

The Relationship between First-Line Nurse Managers' Emotional Intelligence and their Conflict Management Styles

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Abstract:Background: Effective conflict management has become a critical role for nurse managers in healthcare organizations as well as a critical leadership skill. Individuals who can assume a sense of emotional or self-control are able to handle conflicting circumstances more effectively. Thus, When deciding which conflict management style to choose, emotional intelligence is necessary for directing behaviors and taking an appropriate action

Aim: The study aims to investigate the relationship between first-line nurse managers' emotional intelligence and their conflict management styles at Alexandria University Hospitals.

Method: A descriptive correlational study was conducted at 2017. Nurse Managers' Conflict Management Style Assessment Questionnaire and Emotional Intelligence Scale were given to 93 first-line nurse managers working in all Intensive Care and Critical Care Units, medical and surgical care inpatient units at five Alexandria University hospitals.

Results: the first-line nurse managers' overall emotional intelligence was positively correlated with accommodating conflict management style and negatively correlated with each of competing and avoiding styles. Moreover, the majority of the study participants had moderate levels of emotional intelligence and the most frequently used conflict management styles among them were collaborating and compromising while the least used one was avoiding.

Conclusion and recommendations: The present study confirmed that there is a correlation between conflict management styles and emotional intelligence among first-line nurse managers. The study suggests that health care organizations would strengthen the emotional intelligence of their nurse managers by conducting training programs about emotional intelligence and conflict management to enhance their conflict management skills and problem solving. Further researches are needed to study the impact of organizational culture on emotional intelligence and conflict management skills.

Keywords: first-line nurse manager, conflict management, styles, emotional intelligence

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I. Introduction

Dynamic environments such as healthcare work environment characterized by interactions between many individuals, within a defined setting, are always conducive to conflict⁽¹⁾. Conflict is defined as the consequence of real or perceived differences in objectives, actions, ideas, attitudes, beliefs, feelings, or values⁽²⁻⁴⁾. Sometimes these values are related to differences in professional and economical issues, professional competition and scarce resources⁽³⁾. Valentine (2001) indicated that about 20% of the manager's time is spent in handling workplace dispute among employees⁽⁵⁾.

Conflict can be constructive or destructive, healthy or dysfunctional. It can increase creativity by acting as a catalyst for developing new ideas or identifying methods for solving problems⁽²⁾. The leader's role is to create a working environment where conflict may be used as a mean for growth, innovation, and productivity. When organizational conflict becomes dysfunctional, the manager must recognize it in its early stages and actively intervene in order not to adversely affect the motivation of subordinates and organizational productivity. Untreated disputes in health care organizations are costly, because they waste time and money and result in turnover of employees⁽⁶⁾. Thus, effective conflict management has become a critical role for nurse managers in healthcare organizations as well as a critical leadership skill.

Conflict management is concerned with reducing the dysfunction of conflict and increasing the benefits of the constructive conflict using effective ways⁽⁷⁾. Common conflict management styles are collaborating/integrating, competing/dominating, accommodating/obliging, compromising and avoiding⁽³⁾. In collaborating, all parties set aside

their original goals and work together to achieve a common goal that is superordinate and priority. The competing is used when one party pursues what it wants at the expense of the others. In the accommodating, one party sacrifices his or her beliefs and allows the other party to win. In compromising, each party gives up something it wants. In avoiding, the parties involved are aware of a conflict but choose not to acknowledge it or attempt to resolve it⁽³⁾.

In fact, no one conflict management style is successful in all situations. In other words, an effective conflict management style in one situation may be not effective when circumstances change⁽⁸⁾. The selection of the most suitable strategy depends on many factors, such as the situation itself, the urgency of the decision, the importance of the issue, the power and status of each party, and the maturity of the individuals involved in the conflict⁽³⁾. Filley (1975) identified three basic outcome-based conflict management strategies: win - win, win - lose and lose-lose⁽⁹⁾. The optimal goal of conflict resolution is to create a win-win solution for all involved. This outcome is not achievable in every case, and often the aim of the manager is to handle the conflict in a way that reduces the perceptual differences between the parties concerned⁽³⁾.

