### Emotional Intelligence: A Key for Nurse Managers' Transformational Leadership Style

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#### Abstract

A review of the relationship between emotional intelligence and leadership outcomes described the ongoing debate between the proponents and critics of emotional intelligence as one that "thrives on hyperbolic claims on one hand, and empirical evidence to the contrary on the other". The relationship between emotional intelligence with transformational leadership among nurse managers has received particular attention in these study, which can be attributed to both its popularity in the leadership and specific elements of transformational leadership style that seem relevant to emotional intelligence. Aim of the study: This study aims to explore emotional intelligence as the key "concept of possibility" to ignite transformational leader behavior. Research design: The design of study is descriptive correlation research design. Setting: The study was conducted at one hospital of the ministry of health hospitals. Sample: A convenient sample of (48) nurse managers. Tools of data collection: Tool 1: Background data sheet: it covered data related to age, gender, qualification, position, years of nursing experiences, years of nursing management experiences, if he/she has leadership program before and if he/she has an emotional intelligent program before. Tool 2: Multifactor Leadership Questionnaire (MLQ) Form 6S. This questionnaire provides a description of leadership style on seven factors; each factor has three items, related to transformational leadership. Tool 3: The Wong and Law Emotional Intelligence Scale (WLEIS) which consists of 16 items measures four dimensions. Result: the study conducted that there is a positive correlation between emotional intelligent and transformational leadership style among nurse managers. Conclusion and Recommendations: Offering continuing education, course content in curriculum education or professional development opportunities to develop emotional intelligence, as a key for transformational leadership that could have significant implications for health care systems, the quality of management skills, and for preparing effective future nurse managers.

Keywords: Emotional intelligence, nurse managers, transformational leadership

#### Introduction

Effective nursing leadership in organizations requires numerous talents, skills, competencies, and types of knowledge. At its core, leadership is about relations with other people. Without followers, there are no leaders (Kellerman, 2008). Leadership is an art and discipline of guiding, directing, motivating, and inspiring a group or organization toward the achievement of common goals (Marshall, 2011). Nursing leadership matters in today's healthcare environment, which is experiencing unprecedented intense reform. It requires effective communication, self-awareness, and social awareness. Unlike yesterday's leadership requirement for stabilization and growth, today's leaders must transform their organization's values, beliefs, and behaviors (ANCC, 2012). Leadership is broadly accepted to be about influencing others to accomplish common goals. In nursing literature, it has been described as a complex and multifaceted process which involves providing support, motivation, coordination and resources to enable individuals and teams to achieve collective objectives (Davidson et al., 2013). It is important for leaders to recognize their own emotions and to be able to express those emotions to others (Gardner & Stough, 2002). In doing so, the leader uses his or her positive emotions to motivate others and enable the vision of the organization to be enacted through job performance (Duygulu et al., 2011).

Transformational leaders are a source of inspiration to others through their commitment for those who work for them. Their perseverance to a mission and willingness to take risks, along with a strong desire to achieve, drives organizational success (Casida& Parker, 2011). Nurse leaders with a transformational leadership style have been identified through research as supportive of shared decision making and participatory management, inspiring commitment to achieve a vision, and creating an autonomous climate (ANCC, 2012). Behaviors associated with transformational leadership style include clear vision, commitment to excellence, ability to motivate and lead others to higher achievement, and creation of healthy work environments (Clavelle, 2012). Bass & Avolioin 1997 reported that transformational leaders act as mentors to their followers by encouraging learning, achievement, and foster a climate of trust. The five dimensions of transformational leadership are idealized influence (attributed), idealized influence (behavioral), individual consideration, inspirational motivation, and intellectual stimulation (Hayashi & Ewert, 2006).

Idealized influence (attributed) refers to the socialized charisma of the leader and whether or not he or

she is perceived as being confident and committed to high-order ideals. Idealized influence (behavioral) refers to charismatic actions by the leader that are based on values, beliefs, or ideals. Individualized consideration is the extent to which a leader attends to the needs and concerns of his or her followers by providing socio-emotional support. This involves mentoring followers, maintaining frequent contact, encouraging followers to self-actualize, and empowering them. Inspirational motivation is the degree to which leaders inspire and appeal to followers by setting challenging goals and communicating optimism with regard to goal attainment. Intellectual stimulation refers to the extent to which leaders engage in behaviors that cause followers to challenge their assumptions, think creatively, take risks, and participate intellectually (Hayashi & Ewert, 2006).

