

The Relationship between Emotional Intelligence and Leadership Practice among Nursing Leaders

Hesham Aly Mohamed Elkhawas¹, Prof.Dr/ Gehan Mohamed Ahmed Mostafa²,
Dr/ Noha Hussein Yassein Hussein³

¹ (Clinical Instructor, Technical institute of Nursing, Faculty of Nursing, Cairo University, Egypt)

² (Prof of Nursing Administration, Faculty of Nursing, Helwan University, Egypt)

³ (Lecturer of Nursing Administration, Faculty of Nursing, Helwan University, Egypt)

Abstract

Background: Today, Nursing leaders need to inspire, motivate, influence decisions, and foster positive work environments while contributing to the mission and vision of the organization so that Emotional intelligence is considered an important characteristic for successful leadership. **Aim:** The study aimed at exploring the relationship between emotional intelligence and leadership practice among nursing leaders. **Research design:** a descriptive correlational design was utilized. **Setting:** the study was conducted at AlAraby hospital. **Subjects:** included in the study were (30) nursing leaders. **Tools:** data were collected by using the Emotional Intelligence Scale, Leadership Practice Inventory. **Results:** findings revealed that value orientation and enable others to act were the highest among nursing leaders. **Conclusion:** it was concluded that there was a statistically significant positive relationship between emotional intelligence and leadership practice among nursing leaders. **Recommendations:** Formulate strategies and programs to develop Emotional Intelligence in nurse leaders and hence increase the frequency of applying the five exemplary leadership practices, Establishing a comparative study between private and governmental sectors to assess differences, similarities and identify factors that are associated with increasing the emotional intelligence and the five exemplary leadership practices. **Keywords:** Emotional intelligence, Leadership practice, Nursing leaders.

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I. Introduction

Today the concept of leadership has been evolved from simply leading, guiding, and motivating employees to get the desired results. A true leader is not the one with only good decision-making qualities or how good he leads the team but the main focus is now towards the emotional intelligence competencies that are now become a major part of leadership qualities. When leaders demonstrated higher levels of emotional intelligence; they often had established successful employment outcomes. (Shamim, 2019; Willyard, 2017).

Besides, Literature has looked at effective leadership as one of the most important and most critical elements for today's ever-changing organizations (Mansel & Einion, 2019). Moreover, Emotional intelligence has been identified as the critical element needed for this effective leadership. Therefore, nurse leaders, today must be well aware of their emotional intelligence and how that affects nurses and employees (Cumberlander, 2017).

Consequently, Literature asserts that intelligence quotient and technical skills are the minimum requirements for the role of executive leadership. It believes that the extent of a leader's emotional intelligence is the determinant of the leader's success (Compagnone, 2019). Effective nursing leadership in organizations requires numerous talents, technical skills, competencies, and types of knowledge. At its core, leadership is about relations with other people. Without followers, there are no leaders (Kabeel, 2016).

Furthermore, the concept of emotional intelligence is central to future nurse leaders. Nursing is a discipline that demands interaction with patients, their families, and caregivers of the health care team. This interaction is not always verbal but it involves complex emotions as well. Therefore, nurse leaders need to know how to deal with their emotions as they work with diverse patients, families, and the healthcare team (Banjar & El Seesy, 2019).

Along with, when leaders are trained to be emotionally intelligent and their skills are fostered, they are more likely to exhibit transformational leadership behaviors, which will further result in organizational effectiveness and follower satisfaction (Apore & Asamoah, 2019). Also, high levels of emotional intelligence can enhance the transformational leadership style required to create and maintain a positive working environment (Kabeel, 2016). Therefore, the five exemplary leadership practices (transformational leadership

model of Kouzes and Posner) are about how leaders make subordinates do the things they least expected they could do (*Kouzes & Posner, 2017*).