Goleman (1998) indicated that conflict cannot be totally eliminated, but learning essential emotional intelligence (EI) skills can be helpful, and suggested that individuals who can assume a sense of emotional or self-control are able to handle conflicting circumstances more effectively⁽¹⁰⁾. EI refers to the ability to perceive, understand, and control one's own emotions as well as those of others, to discriminate among them and use this information to guide one's thinking and actions^(11,12).

EI involves five components self-awareness, managing emotions, motivating oneself, empathy and social skills⁽³⁾. Self-awareness means being aware of one-self own feeling, being conscious of the emotions within one-self. Managing emotions refers to the ability to balance own moods so that worry, anxiety, fear, or anger do not get in the way of what needs to be done. Motivating oneself is the ability to be hopeful and optimistic despite obstacles, setbacks, or even outright failure is crucial for pursuing long-term goals in life or in business. Empathy indicates being able to put oneself in someone else's shoes—to recognize what others are feeling without them needing to tell. Social skill is the ability to connect to others, build positive relationships, respond to the emotions of others and influence them^(13,14).

Individuals having EI are able to manage distressing moods and control impulses in circumstances involving conflict⁽¹⁵⁾. When deciding which conflict management style to choose, emotional intelligence is necessary for directing behaviors and taking an appropriate action⁽¹⁶⁾. According to Al-Hamdan et al. (2019), the relationship between conflict management styles and emotional intelligence is not completely conceptualized, and the way of how conflict management styles relate to emotional intelligence is not clearly identified. There is a rise in the literature that explores the impact of emotional intelligence on conflict management styles used by nurse managers. However, not all studies reported the same direction of the relationships between emotional intelligence and conflict management styles⁽⁴⁾.

Despite the significant increase in recognizing and understanding the role of EI in organizational behavior and managing conflict, little research has been done on assessing the EI of nurse managers and whether there is a significant relationship with their conflict management styles^(12,17). Jordan and Troth's (2002) and Morrison (2008) found a positive correlation between collaboration and higher levels of EI^(18,19). Also, Shih and Susanto (2010) reported significant and positive association between EI and integrating and compromising conflict handling styles of government employees working in Indonesia⁽²⁰⁾. Furthermore, Chan et al. (2014) and Başoğlu and Özgür (2016) found that emotional intelligence was positively associated with using integrating, obliging, compromising and dominating styles, and negatively associated with using the avoiding style^(21,22).

The outcomes of a descriptive study done in Egypt suggested that both dominating and accommodating styles are frequently used by nurse managers. Also, it was found that half nurse managers had a mild emotional intelligence, which was negatively associated with avoiding style and positively with both dominating and accommodating styles⁽²³⁾. In Jordan, Al-Hamdan et al. (2019), found that nurse managers' emotional intelligence was positively correlated with integrating, compromising and obliging styles, while negatively correlated with dominating and avoiding styles and suggested that individuals are better able to manage conflict if they have higher level of emotional intelligence⁽⁴⁾.

Given the importance of EI to conflict resolution, the present study will be of significance to health care facilities because of the high stress and conflict associated with the nursing profession, that lead nurses to leave the profession. This attrition contributes to the major problem facing the health care industry, which is a shortage of nurses⁽¹²⁾. As First-line nurse managers deal directly with nurses during their work and directly supervised and managed them that lead to more interactions and increase the possibility of conflict to occur. Therefore, McElhane (1996) stated that being able to manage conflict effectively is just as important as planning, communication, motivation, and decision-making and many experts feel it is more important⁽²⁴⁾. Considering various inconsistencies

in the previous research studies, the current study aims to investigate the relationship between first-line nurse managers' emotional intelligence and their conflict management styles at Alexandria University Hospitals.

II. Materials and Method

Design: A descriptive correlational research design was used in this study.

Settings

The study was carried out in Alexandria University Hospitals (N=5) as follows: Alexandria Main University Hospital, El-Shatby Maternity University Hospital, El-Shatby Pediatric University Hospital, El-Hadara Orthopedic and Traumatology University Hospital and University Student Hospital. These are teaching hospitals with wide range of health care services such as outpatient clinics, emergency and inpatient units for different specialties, Critical Care Units and other Intensive Care Units. It also includes paramedical departments as radiology, laboratory, pharmacy, blood bank, dietary, laundry, maintenance departments etc.

