Original Article

Is Self-Esteem Actually the Protective Factor of Nursing Burnout?

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Abstract

Background: Several studies have indicated the significance of personality in the development of burnout with certain personality traits, like self-esteem, to have the main modulating effect.
Objectives: The aim of this study was to examine the relationship between nurses' self-esteem and the interactive (or moderating) role of personal and professional factors on the burnout process.
Methodology: A cross-sectional survey was conducted. A total of 183 hospital nurses completed a self – reported questionnaire.
Results: The results indicated that respondents exhibited high scores in burnout and in the Self-Esteem Scale with female nurses to have higher scores. A positive correlation between self-esteem and all three dimensions of burnout was found. Professional identity was the strongest predictor of personal accomplishment, whilst the inter-professional collaboration was the strongest negative predictor in the model of emotional exhaustion.
Conclusions: Self-esteem might be a quality relevant to the nursing profession, still there are factors that work as a "driven force" that keep nurses' heading on. Multi-modal strategies that create and enhance structures needed for improving nurses' self-esteem should be incorporated in the nursing educational programs.

Keywords: self-esteem, burnout, nurse, professional identity, inter- intra-professional collaboration

Introduction

Nurses are among health professionals sharing the highest prevalence of burnout (Cañadas-De la Fuente et al., 2015). It's a profession with remarkable physical, psychological and emotional stress due to the sensitive working environment. Nurses should not experience burnout because it destroys creativity, reduces productivity and increases acts of poor judgment (Altun, 2002). Although, stressful aspects of the working environment are important predictors of burnout, quite a few studies have indicated the significance of personality in the development of burnout (Ang et al., 2016). Certain personality traits may act as a protective measure against burnout. For example, self-esteem may have a modulating effect on the occurrence of burnout (Gσmez et al., 2014). Some nurses are more

resilient than others against occupational stressors. Resilience could be explained by nurses' professional values that may influence a person's behavior, both consciously and unconsciously, playing a pivotal role in the manifestation of burnout (Altun, 2002). The way nurses think and feel about themselves enhances retention rates (Horton et al., 2007).Professional identity as a part of self concept is considered critical for nurses to function at a high level and benefit from it (Johnson et al., 2012). Few studies have examined inter-professional collaboration as a possible job resource, which may reduce burnout in nurses (Rafferty et al., 2001). Therefore it is highlighted that there is need for further exploring how inter-professional collaboration could predict burnout. Taking under consideration the high rates of nursing burnout, additional research is needed in order to identify the contextual factors, which either contribute to or have a synergetic effect with self esteem on burnout in nurses.

Research questions and hypothesis

The aim of the present study was to examine the relationship between nurses' self-esteem and the interactive (or moderating) role of personal and professional factors on the burnout process. Hence, the study aimed at answering the following research questions:

1. Is there a significant relationship between self-esteem perception of Greek nurses and their burnout levels?
2. Does professional identity and inter-professional- intra-professional collaboration account for the prediction variance and burnout in Greek nurses?

Background

Burnout is defined as a prolonged psychological reaction to chronic emotional and interpersonal work stressors and is divided into three dimensions: emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA) (Maslach et al., 2001). The existence of burnout syndrome can have a negative effect on patient safety (Elmariah et al., 2016) whilst accounts for nurses' poor physical health (Sorour and El-Maksoud, 2012), impaired memory (Peterson et al., 2008), job dissatisfaction (McHugh et al., 2011) and absenteeism (Lambert et al., 2015). In nursing, factors like role ambiguity (Lei et al., 2010), heavy workload (Epp, 2012), low staffing

(Karanikola et al., 2012) and exposure to death and pain (Peters et al., 2012) operate as pivotal factors for burnout.