Ultimately, These five leadership practices (Model the Way, Inspire a Shared Vision, Challenge the Process, Enable Others to Act, and Encourage the Heart) provide an operating system for what people are doing as leaders when they are at their best (*Kouzes & Posner, 2017*). Exemplary leaders passionately believe that they can make a difference. They envision the future creating an ideal and unique image of what the organization can become (*Kouzes & Posner, 2017; Hussain & Gilani, 2019*).

Significance of the Study

The concept of emotional intelligence and leadership practice in the literature delineates the essential attributes of an effective leader (*Balamohan et al., 2015*); however, there is limited nursing literature related to the relationship between the two concepts from the perspective of nurse leaders (*Compagnone, 2019*). Similarly, emotional intelligence is linked to self-awareness, self-management, social awareness, and social skills, all of which are vital in leadership roles (*Mansel & Einion, 2019*). Therefore, the present study is an attempt in this direction and will spot the light on the relationship between emotional intelligence and leadership practice among nursing leaders.

Aim of the Study

This study aims to explore the relationship between emotional intelligence and leadership practice among nursing leaders.

Research question

Is there a relationship between emotional intelligence and the leadership practice of nursing leaders?

Subjects and methods

1-Technical design:

The technical design includes research design, setting, subjects, and tools for data collection.

Research Design:

A descriptive correlational research design was utilized in the current study.

Setting:

The study was conducted at AlAraby hospital which is affiliated with the private health sector at Menofeya Governorate-Egypt. It is a multi-specialty hospital.

Subjects:

One sample was utilized to collect the data of the present study. The sample size was all available, (30) nursing leaders included Charge Nurses, Head Nurses, Supervisor Nurses, & Director Nurses who were utilized during data collection.

Tools for data collection: Two tools were used to collect the necessary data:

First Tool: Emotional Intelligence Scale (EIS). Consisted of two parts:

Part 1: Personal Characteristics: datasheet of the participants includes Age, Gender, Job title, Marital status, Educational level, Years of experience in the nursing profession & Years of experience in the current position.

Part 2: Emotional Intelligence Scale:

Emotional Intelligence Scale was developed by the investigator based on (*Dhar et al., 2002*). It was used in this study to measure the emotional intelligence competencies of nursing leaders (Self-report). The scale composed of 34 items, measures 10 dimensions of emotional intelligence: **Managing relations** (4 items); **Self-motivation** (6 items); **Altruistic behavior** (2 items); **Self-awareness** (4 items); **Empathy** (5 items); **Emotional stability** (4 items); **Value orientation** (2 items); **Commitment** (2 items); **Integrity** (3 items); and **Self-development** (2 items). **Responses** were measured on 5-point Likert scale ranging from (1= Strongly disagree); (2= Disagree); (3= Neutral); (4= Agree) to (5= Strongly agree).

Scoring system: The emotional intelligence scale scoring system ranged between (34-170) and it was calculated according to three levels based on (*Mohamed, 2019*):

- I. Low (34-108).
- II. Moderate (109-132).
- III. High (133-170).

Second Tool: Leadership Practice Inventory (LPI):

Leadership practice inventory was developed by the investigator based on (*Kouzes & Posner, 2013*). It was used in this study to measure the frequency of leadership practices of nursing leaders (Self-report). It measures the frequency of 30 specific leadership behaviors with 6 behavioral statements for each of the five dimensions of leadership practice: (1) **Model the Way**; (2) **Inspire a Shared Vision**; (3) **Challenge the Process**; (4) **Enable Others to Act**; (5) **Encourage the Heart**. Responses were measured on 5- point Likert scale ranging

from (1= Almost never); (2= Rarely); (3= Sometimes); (4= Usually) to (5= Almost always).