The units covered in this study were all Intensive Care and Critical Care Units (N=26), medical and surgical care inpatient units (N=67) in the previously mentioned studied hospitals.

Subjects

The study participants comprised of all first-line nurse managers who were available and willing to participate in the study during the time of data collection in the previously mentioned studied hospitals (N=93). The inclusion criterion for participants was working as a first-line nurse manager for not less than one year.

Tools

Tool 1: Nurse Managers' Conflict Management Styles Assessment Questionnaire

It was developed by the researcher based on review of the current related literatures^(3, 25-28) to assess first-line nurse managers' conflict management styles. It consists of 39 items; 7 items assessed collaborating style; 6 items related to compromising style; 8 items related to accommodating; 9 items measured competing; and 9 items related to avoiding. The responses of these items were measured by using 5-point Likert rating scale ranges from 1 to 5, with the following rating criteria; 1 (never), 2 (seldom), 3 (occasionally), 4 (frequently), and 5 (always). A higher score represents greater use of a conflict style.

Tool 2: Emotional Intelligence Scale (EIS)

The Emotional Intelligence Scale was originally developed by Hunsaker (2001) to assess emotional intelligence in managing workplace⁽²⁹⁾. It was adapted by Vanderpol in 2011 to assess the degree of emotional intelligence of different populations⁽¹³⁾. The scale consists of 25 items; five items under each of the following five dimensions: Self-awareness, managing emotions, motivating oneself, empathy, and social skill. The responses are rated on a five-point Likert scale ranging from 1 to 5, with the following rating criteria; 1 (very slight ability), 2 (slight ability), 3 (moderate ability), 4 (very much ability), and 5 (extreme ability).

The total score of EIS is ranging from 25 to 125, with a score ranging from 101 to 125 indicating high, from 50 to 100 indicating moderate, and below 50 indicating low emotional intelligence.

In addition, first-line nurse managers' sex, age, qualification, working hospital, working unit, years of experience since graduation and in the current position were assessed.

III. Method

The study was approved by the Ethical Committee of the Faculty of Nursing, Alexandria University. An official permission to survey first-line nurse managers was secured from the directors of the studied hospitals. Nurse Managers' Conflict Management Styles Assessment Questionnaire was developed and translated into Arabic and tested for its face and content validity by seven experts in relevant fields. Based on their opinions, modifications were done in some questions. Internal consistency was evaluated using Cronbach's alpha coefficient test, the value was 0.860 and the alpha error was 0.05. Emotional Intelligence Scale (tool 2) proved to be valid and reliable (Cronbach's Alpha = 0.929) by Mahmoud 2013⁽³⁰⁾.

After proper information given to the participants before the distribution of the questionnaires, informed consent was obtained from all participants before initiating data collection. Furthermore, confidentiality of data and participants' privacy and anonymity were assured. A pilot study was carried out involving 10% of first-line nurse managers (N=9) from a setting other than the study settings and who were not included in the study in order to determine study feasibility, including design and questionnaire content. No modifications were done. The questionnaires were hand delivered to each of the study participants in her work settings in the break time at

morning and the needed instructions were given to all the participants. It took between 20-30 minutes to respond to tools. Data were collected in a period of two months, 2017.

Statistical analysis

Data were revised, coded and fed to statistical software SPSS version 20. All statistical analyses were done using two tailed tests and alpha error of 0.05. P value equal or less than 0.05 was considered to be significant. The mean score, mean score percentage with standard deviation were used to describe the scales data, while frequency and percentage were used to describe the categorical data. Pearson correlation coefficient analysis was used to test the nature and strength of relation between two quantitative/ordinal variables.

