>	-0.02	0.01	3.21	0.20

Note: Significant relationships are highlight in bold. '~' symbolises predicted by.

ANOVA results showed no significant differences across job type for emotional exhaustion ($F(3,85) = 1.80, p=0.15$), depersonalisation ($F(3,85) = 1.10, p=0.35$), and personal accomplishment ($F(3,85) = 0.60, p=0.62$). For descriptive purposes, means and ninety-five percent confidence intervals for each job type across the three sub-factors of burnout are presented in Figure 3.

Figure 2. SEM models with standardised estimates for emotional exhaustion and personal accomplishment

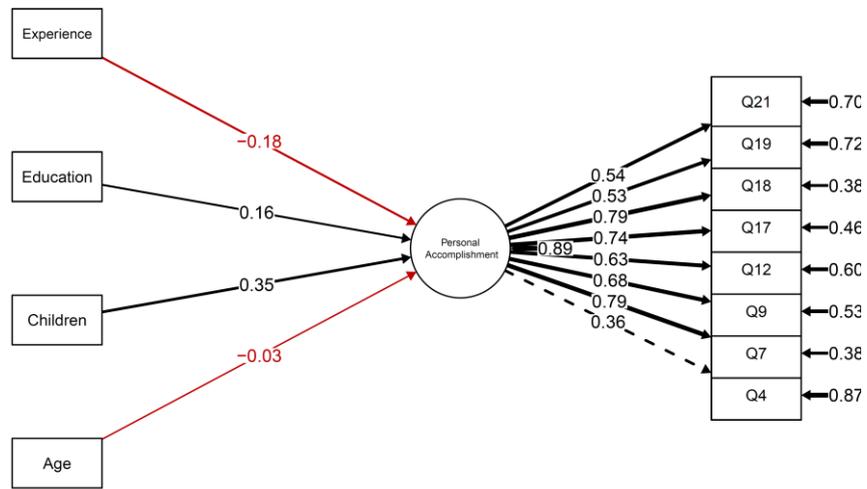
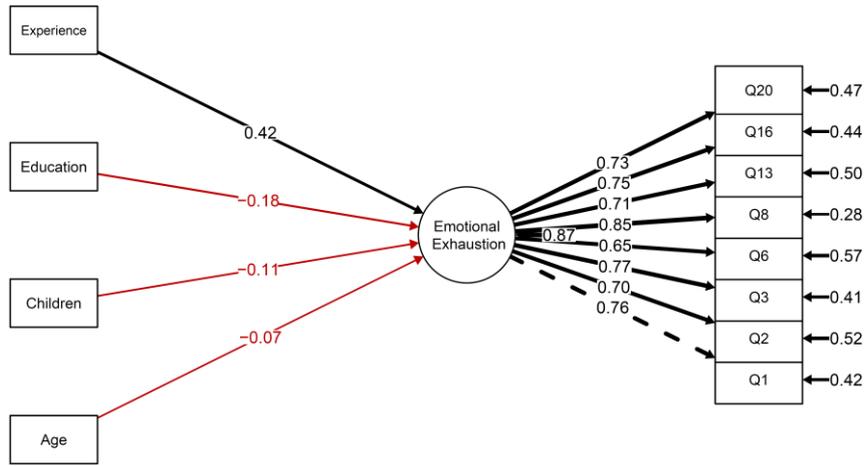
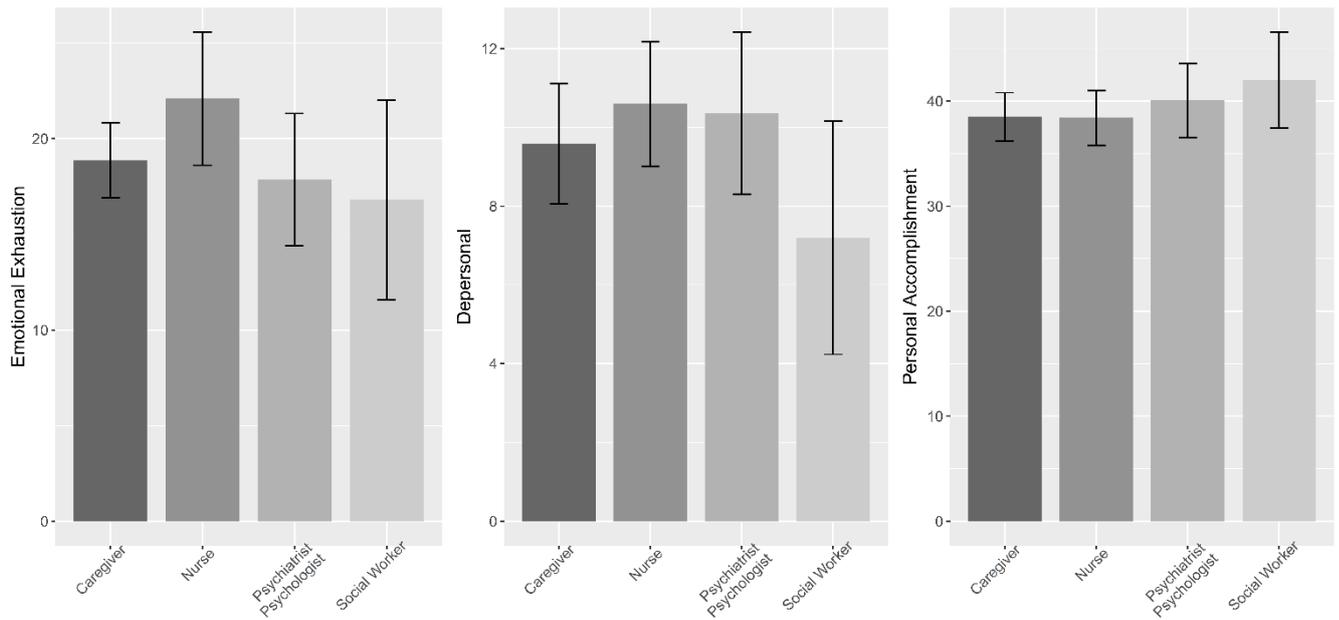