Emotional intelligence is the synthesis of two known concepts, emotion and intelligence, and is characterized as a form of social intelligence (SI) (Schulze et al., 2005). The concept emotional intelligence has been described as having common characteristics of multiple intelligences, in particular the domain of intrapersonal intelligence. Emotional intelligence was defined as: the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (Emotional Intelligence Consortium, 2007). The emotional intelligent framework consists of two dimensions: the ability to understand and manage oneself and the ability to understand and relate to others. These dimensions are further subdivided into self-awareness and self- management and social awareness and relationship management. In each dimension the ability to manage oneself or other is predicated on the awareness one has of self and others (Bratton et al., 2011). Emotionally intelligent interactions with other people depend and build on an individual's strengths in self-awareness and self-management. Without a solid base of self-understanding, self-control, emotional security, trustworthiness, and adaptability, it is virtually impossible to be to others and constructive in work relationships. Thus, good leaders must know themselves well and be able to choose how they will respond in social situations. These strengths then provide the foundation for working effectively with others (Abdul & Ehiobuche, 2011).

The role of the nurse leader becomes critical "in creating supportive and positive work environment to help nurses cope with stress of managing their own and other' emotions" concurrently (Montes-Berges & Augusto, 2007). The American Nurses Association defines the nurse administrator as one who "orchestrates and influences the work of others in defined environment... to enhance the shared vision of an organization," and identifies emotional intelligence as one of nine frameworks for administrative practice (American Nurses Association, 2009). The emotional intelligence framework provides for understanding the ways in which leader behaviors are necessary for the creation of a positive emotion-intensive work environment (Akerjordet & Severinsson, 2008). Emotional intelligence was correlated with positive processes in health care environments and positive institutional outcomes (Momeni, 2009). Emotional intelligence of nurse managers were positively correlated with patient outcomes, and satisfaction, reduced staff turnover, and increased staff resilience (Akerjordet & Severinsson, 2008; Codieret et al., 2011). Transformational leaders develop constructive and positive relationships with followers and respond to their emotional needs (Ashkanasayet et al., 2002). Piper (2005) stated that leaders need both cognitive ability and emotional intelligence to manage the present day complex healthcare delivery system. Emotional Intelligence has been described as an ability that has linkages to transformational leadership (Skinner & Spurgeon, 2005; Barbuto & Burbach, 2006; Downey et al., 2006).

To cope, transformational leaders need to be resilient and agile, able to accept complex change, be emotionally intelligent, and able to help others move forward and achieve success (Reid, 2008). Organizations need to foster emotional intelligence and resiliency into their culture and leaders. Resilient leaders are positive, flexible, focused, and are able to deal with reality and improvise. Furthermore, they are self-aware, able to manage themselves, are aware of others, and can manage relationships. Resilient leaders demonstrate emotional intelligence (Reid, 2008).

#### Significance of the study

In a world where health organizations are faced with increasing challenges effective leadership becomes central to success. The scope of responsibility and the depth of knowledge, skills, and attitudes needed to be an effective nurse manager continue to expand. This expanding role leads to stress among nurse managers. Emotional intelligence is a useful tool to enhance psychological resiliency to this stress. High levels of emotional intelligence can enhance transformational leadership style required to create and maintain a positive working environment (Barling et al., 2000). Many studies on nursing leadership have resulted in the belief that transformational leadership behavior is central to effective leadership and subsequent positive organizational outcomes. If we adopt the philosophy that transformational leadership is the preferred behavior of effective leaders, then what predisposes an individual to behave in this way? There is growing evidence that emotional intelligence is a major catalyst in pre-empting transformational leadership behaviors. Little research to date on nursing leadership in healthcare has demonstrated a connection between emotional intelligence and transformational leadership.