IV. Results

Description of the participants

The highest percentage of the first-line nurse managers (52.7 %) was in the age group 30 to less than 40 yearsold, while the lowest percentage of them (14.0%) were 50 and more years old with mean age 40.52 ±7.90. They were all females, more than one-third of them (67.7 %) had Bachelor of Science Degree in Nursing and 28.0 % had a Diploma of Secondary TechnicalNursing School. Also,more than one-half (51.6%) of first-line nurse managers were working in the Alexandria Main University Hospital, while the minority of them (8.6%) were working in Elshatby Pediatric University Hospital. Moreover, the highest percentage of first-line nurse managers were working in the Medical and Surgical units (72.0%). In addition, 53.8% of them had 10 to less than 20 years of experience since graduationand 40.9% ofthem had 5 to less than 10 years of experience in their current position.

Table 1 illustrates that there was a statistically significant positive correlation betweenfirst-line nurse managers' overall emotional intelligence and accommodating style ($r = .203, p = .051$) and significant negative correlations with each of competing and avoiding styles ($rs = -.214, p = .039$ and $rs = -.237, p = .022$ respectively). On the other hand, compromising had significant positive correlations with each of motivating self and empathy dimensions ($r = .230, p = .026$ and $r = .277, p = .007$ respectively). Regarding accommodating, there were significant positive correlations with motivating oneself, empathy, and social skills dimensions ($r = .202, p = .053, r = .271, p = .009$ and $r = .211, p = .043$ respectively). Moreover, significant negative correlations were found between competing and managing emotions, motivating oneself and empathy ($rs = -.257, p = .013, rs = -.311, p = .002$ and $rs = -.269, p = .009$ respectively) .Lastly, avoiding had significant negative correlations withmotivating oneself, empathy, and social skills dimensions($rs = -.235, p = .024, rs = -.366, p = .000$ and $rs = -.238, p = .021$ respectively).

Table 1: Correlation Matrix between the first-line nurse managers' emotional intelligenceand their conflict management styles

		Conflict Management Styles				
		Collaborating	Compromising	Accommodating	Competing	Avoiding
Self-awareness	r	0.059	0.035	0.097	-0.042	-0.111
	P	0.572	0.739	0.356	0.691	0.291
Managing Emotions	r	0.130	0.191	0.181	-0.257	-0.172
	P	0.215	0.067	0.082	0.013*	0.099
Motivating oneself	r	0.144	0.230	0.202	-0.311	-0.235
	P	0.168	0.026*	0.053*	0.002*	0.024*
Empathy	r	0.141	0.277	0.271	-0.269	-0.366
	P	0.176	0.007*	0.009*	0.009*	0.000*
Social skills	r	0.005	0.152	0.211	-0.133	-0.238
	P	0.965	0.147	0.043*	0.204	0.021*
Overall Emotional intelligence	r	0.078	0.188	0.203	-0.214	-0.237
	p	0.460	0.072	0.051*	0.039*	0.022*

r = Pearson correlation

*Statistically Significant at ≤ 0.05

Table 2 reveals that the highest percentage of first-line nurse managers had fair level regarding their usage of all conflict management styles and the styles that scored highest good levels were compromising followed by collaborating. This goes in the same line with the mean score percentage of their utilized conflict management styles where the highest was regarding collaborating followed by compromising, accommodating, competing and avoiding (75.5±3.89,74.3 ±3.35, 72.8 ±4.00, 71.5 ±5.44 and 67.5 ±5.26 respectively).

Table 2: Mean scores percentages and levels of the studied first-line nurse managers' conflict management styles

Conflict management styles	Levels of Conflict Management						Mean Scores percentages	
	Poor		Fair		Good		Min- Max	M% ± SD
	No	%	No	%	No	%		
▪ Collaborating	8	8.6	48	51.6	37	39.8	17-35	75.5 ± 3.893
▪ Compromising	4	4.3	50	53.8	39	41.9	15-30	74.3 ± 3.354
▪ Accommodating	1	1.1	71	76.3	21	22.6	18-40	72.8 ± 4.007
▪ Competing	7	7.5	64	68.8	22	23.7	17-45	71.5 ± 5.445
▪ Avoiding	14	15.1	66	71.0	13	14.0	18-45	67.5 ± 5.261

Table 3 shows that the majority of first-line nurse managers had moderate level of overall emotional intelligence with mean score percentage 64.6 ± 14.29 . On the other hand, the highest mean score percentages were regarding empathy dimension followed by motivating oneself, social skills, self-awareness and managing emotions (65.8 ± 3.10 , 65.4 ± 3.10 , 64.3 ± 2.97 , 63.7 ± 2.86 and 63.7 ± 2.86 respectively).