Professional identity refers to the characteristics that designate the role and function of a given profession (Seo and Kim, 2017) and is augmented by the "position within the society", "interactions with others" and the "interpretation of the experiences"(Sutherland et al., 2010). That includes attitudes, values, knowledge, beliefs and skills that are shared with others within the professional context (Crossley and Vivekananda-Schmidt, 2009). Nurses' professional identity is constructed through endurance of difficulties and evolves during their careers, whilst occupational choice is a core characteristic of identity as career choices may be in line with self-perception (Johnson et al., 2012). Inter-professional collaboration has been valued in providing high quality of care (Kowitlawakul et al., 2016) and it is necessary in the health care setting, since there is no single profession, which can meet all patients needs (Matziou et al., 2014). It increases active participation of health professionals in decision making, ensuring respect for team member contribution (Herbert, 2005). Team role clarity and team role identification may indicate lower burnout levels (Onyett, 1997). On the other hand, self-esteem can have a buffering effect on stress control and coping (Wu et al., 2011). Self-esteem is defined as a personality trait. It is an outcome of converging personal and professional values, a motivator to maintain commitment to identity standards, and a buffer of moral distress when value incongruence is experienced (Cast and Burke, 2002). People with high self-esteem evaluate themselves positively and are proud of their achievements, while those with low self-esteem are characterized by feelings of worthlessness and lack of confidence (Rosenberg 1985). In addition, low self-esteemed individuals are emotionally more vulnerable and have less interactions with others in their workplace (Khezerlou, 2017). The association between self-esteem and burnout symptoms is well documented (Fothergill et al., 2000) and is already known that professionals with low self-esteem are more susceptible to burnout (Brown and Roloff, 2011).

Methodology

A cross-sectional survey was conducted using a sample of nurses working in a general hospital in

Greece. Participants were recruited by paper poster displays in the nursing stations of all hospital departments. The inclusion criteria were nurses with at least one year of work experience and a permanent employment status. Interested nurses who met the inclusion criteria were informed about the study and provided informed consent. Of the 200 questionnaires that were distributed, 183 nurses completed the questionnaires (response rate of 91.5%).

Data was collected using a self- administered questionnaire that was divided into five main components. The first part included socio-demographic characteristics such as: age, gender, years of experience, hospital department. The second part included the Maslach Burnout Inventory (MBI) (Maslach &Jackson, 1996) which is a 22-item Likert -7 scale ranging from "never" to "every day". The scale measures three related dimensions of burnout, namely emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). Scores are considered to be high if they are in the upper third of the normative distribution, average if they are in the middle third and low if they are in the lower third (Maslach et al. 1996). The reliability of the questionnaire was adequate in terms of Cronbach's alpha (EE, DP, and PA for this sample were good (as α =.86 , .72 and .75, respectively). The third part included the Self-Esteem Scale (RSES) (Rosenberg 1965) which is a 10 items scale, formulated as statements (five positive and five negative) and is measured on a 4 Likert scale ranging from "strongly agree" to "strongly disagree". The reliability of the Greek version (Galanou et al., 2014) was α =.73. The forth part was a specially designed questionnaire based on national and international bibliographical evidence and piloted in a Greek sample. It comprised of an inter-professional collaboration (INPC) and an intra-professional collaboration (ITPC) index that aimed at exploring the nurses' relationships with their colleagues and doctors (Dimitriadou et al. 2008). The items were measured in a 4-point scale. The reliability of the all indexes for this sample was adequate (INPC, and ITPC for this sample were α =.78 and α =.73 respectively). The final part included the Professional Identity Index that explored how nurses think and feel about themselves in relation to their nursing profession. It comprised of 6 questions measured in a 4-Likert scale. Some of the questions are as follows: "Nursing is a profession that demands

critical thinking", "Nurses do not need expertise since they only have to follow doctor's orders" and "Nursing care is crucial for patient's state of health". The reliability of the index was α =.67.

Data was collected from September 2016 until December of 2016. Approval from the scientific committee of the hospital was obtained. Participation was voluntary and participants were informed that confidentiality would be maintained, ascertaining the right to withdraw from the study at any time.

Demographic data was exported to the Statistical Package for the Social Sciences (SPSS), version 23 for data analysis. Mean scores were calculated for items measuring personality and professional traits. Spearman's rho correlation test was performed in order to examine the relationships among burnout, self-esteem, professional identity and inter- intra professional collaboration indexes. Variables showing a significant association were entered in a multiple regression model as predictors, with burnout as a dependent variable.

Results

Among 183 nurses surveyed, 15.8% were male nurses, 79.9 % had more than ten years of experience, and 73.4% were married. Additional demographic characteristics are presented in Table 1.