#### Aim of the study

This study aims to explore emotional intelligence as the key "concept of possibility" to ignite transformational leader behavior. This study seeks to explore whether there is a relationship between emotional intelligence and transformational leadership in nurse managers by assessing emotional intelligence and transformational leadership style of nurse managers.

#### **Research questions**

- Is there a relationship between emotional intelligence and transformational leadership style of nurse managers?
- What is the relationship between emotional intelligence and transformational leadership style of nurse managers

#### Subjects and Methods

#### 1. Technical design

#### 1.1 Research design

The design of study is descriptive correlation research design.

1.2 Setting

The study was conducted at one hospital of the ministry of health hospitals.

1.3 Sample

A convenient sample of (48) nurse managers.

#### 1.4 Tools of data collection

Three tools for data collections were utilized; they included:

**Tool 1:** Background data sheet: it covered data related to age, gender, qualification, position, years of nursing experiences, years of nursing management experiences, if he/she has leadership program before and if he/she has an emotional intelligent program before.

**Tool 2:** Multifactor Leadership Questionnaire (MLQ) Form 6S (Avolio & Bass, 2004). This questionnaire provides a description of leadership style on seven factors; each factor has three items, related to transformational leadership. It consist of 21 items to be rated on 5 point rating scale.

Factor 1 – *Idealized Influence*: indicates whether nurse managers hold subordinates' trust, maintain their faith and respect, show dedication to them, appeal to their hopes and dreams, and act as their role model.

Factor 2 - Inspirational Motivation: measures the degree to which nurse managers provide a vision, use appropriate symbols and images to help others focus on their work, and try to make others feel their work is significant.

Factor 3 - Intellectual Stimulation: shows the degree to which nurse managers encourage others to be creative in looking at old problems in new ways, create an environment that is tolerant of seemingly extreme positions, and nurture people to question their own values and beliefs of those of the organization.

Factor 4 – *Individualized Consideration*: indicates the degree to which nurse managers show interest in others' well - being, assign projects individually, and pay attention to those who seem less involved in the group.

Factor 5 - Contingent Reward: shows the degree to which nurse managers tell others what to do in order to be rewarded, emphasize what you expect from them, and recognize their accomplishments.

Factor 6 – *Management - By - Exception*: assesses whether nurse managers tell others the job requirements, are content with standard performance, and are a believer in "if it isn't broke, don't fix it."

Factor 7 - Laissez - Faire: measures whether nurse managers require little of others, are content to let things ride, and let others do their own thing.

#### Validity and reliability

This instrument is referred to as the most frequent and well researched and validated leadership instrument in the world and is applied to a wide range of organizational settings as well as with leaders in different cultures. It is used to measure transformational leadership style systematically. Cronbach alpha for the overall Multifactor Leadership Questionnaire (MLQ) Form 6S was  $\alpha = 0.92$  (Brandt & Laiho, 2013).

**Tool 3**:The Wong and Law Emotional Intelligences Scale (WLEIS) (Wong & Law, 2002) which consists of 16 items and measures four dimensions; the four dimensions are Self-emotional appraisal (SEA) measures the individual's ability to understand their emotions, others' emotional appraisal (OEA) is the ability to recognize and understand other people's emotions, use of emotion (UOE) is the tendency to motivate oneself to enhance performance, and regulation of emotion (ROE) assesses the ability to regulate emotions and each dimension has four items (Fukuda et al., 2011).

#### Validity and reliability

The four dimensions are with alpha Cronbach ranging from 0.83 to 0.92 for all the dimensions (Law et al., 2004). Sebnemand Ehmet (2008) study examined the reliability and validity of Wong and Law Emotional Intelligences Scale (WLEIS). Cronbach alpha for the overall WLEIS was  $\alpha = 0.89$ . All the dimensions of the WLEIS also

have high internal consistency with SEA,  $\alpha = 0.81$ ; OEA, = 0.89; UOE,  $\alpha = 0.83$ ; and ROE,  $\alpha = 0.87$ .

### 2. Administrative design

2.1 Written approval

An official permission was obtained from the researcher to the director of the hospital for approval of conducting the study.

#### 2.2 Ethical consideration

Before conducting the study, informed oral consent was obtained from the nurse managers after explanation the aim of the study.