Scoring system: The Leadership practice inventory scoring system ranged between (30-150) and it was calculated according to three levels of percentile ranking based on (*Kouzes & Posner, 2017*):

- | | | |
|-----------------------|--------------|-------------|
| I. Least Frequent | (0 - 30%) | (30 - 45) |
| II. Moderate Frequent | (31% - 70%) | (46 - 105) |
| III. Most Frequent | (71% - 100%) | (106 - 150) |

Validity of the tools:

The two tools were distributed to a jury group consisted of three experts specialized in nursing administration all from the faculty of nursing Cairo University are two professors and one assistant professor. They assessed the clarity, comprehensiveness, relevance, and accuracy of the tools for face and content validity and translation into Arabic through an opinionnaire sheet. Accordingly, the necessary modifications and rephrasing of some statements were done based on their opinions.

Reliability of the tools:

The two tools were tested for their reliability. The internal consistency reliability of the items composing the tool was assessed using the Cronbach alpha coefficient. Test of reliability for the two tools yielded (0.87) for emotional intelligence scale and (0.81) for leadership practice inventory self-report; indicating homogeneity among the items under each construct.

Ethical considerations:

Before the study was conducted, ethical approval was obtained from the scientific research and ethical committee of the faculty of nursing-Helwan University. Besides, the investigator obtained official permission from the director of the hospital where the study was conducted. Additionally, Ethics, values, believes and cultures of the study subjects were respected.

Pilot study

A pilot study was conducted on (3) participants of the study subjects. They represent 10 % of the study sample in the study setting. The pilot study aims to test the applicability and clarity of the tools and to identify obstacles and problems that may be encountered during data collection. Additionally, to estimate the time needed to fill it out. The time subjects took to fill in the questionnaire sheet was 15-20 minutes for each tool. These participants were included in the main study sample since no changes were needed in the tools.

Field Work:

After obtaining permission for data collection; the investigator explains the aim of the study to participants. All participants were assured that anonymity and confidentiality were guaranteed and the right to withdraw from the study at any time.

3) Administrative Design

An official agreement was obtained from the director of AlAraby hospital, Menofeya-Egypt to conduct the study in the hospital.

4) Statistical Design

Data entry and statistical analysis were done using the Statistical Program for Social Science (SPSS) version 24.0 software package.

II. Result

Table (1) shows that less than half of the studied nursing leaders were charge nurse and head nurse (46.7% and 26.7% respectively). added to that the mean age of the studied nursing leaders 29.96 ± 3.3 , more than half (56.7%) their ages from 30 to less than 35 years old and 36.7% with age from 25 to less than 30 years old, while the majority of sample 80% of the studied nursing leaders were males. And less than three quarters 70% were married and one fifth 20% were singles. Concerning their level of education, 66.7% had a bachelor's degree, while 13.3% had a technical degree. Regarding the mean of experience years as a nurse is 9.33 ± 4.16 , less than half 43.3% from 5 to less than 10 years and one third from 10 to less than 15 years. Besides, the mean of years' experience as a nursing leader is 4.7 ± 2.65 , one half 50% from 5 to less than 10 years and slightly more than one quarter 26.7 from 3 to less than 5 years of the studied sample.

Table (2) clarifies that there were highly statistically significant differences between emotional intelligence and leadership practices with p-value (0.000).

Table (3) reveals that Emotional intelligence has a significant positive correlation with leadership practice dimensions except Encourage the Heart. On the other side, Leadership practice has a significant positive correlation with Emotional intelligence dimensions except for value orientation and commitment. Also,

there is a positive correlation between model the way, value orientation, and commitment. Besides, there is a positive correlation between inspiring a Shared Vision, Managing relations, Self-Awareness, altruistic behavior, and empathy. Besides, there is a positive correlation between challenge the process, emotional stability, altruistic behavior, self-development, and integrity. But, there is no correlation between enable others to act, encourage the heart and emotional intelligence subscales.

Figure (1) reveals that one-half of the studied nursing leaders (50%) had a high level of emotional intelligence, while another half (50%) had a moderate level of emotional intelligence.

Figure (2) represents that, less than three quarters (70%) of studied nursing leaders had the most frequent leadership practice, while 30% had moderate frequent leadership practice.

Table (1): Frequency and Percentage Distribution of Personal Characteristics among studied Nursing Leaders. (N=30).