Occupational Burnout, self-esteem, professional identity, intra inter-professional collaboration scores

The MBI identified 25.6% of the respondents to have high EE (cut off score of $\geq$39), 25.1% having high DP (cut-off score of $\geq$17) and 27.3% having low PA (cut-off score of $\leq$42), according to the specified cut off points. Subscale score means of the three dimensions are presented in Table 2. The EE score was significantly correlated with gender t(181)=2.58,*p*=.002 and years of experience (*r*=-.245,*p*=.001). No other significant correlation was found between burnout subscale scores and demographic characteristics. Participants exhibited moderate score at the Self-esteem Scale (21.76 ± 4.1) whilst female nurses had higher scores (M=22.8, SD= 3.98) than males (M=21.2, SD=4.86), t(181)=-.108,*p*=.05.   Intra/inter-professional collaboration scores were not statistically significantly differentiated by gender, education, working department or years of experience. However, inter-professional collaboration was

found to be correlated with the number of working weekends (r=.18, p=.013) and number of night shifts per month (r=.14, p= 0.46)(Table 3.). The Professional Identity Index was significantly correlated with education t(181)=-2.116,p=.036) and registered nurses had relatively higher score (M=21.6, SD=2.14) than nursing assistants (M=20.8, SD=2.19).

Correlation between self-esteem and burnout

Significant positive correlation was found between occupational burnout scores and the Self-Esteem Scale. Moreover, the PA scale was strongly correlated (r=.34, p=.000) with the Self-esteem Scale whilst the EE scale had a weakly negative correlation (r=-.15,p=.037). Nevertheless, when both three burnout scales were controlled at the same time, no significant correlation was detected. Results of Spearman's correlation were showed in Table. 3.

Correlations between self-esteem, professional identity and inter- intra professional collaboration

Strong positive association was identified between total Self-Esteem Score and Professional identity Index (r=.42,p=.000). Moderate associations were observed between total Self-Esteem score and the Inter- Intra-Professional Collaboration Indexes (r=.19,p=.01 and r=.21,p=.02 respectively) (Table.3)

Correlations between burnout, professional identity and inter- intra professional collaboration

All burnout scales had a significant negative correlation with the Inter- Intra Professional Collaboration Indexes. More specifically, EE score had a moderate negative association with the Inter-Professional Collaboration Index (r=-.22,p=.002) and the Intra- Professional Collaboration Index (r=-.30,p=.000). The PA scale was correlated with the Professional Identity Index (r=.31, p=.000) while no significant correlation wad detected between the EE scale and the Professional Identity Index (Table. 3).

Hierarchical regression analysis

Since burnout is considered as a combination of EE,D and lack of PA (as defined by Maslach), it was accepted that it would be difficult to combine these three dimensions in a single score (Maslach et al., 1996). For this reason separated statistical analyses were performed.

A four hierarchical multiple regression analysis was conducted with emotional exhaustion, depersonalization and personal accomplishment as the dependent variables. Self esteem was entered at stage one of the regression. The professional identity was entered at stage two, the inter-professional collaboration at stage three and the intra-professional collaboration at stage four.

Hierarchical regression analysis (continue)

Hierarchical multiple regression revealed that self esteem entered at Step 1 explained 26.8% , F(1,181)=4.526, p=.035 in emotional exhaustion. When professional identity was included at Step 2 , the total variance was 32.7%, F(2,180)=3.100,p=.047. In Step 3 inter-professional collaboration explained 35%, F(3,179)=5.182, p=.002 of the variance. Finally, when the intra-professional collaboration was added, the model as a whole accounted for 41%, F(4,178)=6.152, p=.000 of the variance in emotional exhaustion (Table 4.)

In the case of depersonalization self esteem entered at Step 1 explained 32%, F(1,181)=11.55,p=.001. In step 3 Inter-professional collaboration explained 35% F(3,179)=6.060, p=.001 of the variance. In the final step, the model accounted for 36% , F(4,178)=4.562, p=.002 of the variance in depersonalization (Table 5.)

To assess the contribution of a number of independent variables to the variance of personal accomplishment, a final hierarchical multiple regression was used. Self esteem was entered at step 1 and explained 34% F(1,181)=28.273, p=.000 of the variance. In step 2 when professional identity was entered 36%, of the personal accomplishment variance was explained F(2,180)=20.611, p=.000. In step 3. 41% of the variance was explained when the inter-professional collaboration was entered F(3,179)=15.860,p=.000. Finally, when all variables were included, the model explained 43% of the variance F(4,178)=13.410, p=.000 (Table 6.)