#### 3. Operational design

#### 3.1 Data collection procedure

#### **3.1.1** Preparation phase

The managerial arrangements were made to conduct the current study. Nurse Managers who agreed to participate in the study were interviewed individually by the researcher to explain the nature and purpose of the study.

#### **3.1.2 Implementation phase**

Data were collected during August 2016. The researcher visited the selected hospital on daily basis during the morning shifts. Each potential nurse managers were interviewed for 10-15 minutes to fill out the background data in addition to knowledge questionnaire. The researcher clarified any obscure questions. Later, each nurse managers was filling the questionnaire individually for 15-20 minutes.

#### 3.2 Statistical Analysis

Data was collected, presented in tabular form. Percentages were calculated for qualitative data, mean and standard deviations were calculated for quantitative data using the Statistical Package for Social Sciences (SPSS) version (20) for statistical analysis. Spearman and Pearson correlation analysis was used for assessment of the inter-relationships among quantitative variables.

#### Result

**Table (1):** Displays that personal characteristic of nurse managers in the study sample. As the table shows more than quarter of nurse managers were aged from 35 years to 40 years (33.3%). Nearly to two thirds of nurse managers were female (66.7%). Regarding to the qualification, more than half of the nurse managers had bachelor degree (58.4%). More than half of the nurse managers had head nurse position (66.7%). The three quarters of nurse managers had years of nursing experiences from 10 years to less than 20 years (75%). On the other hand, 50% of the nurse managers had less than 5 years of nursing management experiences. The majority of nurse managers had a leadership program before (66.7%) and no one had an emotional intelligent program before.

**Table (2):** Shows that the highest mean scores of transformational leadership style was factor 2- inspirational motivation  $(10.00\pm1.38)$  with main score  $(64.08\pm8.60)$  of total transformational leadership style.

**Table (3):** Shows that the highest mean scores of emotional intelligent dimensions was self-emotional appraisal (SEA)  $(12.58\pm2.71)$  with main score  $(49.83\pm5.59)$  of total emotional intelligent.

**Table (4):** Illustrates that 41.7% of nurse managers had high transformational Leadership level. While, emotional intelligent level of nurse managers were high and moderate with the same percentage (37.5%).

**Table (5):** Reveals that, there is a positive correlation between others' emotional appraisal (OEA) as a dimension of emotional intelligent and all factors of transformational leadership style. On the other hand, there is a positive correlation between regulation of emotion (ROE) as a dimension of emotional intelligent and five factors of transformational leadership style. Moreover, there is a positive correlation between self-emotional appraisal (SEA) and use of emotion (UOE) as the dimensions of emotional intelligent and four factors of transformational leadership style.

Table (6): Shows that there is a positive correlation between emotional intelligent and transformational leadership style among nurse managers (p=0.000).

**Table (7):** Reveals that, there is a positive correlation between transformational leadership style and demographic data of age, qualification, years of nursing experience, years of nursing management experience, and leadership program. In addition, there is a positive correlation between emotional intelligence and qualification, and years of nursing management experience.

Demographic characteristics	No	%
Age:		
⊂<30	12	25
30- <35	12	25
35 - 40	16	33.3
>40	8	16.7
Mean ±SD	34.08	±1.05
Gender		
Male	16	33.3
Female	32	<b>66.</b> 7
Qualification		
Nursing school diploma	12	25
Technical nursing institute	4	8.3
Bachelor of nursing	28	58.4
Master degree of nursing	4	8.3
Position		
Head Nurse	32	66.7
Supervisor	16	33.3
Years of nursing experiences		
<10	8	16.7
10-<20	36	75
>20	4	8.3
Mean ±SD	14.45	5±1.91
Years of nursing management experiences		
<5	24	50
5- <10	8	16.7
> 10	16	33.3
Mean ±SD	6.33	±0.91
Have a leadership program before		
Yes	32	66.7
No	16	33.3
Have aemotional intelligent program before		
Yes	0	0.0
No	48	100

Table	<u>(1)</u> .	Demograph	ic char	acteristics	of the	study	subie	ets (	(n=48)	•
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 Table (2): Total mean score of transformational leadership style among nurse managers (n=48)