Items	N	%
Job title		
Director nurse	2	6.7
Supervisor	6	20.0
Head nurse	8	26.7
Charge nurse	14	46.7
Age		
Less than 25	1	3.3
≥ 25 to <30	11	36.7
≥ 30 to < 35	17	56.7
≥ 35 and more	1	3.3
Mean ± SD	29.96 ± 3.3	
Gender		
Male	24	80.0
Female	6	20.0
Marital status		
Single	7	23.3
Married	21	70.0
Divorced	1	3.3
Widow	1	3.3
Educational Level		
Diploma	3	10.0
Technical institute	4	13.3
Bachelor of nursing	20	66.7
Master degree	3	10.0
Years of experience in the nursing profession		
Less than 5	3	10.0
≥ 5 to < 10	13	43.3
≥ 10 to < 15	10	33.3
≥ 15 and more	4	13.3
Mean ± SD	9.33 ± 4.16	
Years of experience as a nursing leader		
Less than 3	6	20.0
≥ 3 to < 5	8	26.7
≥ 5 to < 10	15	50.0
≥ 10 and more	1	3.3
Mean ± SD	4.7 ± 2.65	

Table (2): Relationship between Emotional Intelligence and Leadership Practice among studied Nursing leaders (N=30).

Items	Emotional intelligence			Chi-square	P-value	Sig.
	Low	Moderate	High			
Leadership Practice						
Least frequent	0	0	0	12.85	.000	H.S
	0	0	0			
Moderate Frequent	0	9	0			
	0	100.0%	0.0%			
Most frequent	0	6	15			
	0	28.6%	71.4%			

Table (3): Correlation between Subscales of Emotional Intelligence and Leadership Practice among studied Nursing leaders (N=30).

		Model the Way	Inspire a Shared Vision	Challenge the Process	Enable Others to Act	Encourage the Heart	Leadership practice
Managing relations	Spearman coefficient		0.410*				0.666**
	P-value		0.025				0.000
Self-Awareness	Spearman coefficient		0.388*				0.327
	P-value		0.034				0.028
Emotional stability	Spearman coefficient			0.402*			0.408*
	P-value			0.028			0.025
Altruistic behavior	Spearman coefficient		0.442*	0.525*			0.575**
	P-value		0.014	0.003			0.001
Value orientation	Spearman coefficient	0.473*					0.171
	P value	0.008					0.366
Commitment	Spearman coefficient	0.415*					0.098
	P value	0.023					0.608
Self-Development	Spearman coefficient			0.381*			0.479**
	P-value			0.038			0.007
Self-Motivation	Spearman coefficient	0.212	0.331	0.331	0.212	0.306	0.455*
	P value	0.260	0.074	0.074	0.260	0.101	0.012
Empathy	Spearman coefficient		0.511*				0.455*
	P-value		0.004				0.012
Integrity	Spearman coefficient			0.414*			0.429*
	P-value			0.023			0.018
Emotional intelligence	Spearman coefficient	0.415*	0.447*	0.447*	0.695**	0.267	0.655**
	P-value	0.023	0.013	0.013	0.000	0.153	0.000