Table 1. Demographic data (n=183)

Items	Classification	Number of people	Percentage (%)
Departments	Internal medicine	125	72.7
	ICU	58	27.3
Gender	Female	154	84.2
	Male	29	15.8
Years of experience	Less than 10	46	25.1
	11-20	81	44.3
	21-30	56	30.6
Marital status	Married	136	74.3
	Unmarried	47	25.7
Education	Registered nurses	149	81.4
	Nursing assistants	34	18.6
Job title	Nurse	138	75.4
	Chief nurse	11	6
	Nurse assistant	34	18.6

Table 2. Subscale score ranges, means and SDs (*n*= 183)

Subscale	Range of subscale values	Mean ± SD
Emotional exhaustion	12-53	30.1421± 10.74
Depersonalization	3-30	12.13± 5.59
Personal achievement	15-48	36.74± 7.03

Table 3. Correlations, Means and Standard Deviations of Study Variables

Scale	M	SD	1	2	3	4	5	6	7
1. Self-esteem	21.76	4.1	--						
2. Professional identity	21.54	2.1	.425**	--					
3. Emotional Exhaustion	30.1	10.7	-.154*	0.32	--				
4. Depersonalization	12.1	5,5	-,206**	-.099	.236**	--			
5. Personal accomplishment	36.7	7	.343**	.319**	-,087	-.339**	--		
6.Inter professional collaboration	7.73	1.7	.216**	.022	-.306**	-.122	.215**	--	
7. Intra professional collaboration	8.84	1.8	.189*	.205*	-.225**	-.174*	.235**	.396**	--

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4. Regression coefficients for predictors of Emotional Exhaustion

	R	R^2	R^2 change	B	SE	β	t	p
Step 1	.156	.27						.000
Self esteem				.41	.19	-.150*	-2.128	.035
Step 2	.182	.033	.06*					.047
Self esteem				.52	-.210	-.168**	-2.271	.001
Professional identity				.51	.396	-.198*	1.288	.002
Step 3	.283	.35	.02*					.002
Self esteem				-.415	.209	-.158*	-1.989	.048
Professional identity				.661	.390	-.134*	1,694	.009
Inter professional collaboration				-1.274	.423	-.224*	-3.011	.003
Step 4	.349	.41	.06**					.000
Self esteem				-.289	.209	-.110	-1.380	.169
Professional identity				.431	.390	.088	1.105	.270
Inter professional collaboration				-.684	.462	-.120	-1.481	.140
Intra professional collaboration				-1.447	.499	-.235*	-2.902	.004

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5. Regression coefficients for predictors of Depersonalization

	R	R^2	R^2 change	B	SE	β	t	p
Step 1	.245	.32						.001
Self esteem				-.334	.098	-.245**	-3.399	.001
Step 2	.346	.33	.01*					.047
Self esteem				-.318	-.108	-.233*	-2.06-	0.04
Professional identity				-.0.73	.0.203	-.028	-.360	.719
Step 3	.304	.35	.02**					.001
Self esteem				-.273	.108	-.200*	-2.535	.012
Professional identity				-.008	.202	-.003	-.040	.0968
Inter professional collaboration				-.545	.219	-.184*	-2.493	.014
Step 4	.305	.36	.01*					.002
Self esteem				-.264	.111	-.194*	-2.391	.018
Professional identity				-.025	.206	-.010	-.119	.906
Inter professional collaboration				-.503	.244	-.170*	-2.059	.041
Intra professional collaboration				-.104	.264	-.0.32	-.394	.694

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Table 6. Regression coefficients for predictors of Personal Accomplishment

	R	R^2	R^2 change	B	SE	β	t	p
Step 1	.368	.34						.000
Self esteem				.631	.119	.368*	5.317	.001
Step 2	.432	.36	.02*					.047
Self esteem				.457	.126	.266*	-3.619	.000
Professional identity				.800	.238	.248**	3.367	.001
Step 3	.458	.41	.05**					.000
Self esteem				.409	.127	.238*	3.226	.002
Professional identity				.729	.237	.226*	3.079	.022
Inter professional collaboration				.595	.257	.160*	2.315	.014
Step 4	.305	.44	.03*					.002
Self esteem				.349	.128	.203*	2.724	.007
Professional identity				.837	.239	.259**	3.502	.001
Inter professional collaboration				.316	.283	.085	1.117	.2.65
Intra professional collaboration				.683	.306	.169*	2.235	.027

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Table 7. Previous studies in nurses in Greece

	Emotional Exhaustion Scale Mean ± SD	Personal Accomplishment Mean ± SD	Depersonalization Scale Mean ± SD
Adali (1999)	24.01±11.34	35.05±9.47	7.8±5.8
Dilintas (2010)	25.4±11.8	34.08±6.9	9.8±6.5
Noula et al. (2010)	25.97 ± 10.56	32.35 ± 8.15	10.01 ± 6.1
Skefales el al. (2014)	27.5±11.3	32.6±9.3	8±6.1

Discussion

The paper presents the contributions of self esteem, professional identity, inter- professional and intra-professional collaboration in a model predicting each one of the three burnout dimensions.