Factors of Multifactor Leadership Questionnaire 6S	Mean	SD	Range
Factor 1 – Idealized Influence	9.33	1.52	8-12
Factor 2 – Inspirational Motivation	10.00	1.38	7-12
Factor 3 – Intellectual Stimulation	9.91	1.58	7-12
Factor 4 – Individualized Consideration	9.16	1.43	6-11
Factor 5 – Contingent Reward	9.33	1.73	7-12
Factor 6 – Management - By - Exception	9.83	1.55	7-12
Factor 7 – Laissez - Faire	6.50	2.87	2-10
Total	64.08	8.60	50-80

#### Table (3): Total mean score of Emotional intelligent among nurse managers (n=48)

<b>Dimensions of Emotional intelligent</b>	Mean	SD	Range
Self-emotional appraisal (SEA)	12.58	2.71	8-16
Others' emotional appraisal (OEA)	12.08	1.69	9-15
Use of emotion (UOE)	11.83	1.85	9-15
Regulation of emotion (ROE)	11.41	3.83	3-16
Total	49.83	5.59	39-61

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Table (4): Comparison between	Transformational Leauersin	p and emotional intemper	IL IEVEIS (II-40)

Rating levels	Transformation	al leadership	<b>Emotional intelligent</b>		
	No	%	No	%	
low	12	25	12	25	
moderate	16	33.3	18	37.5	
high	20	41.7	18	37.5	

### Table (5): Correlation matrix for Nurse Managers' Transformational Leadership factors and dimensions of emotional intelligent (n= 48)

Transformational Leadership Factors	Dimensions of Emotional Intelligent								
	Self-emotional		others' emotional us		use of e	use of emotion		ation of	
	appraisa	appraisal (SEA)		appraisal (OEA)		(UOE)		emotion (ROE)	
	r	Sig.	r	Sig.	r	Sig.	r	Sig.	
Factor 1 – Idealized Influence	0.715**	0.004*	0.711**	0.004*	-0.197	0.242	0.651**	0.001*	
Factor 2 – Inspirational Motivation	0.808**	0.000*	0.626**	0.001*	0.474**	0.004*	0.745**	0.000*	
Factor 3 – Intellectual Stimulation	-0.051	0.374	0.796**	0.000*	0.184	0.276	0.796**	0.001*	
Factor 4 – Individualized Consideration	0.851**	0.000*	0.581**	0.003*	0.845**	0.002*	0.499**	0.003*	
Factor 5 – Contingent Reward	0.696**	0.008*	0.828**	0.000*	0.795**	0.000*	0.033	0.529	
Factor 6 – Management - By - Exception	0.272	0.491	0.930**	0.002*	0.316	0.057	0.669**	0.005*	
Factor 7 – Laissez – Faire	-0.034	0.551	0.699**	0.000*	0.911**	0.002*	-0.116	0.185	

(\*) Statistically significant at p < 0.05

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

# Table (6): Correlation matrix for Nurse managers' Transformational Leadership and their emotional intelligent (n= 48)

Item	Spearman rank correlation coefficient Transformational Leadership			
	correlation	Significant		
Emotional intelligence	0.532**	0.000*		
(*) Statistically similar to $< 0.05$	(**) Ctation 11	r = 1		

(\*) Statistically significant at p < 0.05

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

# Table (7): Correlation matrix for Nurse Managers' demographic data and their Transformational Leadership and emotional intelligent (n= 48)

Items of demographic data	Spearman rank correlation coefficient				
	Transformational Leadership		Emotional i	ntelligence	
	Correlation	Correlation Significant C		Significant	
Age	0.654**	0.000*	0.071	0.742	
Gender	0.232	0.387	-0.086	0.689	
qualification	-0.563**	0.004*	-0.838**	0.002*	
Position	0.245	0.249	-0.366	0.079	
Years of nursing experience	0.524**	0.009*	0.273	0.197	
Years of nursing management experience	0.520**	0.009*	0.730**	0.008*	
Have a leadership program before	-0.622**	0.005*	-0.643	0.008	
Have a emotional intelligent program before	Fisher	1.00	Fisher	1.00	
(*) G	(shale) C	11	0.01		