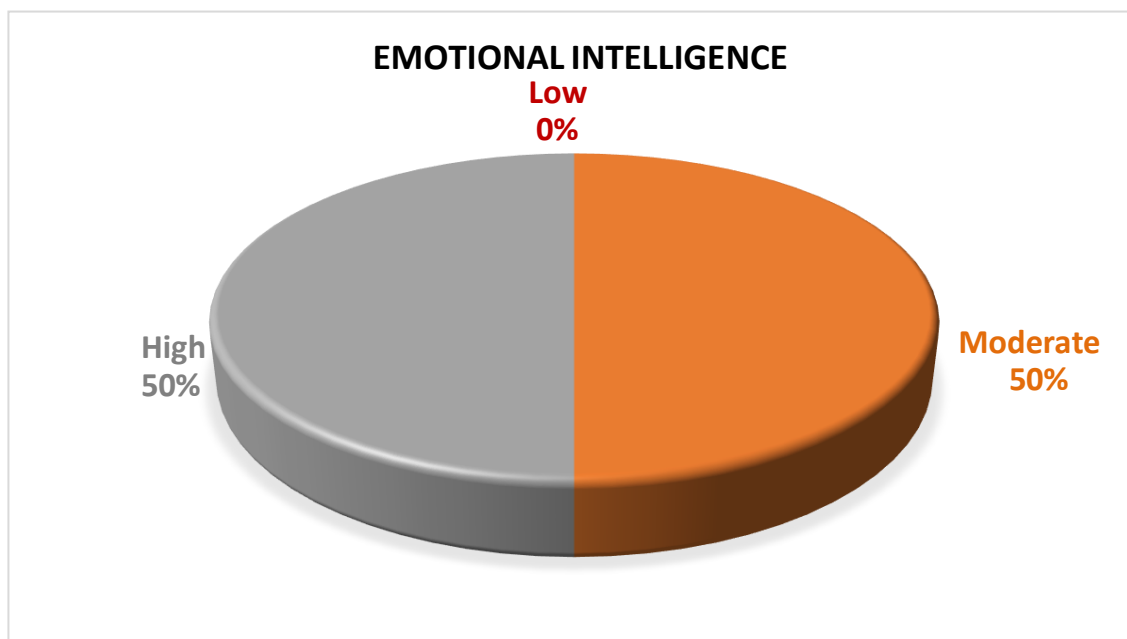


Figure (1): Percentage Distribution of Emotional Intelligence among studied Nursing leaders (N=30).

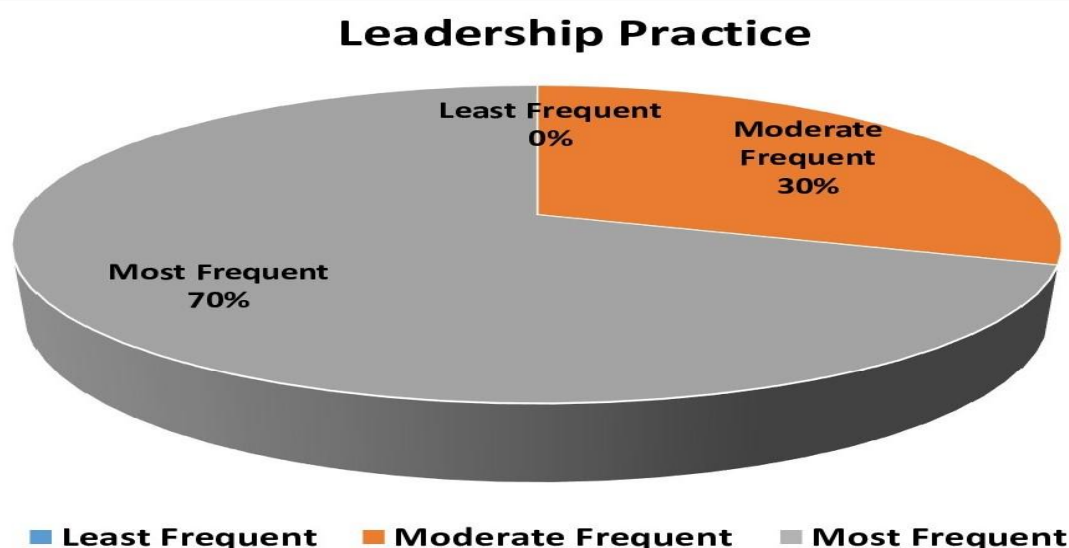


Figure (2): Percentage Distribution of Leadership Practice among studied Nursing leaders (N=30).

III. Discussion

The present study revealed that the majority of nursing leaders had personal characteristics of age from 25 to < 35, males, and married with less than 10 years of nursing leadership experience. The present study results are incongruent with *Kabeel, (2016)* who revealed that the majority of nurse leaders had a personal characteristic of age from 35 to 40 years and female with less than 5 years of nursing leadership experiences.

