

Emotional intelligence, self-esteem and transformational leadership in nurses: a systematic review

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Abstract

The transformational leadership is a specific form of leadership that incorporates all the essential components of a leader such as dynamic, self-confidence, inspiration, emotional intelligence, that are all prerequisites of an effective leadership. The aim of this paper was to review the relationship between transformational leadership, the self-esteem and emotional intelligence of nurses. We reviewed the relevant Greek and international literature in several databases (MEDLINE, CINAHL/EBSCO, COCHRANE, SCOPUS, WEB OF KNOWLEDGE, EMBASE, EXCERPTA MEDICA, IATROTEK, Business and PSYCHINFO) by using the following keywords: «emotional intelligence», «transformational leadership», «self-esteem» και «nursing». The initial search revealed 39 research articles. Among them 30 were excluded after reading the abstracts, while 2 other articles were selected for further evaluation of the full text. Seven articles remained that fulfilled all the criteria for selection. In all those research articles there was a correlation between nurses' transformational leadership scores and emotional intelligence. Although there is a difference in the mean emotional intelligence between men and women, the gender does not affect the characteristics of transformational leadership. Except from the exploration of the role of emotional intelligence on transformational leadership, the majority of the authors also investigated the link between transformational leadership and the intention of nurses to turnover and nurses' satisfaction with their profession. Emotional intelligence is a predictor of transformational leadership of nurses. The implementation of the fundamentals of transformational leadership facilitates the personal development of nursing managers; improves their job satisfaction.

Keywords: Transformational leadership, nursing, emotional intelligence, self-esteem.

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1. Introduction

The last decade the transformational leadership is a matter or research focus in the nursing literature with an emphasis in its role to the effectiveness and quality of healthcare services provided and nurses' working environment^{1,2}. Transformational leadership incorporates several characteristics of the leader such as dynamism, self-confidence, inspiration, emotional intelligence that are prerequisites for an effective leadership³⁻⁶.

According to Coleman⁷ emotional intelligence reflects the ability to identify one's own emotions, the emotion of others, to assess them, and to control them in order to be able to adopt in different environments and fulfill the goals.

The person with a high emotional intelligence identifies his own emotions and the emotions of others, and he is able to manage them. He is very social and avoids catastrophic and problematic behaviors⁸.

Nurses are, by definition, due to their direct contact with the patients more sensitive regarding the accomplishment of patients' needs and the management of their emotions as they are well trained to do it. The development of nurses' emotional competencies is essential given that it is linked with patients' wellbeing and quality of care delivery⁹⁻¹¹. Nurses are called to manage their empathetic skills to establish a therapeutic relation with their clients^{10,12,13}.

According to Akerjordet & Severinsson¹⁴ the nurses with higher emotional intelligence develop a more profound and healing therapeutic alliance with their clients a finding that was previously supported by McQueen¹⁰ who concluded that the nurses with higher emotional intelligence provide a more patient centered care.

In the literature another factor that has been widely approached was self-esteem, at the beginning of 1970, by Korman¹⁵⁻¹⁷ who has published several papers that revealed self-esteem as a predictor of workers' motivation, attitudes and work related behavior. Later, Pierce et al.¹⁸ have introduced the term organization-based self-esteem (OBSE) that describes employees' belief about their value as members of an organization. Sasat et al.¹⁹ stressed that nurses' self-esteem is related to the supportive administration environment.

Pierce & Gardner¹⁸ believe that OBSE is affected by critical incidents that the employees come across in their workplace and by their self-efficacy and their experience to deal with those events.

The aim was to review the relationship between transformational leadership, the self-esteem and emotional intelligence of nurses.

2. Sample and Methods

We reviewed the relevant Greek and international literature in several databases (MEDLINE, CINAHL/EBSCO, COCHRANE, SCOPUS, WEB OF KNOWLEDGE, EMBASE, EXCERPTA MEDICA, IATROTEK, Business and PSYCHINFO) by using the following keywords: «emotional intelligence»,

«transformational leadership», «self-esteem» και «nursing», combined with and/or. The authors have further explored the OpenGrey literature and reviewed the references of the research manuscripts for articles that are not indexed in the above databases.

The year of publication was not used as a criterion for the exclusion of a research. On the contrary, the selection criteria were the followings:

1. published in the Greek in the English language,
2. qualitative or quantitative research,
3. research and not review,
4. not unpublished PhD or MSc thesis,
5. the sample should be nurses.