(\*) Statistically significant at p < 0.05

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

#### Discussion

Emotional intelligence requires self-awareness and can be further enhanced through practice and feedback. Emotional intelligence refers to the ability to discriminate and monitor emotions and use the evidence to guide action and thought. The relationship between emotional intelligence and effective leadership has been validated by others (Codierm, 2011). Researches into the relationship between emotional intelligence and transformational leadership are filled with bold claims as to the relationship between these constructs. Noted experts in the field of emotional intelligence argue that elements of emotional intelligence such as empathy, self-confidence, and self-awareness are the core underpinnings of visionary or transformational leadership (Goleman et al., 2002).

The most effective leaders were those with high Emotional intelligence. A study conducted in Boston with more than 20 000 executives found that Emotional intelligence was twice as important as technical skills and cognitive abilities in determining leadership ability. High-level Emotional intelligence leaders bring out the best in members of the organization, drive motions in a positive manner, connect with others at an emotional level, and make work more meaningful (Goleman et al., 2002). Others have noted the disappointing results of intelligence and personality models in the prediction of exceptional leadership and have argued that EI may

represent an elusive "X" factor for predicting transformational leadership (Brown & Moshavi, 2005). The present study investigated the relationship between emotional intelligent and transformational leadership style to explore emotional intelligence as the key "concept of possibility" to ignite transformational leader behavior.

The present study revealed the majority of nurse managers who participate in the study had personal characteristic of aged from 35 years to 40 years and female. Regarding to the qualification, the majority of the nurse managers had bachelor degree (BSN) with less than 5 years of nursing management experiences. As presented in study of emotional intelligence and nursing leadership styles among nurse managers by Tyczkowski et al., (2015), participants in this study were primarily female (92%), and 61 years of age or older (35%).The highest level of education reported by participants was BSN (56%), with the majority of subjects reporting less than 5 years' experience as a manager (34%).

The present study illustrated the correlation between the four dimensions of emotional intelligent and the seven factors of transformational leadership style. Significant relationships were found between subscales of emotional intelligent and components of transformational leadership (Palmer et al., 2001). Emotional intelligence is associated with 3 attributes of transformational leadership (using the Multifactor Leadership Questionnaire [MLQ]): idealized influence, individualized consideration, and inspirational motivation (Parker & Sorensen, 2008). These authors also found that high levels of emotional intelligent can enhance transformational leadership style required to create and maintain a positive working environment.

In this study, a significant positive relationship between emotional intelligent and transformational leadership style was noted. In additional, the present study reported that nurse managers who had high emotional intelligent level had high level of transformational Leadership style. These results are consistent with those of other studies that found an association between emotional intelligent and transformational leadership suggested in the literature (Vrba, 2007; Parker & Sorensen, 2008; Palmer, 2001). Several studies noted strong relationships between EI and transformational leadership (Harm & Crede, 2012). Katrina (2006) reported in her study that the result indicate support of the predicted relationship between emotional intelligence and transformational leadership.

A strong positive relationship between these two constructs was found in three of the five participants and a negative correlation from the other two participants. In a meta-analysis study, leaders with high levels of emotional intelligent were shown to demonstrate transformational leadership styles. Subordinates consistently rated transformational leaders as more effective than laissez-faire and transactional leadership styles (Pillay et al., 2013). There is considerable agreement that high levels of emotional intelligent are a necessary component of transformational leadership (Parker & Sorensen, 2008). In the same line, the result of study of Tyczkowski et al., (2015) found statistically significant positive relationships between emotional intelligent and transformational leadership and the outcomes of leadership (extra effort, effectiveness, and satisfaction). No statistically significant relationships were noted between emotional intelligent and transactional or laissez-faire leadership styles.

The present study indicated that, there is a positive correlation between transformational leadership and emotional intelligence with qualification, and years of nursing management experience. This result supported by Duygulu (2011) who concluded that more than half of the nurse managers participants were prepared at the BSN level.