In the same way, as presented in a study of emotional intelligence and nursing leadership styles among nurse leaders by *Tyczkowski et al., (2015)*, the majority of participants were primarily female (92%), more than one third were 61 years of age or older and slightly more one-third of subjects reporting less than 5 years' experience as a nurse leader.

This contradiction may be due to "from the investigator's point of view"

The nursing profession in the private sector had young nursing leaders in all ranks compared to the government sector and their leadership could be improved through mentorship and training by the leaders in the higher rank who made up the lowest percentage of them.

Regarding marital status, nurse leaders who dominated the leadership positions were married at a young age as a cultural tradition in Egypt. This may be related to "from the investigator's point of view" the psychological and emotional stability that is likely to result from marriage and thus might increase the

frequency of utilizing leadership practices.

In the same perspective, *Aziza & Yussef, (2017)* reported in a study on 125 nurses' leaders who participated from the five selected hospitals in Jeddah that the great majority of them were females. Moreover, more than three quarters were married, in the age group of 31-50 years.

As regards the qualification of nursing leaders; the majority of the nurse leaders who participated in the study had a bachelor's degree. In support of the present study *Kabeel, (2016)* revealed that the majority of the nurse managers had a bachelor's degree.

Also, this result is consistent with *Tyczkowski et al., (2015)* who stated more than half were bachelor's degrees. Agreed with *Aziza & Yussef, (2017)* revealed more than one-half of the nurse's leaders have bachelor qualifications.

This may be related to the fact that to have more opportunities to be a nurse leader, you should have a minimum bachelor's degree in nursing. In addition to learning how to accommodate a growing, diverse patient population, healthcare organizations need high qualified experienced nursing leaders to help them navigate changes in technology, community, healthcare reform, and legislation.

As regards, the finding of the present study revealed that there were highly statistically significant differences between emotional intelligence and leadership practice and there was a strong positive relationship between emotional intelligence and leadership practice among nursing leaders.

This finding is consistent with previous research by *Echevarria et al., (2017)* and *Spano-Szekely et al., (2016)* in a predictive correlation study used a sample of 148 nurse leaders to measure their level of emotional intelligence and transformational leadership practice; They found a significant positive relationship between emotional intelligence and leadership practice.

In the same way, this result is consistent with *Compagnone, (2019)* who demonstrated a significant moderate, positive correlation between emotional intelligence and transformational leadership practice among nurse leaders. This result is in agreement with *Wen et al., (2019)* who showed that the emotional intelligence of participants had a significant positive correlation with their leadership practice and emotional intelligence can predict their leadership practice positively.

Similarly, this finding is agreed with *Kabeel, (2016)* who noted in her study a significant positive relationship between emotional intelligence and transformational leadership style. Besides, she reported that nurse leaders who had high emotional intelligence levels had a high level of transformational leadership practices. Results of the study were consistent with *Goleman, (2017)* who premised that supported positive relationships between emotional intelligence and transformational leadership practice.

In the same perspective, *Tyczkowski et al., (2015)* used the Emotional Quotient Inventory to measure emotional intelligence and the Multifactorial Leadership Questionnaire to determine leadership style in 128 nurse leaders. The result revealed in the transformational leadership style compared to the other leadership styles denoting a strong correlational between emotional intelligence and transformational leadership practice.

On the contrary, *Van Genderen, (2012)* investigated the predictive relationship between emotional intelligence and transformational leadership of leaders at various levels within the organization hierarchy in Moscow, Russia; the results indicate no significant relationship between emotional intelligence and the leadership practice of Russian leaders.

Besides, this finding of the present study is inconsistent with *Bush et al., (2020)* who revealed that no significant correlation was found between overall emotional intelligence and leadership practice. Also, *Noe, (2012); Harney, (2015)* who stated that emotional intelligence was not directly correlated to leadership practice and that they were not dependent on each other.