3. Main Results

The use of keywords resulted in 39 studies. Thirty of them were excluded as irrelevant based on their while two were selected for further assessment of their full text. Finally, only 7 studies were relevant to the selection criteria (Table 1). There was no study published in the Greek language.

The flow chart (figure 1) shows the flow of the literature review.

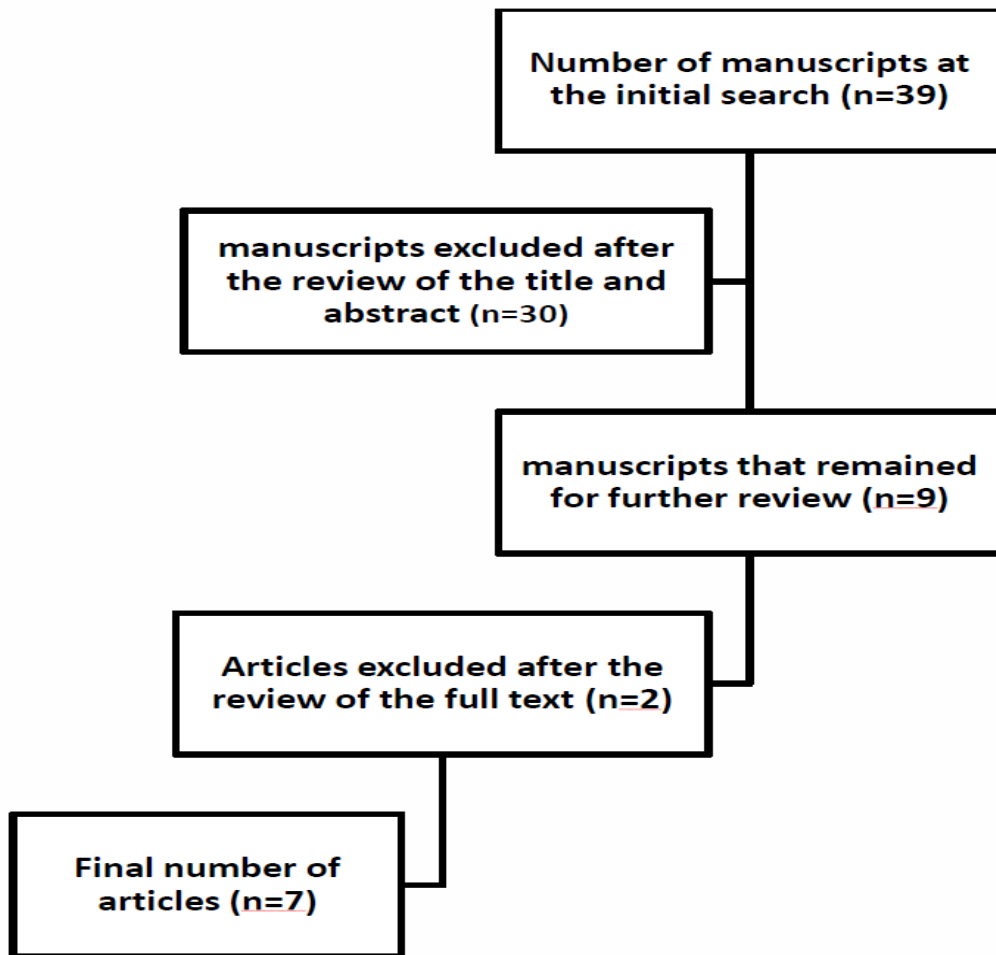


Figure 1: flow chart of literature review

Table 1: Studies relevant to the selection criteria

Authors	Title	Country	N	Scales	Results
Tyczkowski et al. (2015) [21]	Emotional intelligence (EI) and nursing leadership styles among nurse managers	USA	146 nurse managers	MLQ Form 5X EQ-i 2.0 tool	49.1% had a higher than average emotional intelligence score. Emotional intelligence explains 44% of the variance in transformational leadership
Kabeel A.R. (2016) [22]	Emotional Intelligence: A Key for Nurse Managers' Transformational Leadership Style	Egypt	48 nurse managers	Multifactor Leadership Questionnaire (MLQ) Form 6S. The Wong and Law Emotional Intelligence Scale (WLEIS)	41.7% of nurse managers had a high transformational leadership scores. 37.5% had high to moderate emotional intelligence scores There was a statistically significant correlation between emotional intelligence and transformational leadership (r=0.532; p<0.001) Variables that correlate with transformational leadership are: age (r=0.654; p<0.001), years of nursing experience (r=0.524; p=0.009), years of nursing management experience (r=0.520; p=0.009), attendance of a leadership training program (r=-0.622; p=0.005), qualification (r=-0.563; p=0.004) Variables that correlate with emotional intelligence are: qualification (r=-0.838; p=0.002), years of nursing management experience (r=0.730; p=0.008), attendance of a leadership training program (r=-0.643; p=0.008)