Figure 3. Means with 95% confidence intervals for job type



Discussion

The purpose of the present study was to examine burnout syndrome among clinicians in different mental health settings in Greece. This study has centered on risk factors, like job experience, marital status, level of education, etc., as well as prevention and coping strategies of burnout syndrome. Out of three burnout factors, emotional exhaustion and personal accomplishment demonstrated one significant predictor each whereas depersonalisation showed no significant predictors.

Consistent with previous research (Leiter & Maslach, 2009. Ray, Wong, White, & Heaslip, 2013), results of our analysis suggest that emotional exhaustion is strongly connected with the duration of working experience. More specifically, our results indicate that feelings of exhaustion are strongly aligned with the years a mental health professional has been in the role. Results show job experience (years in the job) to be a significant predictor of emotional exhaustion in clinical staff. Specifically, as the number of years increased so did experiencing emotional exhaustion. This means that

emotional exhaustion may compound over time leading to a greater feeling of exhaustion the longer a clinician has been in the role. However, it is surprising to note that experienced workers in the field do not develop strategies to reduce emotional exhaustion as they progress through their career. This highlights the importance for mental health institutions or community mental health centers to provide complementary strategies to combat emotional exhaustion in even the most experienced clinicians and provide tools to help cope with exhaustion. Although it is evident from the literature that burnout is more common among professionals in health settings, not all staff members experience trauma reactions as a result of their work. This suggests that for some experienced professionals there are mechanisms that may help manage their emotional exhaustion and increase their resiliency to encountering difficult work situations (Clarke, 2008).

As previously noted, emotional exhaustion can be strongly connected with job performance. More specifically, burnout can lead, for mental health professionals who stay in the job, to lower productivity and lower working effectiveness (Leiter & Harvie, 1996). At this point, it is important to mention that exhaustion is not something that is simply experienced. It prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with work overload (Schaubroeck & Jones, 2000). Once emotional exhaustion occurs, an individual may attempt to cope with it by detaching him or herself from others and developing a depersonalized response to them. Thus, emotional exhaustion should be a predictor of depersonalization, something confirmed by the current findings. Once depersonalization occurs, the individual may begin to feel less successful in their role and evaluate themselves less positively in terms of actual accomplishments (Laschinger, Leiter, Day, & Glin, 2009). Another possible interpretation for these particular results can be attributed to emotional feelings. This theoretical notion is based on the idea that many health and social service professional interactions often arouse

strong emotional feelings. As a result these strong feelings may be a significant factor for the poor quality and welfare services as well.

When treating personal accomplishment as the latent outcome variable, findings showed that the number of children a clinician has, to be a significant predictor of personal accomplishment in their job. Furthermore, marital status seems to be a significant predictor of personal accomplishment in their job. One possible interpretation for family status as a predictor is that having children provides greater personal accomplishment in someone's work. More specifically, the family role emphasizes caring, nurturance, and concern for other people and their well-being. Consequently, parent-professionals tend to be less likely to respond to people and their problems in an impersonal and cynical manner, after all, the parental role lays great emphasis on emotionality (Brotheridge & Grandey, 2002). This could suggest that having children might lead to a greater recognition of what you have achieved in your workplace specifically. In other words, having children might help to compartmentalize (or separate) private life and work life and hence invoke the realization of personal achievements at work. Another argument might be that having children increases a person's sense of empathy and enables the identification of change in a patient's outcomes. Having settled down and started a family creates a more stable life-style and a different perspective on life (Maslach et al., 1985).