#### Conclusion

Based on the results of this study, it had been concluded that there was a positive relationship between emotional intelligent and transformational leadership style. This study explored emotional intelligence as the key to ignite transformational leadership style.

#### Recommendations

- Emotional intelligent course content education should be included in the bachelor's-level nursing curriculum in nursing educational institutions, for preparing effective future nurse managers.
- Offering continuing education or professional development opportunities to develop emotional intelligence, as a key for transformational leadership that could have significant implications for health care systems, and the quality of management skills.
- To create resilient and effective nurse managers, health care systems must assist nurse managers to build emotional intelligence skills and transformational leadership qualities/skills, for effective decision-making.

#### References

Abdul, L. A., & Ehiobuche, C. (2011): Emotional Intelligence and Managerial Competence. Insights To A Changing World Journal, 2011(4), 41-58.

Akerjordet K., & Severinsson E. (2008): Emotionally intelligent nurse leadership: a literature review study. J

Nurse Manage. 2008; 16(5):565-577.

- American Nurses Association. (2009): Nursing administration: Scope and standards of practice. Silver Spring, MD: Nurses Books.org. p. 3.
- American Nurses Credentialing Center (NCCA) (2012): Magnet recognition program® model. Accessed at http://www.nursecredentialing.org/Magnet/ProgramOverview/New-Magnet-Model
- Ashkanasay N., Zerbe W., & Hartel C., (2002): Managing Emotions in the Workplace. New York, NY: M.E. Sharpe; 2002.
- Avolio, B.J., & Bass, B.M. (2004): Multifactor Leadership Questionnaire Manual and Sample Set (3rd ed.). Redwood City, CA: Mind Garden, Inc.
- Barbuto, J.E., & Burbach, M.E. (2006): The emotional intelligence of transformational leaders: A field study of elected officials. The Journal of Social Psychology, 146 (1), 51-64.
- Barling J., Slater F., & Kelloway K. (2000): Transformational leadership and emotional intelligence: an exploratory study. Leadersh Organ Dev J. 2000; 21:157-161.
- Brandt T., & Laiho M., (2013) : Gender and personality in transformational leadership context; An examination of leader and subordinate perspectives, Leadership and Organization Development Journal, 34 (1): 44-66.
- Bratton V. K., Dodd N. G., & Brown F. (2011): The impact of emotional intelligence on accuracy of selfawareness and leadership performance. Leadership & Organization Development Journal, 32(2), 127-149.
- Brown F. W., & Moshavi D. (2005): Transformational leadership and emotional intelligence: A potential pathway for an increased understanding of interpersonal influence. Journal of Organizational Behavior, 26, 867-871.
- Casida J., & Parker J. (2011) : Staff nurse perceptions of nurse manager leadership styles and outcomes. Journal of Nursing Management, 19(4), 478-486. doi: 10.1111/j.1365-2834.2011.01252.x.
- Clavelle J.T., (2012): Transformational leadership Visibility, accessibility, and communication. The Journal of Nursing Administration, 42(7/8), 345-346.
- Codier E., Kamikawa C., & Kooker B. (2011): The impact of emotional intelligence development on NMs. NursAdm Q; 35(3):270-276. doi:10.1097/NAQ.ObO13e318224ae3.
- Downey L., Papageoriou V., & Stough C. (2006): Examining the relationship between leadership, emotional intelligence and intuition in senior female managers.189 Leadership& Organizational Development Journal, 27(4), 250-264. doi:10.1108/01437730610666019
- Duygulu S., Hicdurmaz D., &Akar I. (2011): Nursing students' leadership and emotional intelligence in Turkey. J Nurs Educ.; 50(5):281-285. doi:10.3928/0148434-20110130-07.
- Emotional Intelligence Consortium. (2007): Mayer-Salovey-Caruso Emotional Intelligence Test (msceit). Retrieved June 22, 2007, http://eiconsortium.org/measures/msceit.htm.
- Fukuda E., Saklofske D. H., Tamaoka K., Fung T. S., Miyaoka Y., &Kiyama, S. (2011): Factor structure of Japanese versions of two emotional intelligence scales. International Journal of Testing, 11, 71-92. doi:10.1080/15305058.2010.516379
- Gardner L, & Stough C. (2002): Examining the relationship between leadership and emotional intelligence in senior level managers. Leadership Organ Dev J. 2002; 23 (2):68-78.
- Goleman D., Boytazis R., & McKee A. (2002): Primal Leadership: Recognizing the Power of Emotional Intelligence. Boston: Harvard Business School Press.
- Harm P.D., & Crede M. (2012): Emotional Intelligence and Transformation and Transactional Leadership: A Meta-analysis. Lincoln, NE: University of Nebraska—Lincoln: Leadership Institute Faculty Publications;
- Hayashi A., & Ewert A. (2006): Outdoor leaders' emotional intelligence and transformational leadership. Journal of Experiential Education, 28, 222-242.
- Katrina P. (2006): Investigating the relationship between emotional intelligence and transformation leadership in Nurse Managers. School of Management, Victoria University, Melbourne, Australia, Nursing Management 36(12):10-15.
- Kellerman B. (2008): Followership: How followers are changed and changing leaders. Boston, MA: Harvard Business Press.
- Law K. S., Wong C. S., & Song L. J. (2004): The construct and criterion validity of emotional intelligence and its potential utility for management studies. Journal of Applied Psychology, 89, 483-496.
- Marshall E.S. (2011): Transformational leadership in nursing: From expert clinician to influential leader. New York, NY: Springer Publishing Company, LLC.
- Momeni N. (2009): The relation between managers' emotional intelligence and the organizational climate they create. Public Pers Manage. 2009; 38(2):35-48.
- Montes-Berges B., & Augusto, J.-M. (2007): Exploring the relationship between perceived intelligence, coping,