Crowne et al. (2017) [23]	Leading nurses: emotional intelligence and leadership development effectiveness	USA	Initially 55 individuals and after 3 years 20 nurses at nursing homes	Baron Emotional Quotient Inventory Multifactor Leadership Questionnaire An educational training program has been conducted to improve emotional intelligence and transformational leadership in three years period	In Time 1, there was no statistically significant correlation between emotional intelligence and transformational leadership. In Time 2, after the completion of the educational training program the correlation was significant ($r=0.490$; $p<0.05$)
Echevarria et al. (2017) [24]	Predictors of transformational leadership of nurse managers	USA	148 nurse managers	Multifactor Leadership Questionnaire Genos EI Inventory-concise version	Leadership intelligence did not correlate with transformational leadership ($p=0.918$). It was correlated with emotional intelligence ($r=0.59$; $p<0.001$). Emotional intelligence was the only predictor of transformational leadership that explained 34.2% of the variance. Although females has higher mean emotional intelligence scores was no statistical significant difference between the two genders. Factors that correlate with emotional intelligence are: years of nursing management experience ($r=0.19$; $p=0.023$), years of nursing experience ($r=0.10$; $p=0.024$), age ($r=0.20$; $p=0.017$)

Wang et al. (2018) [25]	When nurse emotional intelligence matters: How transformational leadership influences intent to stay	China	535 nurses	Wong and Law Emotional Intelligence Scale (WLEIS) Chinese version of the transformational leadership scale	Transformational leadership and emotional intelligence are predictors of nurses' intention to stay (explain 34.3% of variance) Transformational leadership correlates with emotional intelligence ($\beta=0.663$; $p<0.001$).
Spano-Szekely et al. (2016) [26]	Emotional Intelligence and Transformational Leadership in Nurse Manager	USA	148 nurse managers	Trait Emotional Intelligence Questionnaire Short Form (TEIQue-SF) Multifactor Leadership Questionnaire (MLQ) Short Form	Transformational leadership correlates with emotional intelligence ($r=0.47$; $p<0.001$) in nurse managers in acute care settings. Emotional intelligence and laissez-faire leadership were negatively correlated ($r=-0.43$; $p<0.001$) Emotional intelligence correlated with transformational leadership certification
Malcalm & Boakye (2017) [27]	Examining Emotional Intelligence as a Precursor of Transformational Leadership among Nurse Leaders in Ghana	Ghana	80 nursing managers	Wong and Law Emotional Intelligence Scale (WLEIS) Transformational leadership items adapted from the study of House (1998)	All the sub-dimensions of emotional intelligence correlated with transformational leadership

The literature review did not reveal any published research regarding the combination of the three keywords: transformational leadership, self-esteem and emotional intelligence. There was only one research conducted in a sample of 65 women managers in private and public sector in Pakistan²⁰, but this research was excluded according to the criteria.

Table 1 presents the studies that fulfilled the criteria. As can be seen, three out of seven studies have been conducted in USA, and none in Europe. The sample size varied ranging from 20 to 535 nurses, while the majority was nurse managers.

In the study of Tyczkowski et al.²¹ the vast majority of the participants were females (91%), half of them (45%) hold a master's degree; 35% were 61 years old, while 34% reported less than 5 years of experience as managers. Among the 146 nurses,

43% were heads of the department and 8% directors.

Kabeel et al.²² reported that 33% aged between 35-40, mainly females (66,7%), while 8,3% had a master's degree, 67% were heads of the department and 33% supervisors, with a mean working experience of 14.5 years.

In the study of Crowne et al.²³ participated 55 nurses initially but only 20 remained at all the phases of the training program. Among them there was only one male person, the majority were above 50 years old with a mean working experience of 19.50 years.