Detachment from work refers to one's ability to cognitively and behaviorally disengage from work-related activities. In their research, Sonnetag, Kuttler and Fritz (2010) found that one's ability to detach from work was associated with lower levels of EE and a diminished need to engage in recovery strategies, such as relaxation techniques. The ability to detach from work was also predictive of EE levels one year later (Sonnetag, Binnewies, & Mojza, 2008). Furthermore, relaxation strategies have been linked with improved general health, better sleep and lowered levels of exhaustion (Sonnetag & Natter, 2004), whereas social activities have also been associated with a positive work-

life balance (Bakker, Demerouti, & Sanz-Vergel, 2014). Hence, each of these strategies has demonstrated the ability to restore psychological and physiological balance after stressful work experiences.

Finally, results showed no significant differences across job type for emotional exhaustion, depersonalisation, and personal accomplishment. This finding suggests that an individual's job role within a mental health setting does not impact the burnout they experience and that this is consistent across different components of burnout (emotional exhaustion, depersonalisation, & personal accomplishment).

Limitations and future research

This study has several limitations. First, due to self-reported measures results may be biased by common method variance and thus the strength of the tested relations might have been artificially inflated. Socially desirable responding is also a weakness of self-report methods. Effects of social desirability and response biases can be detrimental to outcomes, as this can affect the validity of the findings. Future studies could overcome this shortcoming by using objective rather than subjective measures, as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff's (2003).

Second, the generalizability of our results to other health care settings or to the Hellenic healthcare professionals' community is hindered by the selection bias. Although we addressed this issue by sampling participants from different hospitals and cities the research sample does not meet the requirements for a representative one of the Greek healthcare professionals. We could not investigate the differences between responders' and non-responders' answers thus we do not know if and how the selection bias might have influenced the results.

References

- Aluja, A., Blanch, A., & Garcia, L. F. (2005). Dimensionality of the Maslach Burnout Inventory in school teachers. *European Journal of Psychological Assessment, 21*, 67—76.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior, 1*(1), 389-411.
- Boyer, S. L., & Bond, G. R. (1999). Does assertive community treatment reduce burnout? A comparison with traditional case management. *Mental Health Services Research, 1*, 31—45.
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labour and burnout: comparing two perspectives of “people work”. *Journal of Vocational Behaviour 60*, 17–39.
- Clarke, J. (2008). Promoting professional resilience. In M. Calder (Ed.), *Contemporary risk assessment in safeguarding children* (pp. 164—180). Dorset: Russell House Publishing.
- Corrigan, P. W. (1990). Consumer satisfaction with institutional and community care. *Community Mental Health Journal, 26*, 151—165.
- Dunn, T. J., Baguley, T., & Brunsdon, V. (2013). From alpha to omega: a practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology, 105* (3), 399-412.
- Edwards, D., & Burnard, P. (2003). A systematic review of stress and stress management interventions for mental health nurses. *Journal of Advanced Nursing, 42*, 169—200.
- Fagin, L., Brown, D., Bartlett, H., Leary, J., & Carson, J. (1995). The Claybury

- community psychiatric nurse stress study: Is it more stressful to work in hospital or the community? *Journal of Advanced Nursing*, 22, 347—358.
- Fagin, L., Carson, J., Leary, J., De Villiers, N., Bartlett, H., O'Malley, P., West, M., & McElfatrick, S. (1996). Stress, coping and burnout in mental health nurses: Findings from three research studies. *International Journal of Social Psychiatry*, 42, 102—111.
- Freudenberger, H. J. (1974). The staff burnout syndrome in alternative institutions. *Psychotherapy Theory Research & Practice*, 12, 72—83.
- Garman, A. N., Corrigan, P. W., & Morris, S. (2002). Staff burnout and patient satisfaction: Evidence of relationships at the care unit level. *Journal of Occupational Health Psychology*, 7, 235—241.
- Glasberg, A. L., Eriksson, S., & Norberg, A. (2008). Factors associated with 'stress of conscience' in healthcare. *Scandinavian Journal of Caring Sciences*, 22(2), 249-258.
- Gowdy, E. A., Carlson, L. S., & Rapp, C. A. (2003). Practices differentiating high performing from low-performing supported employment programs. *Psychiatric Rehabilitation Journal*, 26, 232—239.
- Health and Social Care Information Centre (2014). *NHS Sickness Absence Rates, April 2014*. Retrieved from <http://www.hscic.gov.uk/catalogue/PUB15692>
- Hallberg, U. E., & Sverke, M. (2004). Construct validity of the Maslach Burnout Inventory: Two Swedish health care samples. *European Journal of Psychological Assessment*, 20, 320—338.
- Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2014). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research*, 44, (3), 486-507.
- Kilfedder, C. J., Power, K. G., & Wells, T. J. (2001). Burnout in psychiatric nursing.