About, the correlation between subscales of emotional intelligence and leadership practice among nursing leaders; the present study revealed that emotional intelligence had a significant positive correlation with dimensions of leadership practice except encourage the heart. On the other side, leadership practice had a significant positive correlation with dimensions of emotional intelligence except for value orientation and commitment.

This finding is agreed with *Anand & UdayaSuriyan, (2010)* who identified that many components of emotional intelligence are correlated with leadership practices. Besides, *Kabeel, (2016)* found significant positive relationships between subscales of emotional intelligence and components of transformational leadership practice.

In the same way, *Zurita-Ortega et al., (2020)* found statistically significant differences and strong positive correlations between leadership practice and all emotional intelligence dimensions. Also, *Miller, (2015)* showed a positive relationship between all emotional intelligence sub-scales and the five leadership practices and stated that the weakest relationship for leaders appeared to be between self-motivation and model the way while the strongest relationship appeared to be between emotional stability and enabling others to act.

On the contrary, this finding is conversely with *Noe, (2012); Harney, (2015); Bush et al., (2020)* who stated that the five leadership practices and the dimensions of emotional intelligence are not correlated. The

Pearson Product-Moment Correlation statistics shows that there is no significance or correlation among the subscales of emotional intelligence and leadership practice.

IV. Conclusion and Recommendations

■ In light of the study findings, it can be concluded that there is a strong positive relationship between emotional intelligence and leadership practice among nursing leaders.

In light of the study findings, the following recommendations are suggested:

- Formulate strategies and programs to develop emotional intelligence in nurse leaders and hence increase the frequency of applying the five exemplary leadership practices.
- Implementing screening assessment tools for emotional intelligence and Leadership that senior nurse leaders and recruiters must screen for attributes of emotional intelligence and the five exemplary leadership practices in current and future nurse leaders.
- Establishing a comparative study between private and governmental sectors to assess differences, similarities, and identify factors associated with increasing the emotional intelligence and the five exemplary leadership practices.