social support and mental health in nursing students. Journal of Psychiatric and Mental Health Nursing, 14, 163-171.

- Palmer B., Walls M., Burgess Z., &Stough C. (2001): Emotional intelligence and effective leadership. Leadersh Organ Dev J.; 22(1):5-10.
- Parker P.,& Sorensen J. (2008): Emotional intelligence and leadership skills among NHS managers: an empirical investigation. Int J ClinLeadersh.; 16:137-142.
- Pillay M., Vivers R., &Mayer C.(2013):The relationship between emotional intelligence and leadership styles in the South African petrochemical industry. SA J Ind Psychol.; 29(1):1-12. doi:10.4102/sajip.v39i1.1109.
  Piper L.E. (2005): Passion in today's health care leaders. The Health Care Manager, 24(1), 44-47.
- Reid J.(2008): The resilient leader: why EQ matters. Ivey Bus J. 2008. http://iveybusinessjournal.com/topics/ leadership/the-resilient-leader-why-eq-matters.
- Schulze R., Roberts R.D., Zeidner M. & Matthews G. (2005): Theory, measurement, and applications of emotional intelligence: Frames of reference. In Schulze, R. & Roberts, R. D. (Eds.), Emotional intelligence: An international handbook (pp1-25). Cambridge, MA: Hogreffe& Huber.
- Sebnem A. & Ehmet E. (2008): Measurement of emotional intelligence: Validity and reliability studies of two scales. World Applied Sciences Journal, 4(3), 430-438. http://www.idosi.org/wasj/wasj4 (3)/15.pdf [9 January 2011].
- Skinner C., & Spurgeon P. (2005): Valuing empathy and emotional intelligence in health leadership: A study of empathy, leadership behavior and outcome effectiveness. Health Services Management Research, 18, 1-12.
- Tyczkowski B., Vandenhouten C., Reilly J., & Kubsch S., (2015): Emotional Intelligence (EI) and Nursing Leadership Styles Among Nurse Managers Nurs Admin Q Vol. 39, No. 2, pp. 172–180
- Vrba M. (2007): Emotional intelligence skills and leadership behavior in a sample of South African first-line managers. Manage Dyn; 16(2):25-35.
- Wong CA., Cummings GG., Ducharme L. (2013): 'The relationship between nursing leadership and patient outcomes: a systematic review update', Journal of Nursing Management, vol. 21, no. 5, pp. 709-724.
- Wong C. S. & Law K. S. (2002): The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. Leadership Quarterly, 13, 243-274.