In our study higher mean levels of EE (M=30.14) and DP (M=12.13) scores were reported as compared to results from previous studies in nurses in Greece (Table 7.). Even though the understaffing in nursing personnel in Greek hospitals is not new (Dimitriadou et al. 2009), the economic recession in Greece has made the situation worse. There is an increase in the average age of nurses working in the public sector and that is a fact that is not going to change soon since there is not expected to be a nurse recruitment in the near future. Nevertheless, a really interesting fact is that the personal achievement subscale (M=36.74) in our study presented high score, even though nurses have to work harder and have to watch their salaries cut back. According to Maslach and

Goldberg (1998) low rewards diminish the value of work and the value of the worker, developing a feeling of injustice, thus having a negative effect on personal accomplishment. However, in our study, other factors may be responsible for nurses' unexpected high score in personal accomplishment scale, perhaps the strong perception of professional identity and the feeling of supporting patients who are economically weak and unemployed. Self-esteem is considered a major problem in the nursing profession. Nurses with healthy self-esteem have better performance in their work, whilst nurses with low self-esteem are not likely to do so (Randle, 2003b). In the present study moderate self-esteem score was observed. This can be explained by the low scores in inter/intra-professional indexes, supporting the important role that plays, in the way people are treated by other healthcare professionals, in the development of their self-esteem in the hospital context.

Nurses rework their professional identities in response to changes in their professional lives (Johnson et al., 2012). In our study, this probably explains the high scores in the Professional Index. Nurses "need" to believe that they are competent and offer high quality health services, because in the physician health centered system in Greece, the only thing that can help them carry on is the strong professional identity. A positive correlation between self-esteem and all three dimensions of burnout was found. In particular, emotional exhaustion and depersonalization were negatively correlated with self-esteem, while the personal accomplishment was positively related with it. In line with the transactional model of stress and coping (Lazarus and Folkman, 1984), if an individual does not believe that he is significant or worthy, stress may be expected to appear and negative feelings may trigger avoidance behaviors. Ineffective coping with stress further exacerbates the problem and makes burnout development possible. On the other hand, people with high self-esteem have a more positive attitude towards their role at work and may handle stressful events more effectively (Fothergill et al., 2000). Self-esteem affects the relationship between job satisfaction and is the link between work performance and work role conflicts (Papanis, 2004). Studies have reported that low esteemed individuals, displayed limited coping resources, thus increased psychological distress and difficulties in controlling stressful

events (Lee et al., 2013).Emotional exhaustion is afflicted first, as it is often the earliest manifestation of burnout (Maslach et al., 2001).

The positive association between self esteem and professional identity in the present study, suggests people's ability to consider their work meaningful, judging their own worth in a way that has impact not only on their role status but on their personal control and performance as well. Professional identity was the strongest predictor of personal accomplishment. Professional identity is the individual nurse's perception of her/himself in the context of nursing practice. It is the sense of self that is derived from the role we take on in the working environment (Johnson et al., 2012). When nurses develop a deep valuing and commitment to themselves, self-esteem is enhanced, thus increase in competence and successful achievement occurs.

The inter-professional collaboration was the strongest negative predictor in the model of emotional exhaustion. Relations with doctors are an important factor that may yield benefits in terms of nurses' work engagement and clinical autonomy. Supportive and empowering relations with doctors lead nurses to positive attitudes towards their position (Gunnarsdottir et al., 2009).

Limitations

The cross sectional research design renders impossible the inferences of causal relationships among the variables concerned. Moreover, the present study relied on self report measures. Further studies that include objective measures and include larger randomized samples would be important. Caution is exerted in interpreting the quantitative associations that are presented in this study.

Conclusion

Nurses are particular vulnerable to burnout because of changeable interpersonal interactions and multidimensional organizational factors. Self-esteem might be a quality relevant to the nursing profession, still there are factors such as the professional identity that work as a "driven force" that keep nurses' heading on, despite the difficulties they encounter during their daily practice. The central problem for nurses working in the hospital environment is the dissonance between expectations cultivated during nursing studies and the reality experienced at work.

Education programs should incorporate the working process along with nursing studies and should focus on strategies that create and enhance structures needed for improving nurses' self-esteem and professional identity. This understanding can prepare nurses to become more resilient and fight back for better patient health conditions.

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