References

- [1]. **Anand, R., & UdayaSuriyan, G. (2010).** Emotional intelligence and its relationship with leadership practices. *International Journal of Business and Management*, 5(2), 65.
- [2]. **Apore, G. N., & Asamoah, E. S. (2019).** Emotional intelligence, gender and transformational leadership among nurses in emerging economies. *Leadership in Health Services*.
- [3]. **Aziza, M., & Yussef, T. O. (2017).** Perceived Emotional Intelligence of Nurse Managers in Ministry of Health in Jeddah, Saudi Arabia.
- [4]. **Balamohan, P., Tech, M. and Gomathi, S. (2015).** Emotional Intelligence – Its Importance and Relationship with Individual Performance, Team Effectiveness, Leadership and Marketing Effectiveness. *MJSS*.
- [5]. **Banjar, H., & El Seesy, N. (2019).** Measurement of the Emotional Intelligence Competencies for Effective Leaders among Saudi Nursing Students at King Abdul Al Aziz University. *American Journal of Nursing Research*, 7(4), 420-427.
- [6]. **Bush, T., Glover, D., Ng, A. Y. M., & Romero, M. J. (2020).** Master teachers as teacher leaders: evidence from Malaysia and the Philippines. *International Studies in Educational Administration*, 43(2).
- [7]. **Compagnone, M. S. N., & CPEN, T. (2019).** Examining the Association between Emotional Intelligence and Leadership Style in Nurse Leaders.
- [8]. **Cumberlander, S. L. (2017).** The Effects and Levels of Emotional Intelligence on Leadership Styles and Employee Morale (Doctoral dissertation, Carson-Newman University).
- [9]. **Dhar, U., Pethe. S., Hyde. A. (2002).** Manual for Emotional Intelligence Scale, National Psychological Corporation, Kacherighat, Agra.
- [10]. **Echevarria, I. M., Patterson, B. J., & Krouse, A. (2017).** Predictors of transformational leadership of nurse managers. *Journal of nursing management*, 25(3), 167-175.
- [11]. **Goleman, D. (2017).** What Makes a Leader?(Harvard Business Review Classics). Harvard Business Press.
- [12]. **Harney, E. I. (2015).** Correlation of emotional intelligence of school leaders and school climate: A cross-cultural comparison between American and South Korean schools. Indiana University of Pennsylvania.
- [13]. **Hussain, F. A. M. A. M., & Gilani, S. A. (2019).** Leadership Practice Among Nurses in Tertiary Care Hospital Lahore. *Leadership*, 60.
- [14]. **Kabeel, A. R. (2016).** Emotional Intelligence: A Key for Nurse Managers' Transformational Leadership Style. *Journal of Natural Sciences Research*, 6(20), 28-36.
- [15]. **Kouzes, J. M., & Posner, B. Z. (2017).** *The Leadership Challenge* (6th ed.). Hoboken, NJ: John Wiley & Sons.
- [16]. **Kouzes, J. M., & Posner, B. Z. (2013).** Leadership practices inventory: Self report.
- [17]. **Mansel, B., & Einion, A. (2019).** 'It's the relationship you develop with them': emotional intelligence in nurse leadership. A qualitative study. *British Journal of Nursing*, 28(21), 1400-1408.
- [18]. **Miller, K. B. (2015).** The relationship between emotional intelligence behaviors and leadership practices among women leaders in education and business organizations. Unpublished Ph. D. Dissertation. The Philippines: Capella University.
- [19]. **Mohamed, M. A. A. (2019).** The Relationship between Faculty Staff Members and Their Assistants' Emotional Intelligence and Their Clinical Teaching Effectiveness. *Port Said Scientific Journal of Nursing*, 6(1), 198-214.
- [20]. **Noe, J. (2012).** The Relationship between Principal's Emotional Intelligence Quotient, School Culture, and Student Achievement.
- [21]. **Posner, B. (2015).** An investigation into the leadership practices of volunteer leaders. *Leadership & Organization Development Journal*, 36(7), pp.885-898.
- [22]. **Shamim, M., & Siddiqui, D. A. (2019).** Impact of Leader's Emotional Intelligence on Sub-Ordinates' Organizational Citizenship Behavior and Task Performance: The mediatory role of Organizational Culture. Available at SSRN 3510571.
- [23]. **Spano-Szekely, L., Griffin, M. T. Q., Clavelle, J., & Fitzpatrick, J. J. (2016).** Emotional intelligence and transformational leadership in nurse managers. *JONA: The Journal of Nursing Administration*, 46(2), 101-108.
- [24]. **Tyczkowski B., Vandenbouten C., Reilly J., Kubsch S. M. (2015).** Emotional Intelligence and Nursing Leadership Styles Among Nurse Managers. *Nursing administration quarterly/April-June 2015; Vol.39, No.2*, pp.172-180.
- [25]. **Van Genderen, F. (2012).** Relationship between emotional intelligence and leadership Style: A comparative-gender study. *Review of International Comparative Management*, 13(2), 224-236.
- [26]. **Wen, R. H., Lin, L. N., Zhon, Z. B., & Liu, Y. F. (2019, January).** Research on the Characteristics and Correlation between the Emotional Intelligence and Leadership Practice of Medical College Students. In 3rd International Seminar on Education Innovation and Economic Management (SEIEM 2018). Atlantis Press.

- [27]. **Willyard, D. A. (2017).** The Relationship between Nurse Leaders' Emotional Intelligence and Nurse Followers' Organizational Commitment and Retention (Doctoral dissertation, College of Saint Mary).
- [28]. **Zurita-Ortega, F., Olmedo-Moreno, E. M., Chacón-Cuberos, R., Expósito López, J., & Martínez-Martínez, A. (2020).** Relationship between Leadership and Emotional Intelligence in Teachers in Universities and Other Educational Centres: A Structural Equation Model. *International Journal of Environmental Research and Public Health*, 17(1), 293.