Echevarria et al.²⁴ have conducted a research in a sample of 148 nurse managers; 88.4% were females, while 70.9% hold a master's degree, 77.7% had a special training in management, with a mean working experience in nursing to be 48.86 years, and as managers 23.65 years.

In the research of Wang et al.²⁵, participated 535 nurses; 98.3% were females. Only 9.7% had a bachelor, 60.7% were married, 41.6% had a supervision post while 65% of them were permanent staff.

Spano-Szekely et al.²⁶ conducted their research in a sample of 148 nurse managers; 44.6% hold a master's degree, 16.2% have been trained in leadership, while 50.7% had a working experience as managers below 5 years.

Malcalm et al.²⁷ conducted a research in a sample of 80 nurses without reporting any demographic characteristic.

Regarding the scales that have been used in the above-mentioned studies, all have used Wong and Law Emotional Intelligence Scale (WLEIS), while for assessing transformational leadership three of them have used Multifactor Leadership Questionnaire (MLQ) and the rest several scales (transformational leadership scale). Multifactor Leadership Questionnaire that has been used in the majority of the studies has several versions: MLQ 5X, 6s. MLQ 5X contains 45 items that evaluate the frequency of leadership behaviors by using a 5-point Likert scale [4]. It contains 5 subscales. MLQ 6s, contains 21 items, it uses a 5-point Likert scale while it has 7 factors⁴. Cronbach's alpha ranged from 0.89 to 0.94 for all the factors.

In all the studies, there was a positive correlation between nurses' transformational leadership and emotional intelligence.

Although there is a difference in the mean emotional intelligence between males and females, the gender was not a predictor of transformational leadership²⁴.

The systematic review revealed that except from exploring the role of several variables on transformational leadership the authors have evaluated also the role of transformational leadership on nurses' intention to remain employed and their job satisfaction.

4. Discussion

The aim was to review the relationship between transformational leadership, the self-esteem and emotional intelligence of nurses.

All the studies were selected on the basis of the selection criteria. They all supported the positive correlation between nurses' transformational leadership and emotional intelligence. This finding is in accordance to that in other professional groups²⁸, or in the management field in general^{26,29-38}.

Several authors^{39,40} have explored the role of emotional intelligence in transformational leadership. From the beginning of the research on transformational leadership⁴¹⁻⁴³ the authors have emphasized the central role of specific characteristics like empathy, motivation, self-confidence and self-perception on emotional intelligence.

Mayer, Caruso & Salovey⁸ and Mayer & Geher⁴⁴ stressed that females have higher emotional intelligence scores compared to males. Although Mandell & Pherwani³² concluded that emotional intelligence is a strong predictor of transformational leadership and females have a higher emotional intelligence score, gender was not a predictor of transformational leadership, a finding that was previously supported by Eagley & Johnson⁴⁵, but not by Carless⁴⁶, who believed that females are more transformational than males.

Although in the nursing literature there is a difference in the mean emotional intelligence between males and females, the gender did not affect the characteristics of transformational leadership²⁴.

The literature review has explored other factors that correlate with transformational leadership but are not predictors. One of these factors is age^{22,47} with nurses with higher age having high mean scores of emotional intelligence and transformational leadership. Another factor is the years of nursing experience^{22,24} with nurses with higher mean experience scoring higher in the above scales.

Through the systematic review a new research question arises that relates to the way these variables interfere to the characteristics of transformational leadership. This is a question that is in line with the results of Brown & Moshavi⁴⁸.

More precisely:

1. emotional intelligence could be an "antecedent" of transformational leadership: emotional intelligence relates to the ability of an individual to understand the emotional status of the "others" and adopt certain behaviors that are in line with an effective leadership,
2. emotional intelligence is the mediator of transformational leadership and its outcomes.

A limitation of some studies was the small sample size. In the meantime, strength was the kind of sample (nurse managers) and the use of WLEIS that allows comparisons.

In the future the studies could focus on the investigation of the characteristics of manager's personality that influence or are influenced by the characteristics of transformational leadership. In this way it could be feasible to develop managers'

assistance and training programs that could help them enhance their competencies towards an effective transformational leadership.

5. Conclusion

Emotional intelligence is a predictor of transformational leadership of nurses. The implementation of the fundamentals of transformational leadership facilitates the personal development of nursing managers; improves their job satisfaction and predicts their intention to remain employed as nurses.

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