- Journal of Advanced Nursing*, 34, 383—396.
- Kim, H., & Ji, J. (2009). Factor structure and longitudinal invariance of the Maslach Burnout Inventory. *Social Work Practice*, 19, 325—339.
- Laschinger, H. K. S., Leiter, M., Day, A., & Glin, D. (2009). Workplace empowerment, incivility, and burnout: Impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management*, 17, 302-311.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of applied Psychology*, 81 (2), 123-135.
- Lee, H., Chein, T., & Yen, M. (2013). Examining factor structure of Maslach burnout inventory among nurses in Taiwan. *Journal Nursing Management*. 21: 648–656.
- Leiter, M. P., Bakker, A. B., & Maslach, C. (Eds.). (2014). *Burnout at work: A psychological perspective*. Psychology Press.
- Leiter, M. P., & Harvie, P. L. (1996). Burnout among mental health workers: a review and a research agenda. *International Journal of Social Psychiatry*, 42(2), 90-101.
- Leiter, M. P., & Maslach, C. (2009). Nurse turnover: the mediating role of burnout. *Journal of nursing management*, 17(3), 331-339.
- Loera, B., Converso, D., & Viotti, S. (2014). Evaluating the Psychometric Properties of the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) among Italian Nurses: How Many Factors Must a Researcher Consider? *PLoS ONE* 9(12).
- Maslach, C. (1976). Burned-out. *Human Behaviour*, 5, 16—22.
- Maslach, C., & Jackson, S. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2, 99—113.
- Maslach, C., & Jackson, S. E. (1986). Maslach Burnout Inventory manual (2nd ed.).

Palo Alto, CA: Consulting Psychologists Press.

- Maslach, C., & Jackson, S. E. (1985). The role of sex and family variables in burnout. *Sex roles, 12*(7-8), 837-851.
- Maslach, C., Jackson, S., & Leiter, M. (1986). *Maslach Burnout Inventory* (3rd ed.). Mind Garden Inc.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology, 52*, 397—422.
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research, 39*, 341—352.
- Oddie, S., & Ousley, L. (2007). Assessing burn-out and occupational stressors in a medium secure service. *The British Journal of Forensic Practice, 9*, 32—48.
- Paris, M., & Hoge, M. A. (2010). Burnout in the mental health workforce: A review. *The journal of behavioral health services & research, 37*(4), 519-528.
- Pisanti R., Lombardo, C., Lucidi, F., Vviolanti, C., & Lazzari, D. (2013) Psychometric properties of the Maslach Burnout Inventory for Human Services among Italian nurses: a test of alternative models. *Journal of Advanced Nursing 69*(3), 697–707.
- Podsakoff, P. M., Mackenzie, J. B., Lee, J-Y., & Podsakoff, N. P. (2005). Common method biases in behavioral research: critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88* (5), 879-903.
- Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology, 19*(4), 255-267.
- Richardsen, A. M., & Martinussen, M. (2005). Factorial validity and consistency of the

- MBI—GS across occupational groups in Norway. *International Journal of Stress Management*, 12, 289—297.
- Rohland, B. M. (2000). A survey of burnout among mental health centre directors in a rural state. *Administration & Policy in Mental Health*, 27, 221—237.
- Rose, S., Horne, S., Rose, J., & Hastings, R. P. (2004). Negative emotional reactions to challenging behaviour and staff burnout: Two replication studies. *Journal of Applied Research in Intellectual Disabilities*, 17, 219—223.
- Rowe, M. M., & Sherlock, H. (2005). Stress and verbal abuse in nursing: Do burned out nurses eat their young? *Journal of Nursing Management*, 13, 242—248.
- Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *Journal of Individual Psychology*, 29, 1—15.
- Schaubroeck, J., & Jones, J. R. (2000). Antecedents of workplace emotional labor dimensions and moderators of their effects on physical symptoms. *Journal of Organizational Behavior*, 21, 163—184.
- Siebert, D. C. (2005). Personal and occupational factors in burnout among practicing social workers: Implications for research, practitioners, and managers. *Journal of Social Service Research*, 32, 25—44.
- Sonnetag, S., Binnewies, C., & Mojza, A. J. (2008). Did you have a nice evening? A day level study on recovery experiences, sleep, and affect. *Journal of Applied Psychology*, 93, 674—684.
- Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, 12, 204—221.
- Sonnetag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of Vocational Behavior*, 76, 355—365.

Sonnetag, S., & Natter, E. (2004). Flight attendants' daily recovery from work: Is there no place like home? *International Journal of Stress Management*, *11*, 366—391.

Tillet, R. (2003). The patient within: Psychopathology in the helping professions. *Advances in Psychiatric Treatment*, *9*, 272—279.

Wright, S. (2005). Burnout. A spiritual crisis. *Nursing Standard*, *19*(46), 1-24