Table 3: Mean scores percentages and levels of the studied first-line nurse managers' emotional intelligence

Emotional Intelligence dimensions	Levels of Emotional Intelligence						Mean Scores percentages	
	Low		Moderate		High		Min- Max	M% ± SD
	No	%	No	%	No	%		
▪ Empathy	2	2.2	84	90.3	7	7.5	8-23	65.8 ± 3.102
▪ Motivating oneself	1	1.1	83	89.2	9	9.7	8-22	65.4 ± 3.102
▪ Social skills	2	2.2	85	91.4	6	6.5	8-23	64.3 ± 2.972
▪ Self-awareness	1	1.1	90	96.8	2	2.2	7-22	63.7 ± 2.864
▪ Managing emotions	1	1.1	89	95.7	3	3.2	8-24	63.6 ± 2.921
▪ Overall Emotional Intelligence	1	1.1	85	91.4	7	7.5	39-109	64.6 ± 14.290

Table 4 illustrates that there was statistically significant difference among mean scores of first-line nurse managers' usage of collaborating management style in relation to their years of experience since graduation ($F=3.357$, $P=0.022$). In which, the highest mean scores were among those who had 30 and more years of experience. Regarding compromising style, there were statistically significant differences in relation to the hospital ($F=2.465$, $P=0.051$) and years of experience since graduation ($F=4.806$, $P=0.004$) as the highest mean score was among those who worked in Alexandria Main University hospital and those who had 30 and more years of experience.

Concerning accommodating as well as avoiding styles, there were statistically significant differences in relation to age, years of experience since graduation and in the current position. In which, the highest mean scores were among those who were 50 and more years old ($F=3.105$, $P=0.050$ and $F=4.734$, $P=0.011$) respectively, who had 30 and more years of experience since graduation ($F=3.821$, $P=0.013$ and $F=4.269$, $P=0.007$) respectively and who had 20 and more years of experience in the current position ($F=2.751$, $P=0.033$ and $F=3.789$, $P=0.007$) respectively. Moreover, in competing style, the highest mean scores were among those who had 30 and more years of experience since graduation and who had 20 and more years of experience in the current position with statistically significant differences ($F=3.666$, $P=0.015$ and $F=3.052$, $P=0.021$) respectively.

Table 4: The relationship between the studied first-line nurse managers' conflict management styles and their demographic characteristics

Demographic characteristics	Collaborating	Compromising	Accommodating	Competing	Avoiding
	M ± S. D	M ± S. D	M ± S. D	M ± S. D	M ± S. D
Age					
▪ 30-	26.31±3.343	22.02±2.890	28.65±3.413	31.55±4.569	30.24±4.226
▪ 40-	26.13±4.529	21.90±3.754	28.77±4.395	32.13±6.032	29.03±5.958
▪ 50+	27.46±4.332	24.23±3.586	31.62±4.501	34.46±6.753	34.15±5.640
Test of significance	F=0.567 P=0.569	F=2.630 P=0.078	F=3.105 P=0.050*	F=1.483 P=0.232	F=4.734 P=0.011*
Level of education					
▪ Technical Secondary School	25.92±3.783	22.27±3.293	28.81±4.167	31.96±5.219	31.15±4.929
▪ Technical Institute Diploma	25.25±2.986	21.25±3.403	26.75±1.893	31.00±3.916	29.50±1.732
▪ Bachelor of Science in Nursing	26.68±4.003	22.37±3.419	29.38±4.002	32.30±5.670	30.13±5.546
Test of significance	F= 0.530	F= 0.205	F= 0.910	F= 0.127	F= 0.405

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	P=0.591	P=0.815	P=0.406	P=0.881	P=0.668
Hospital name					
▪ Main University Hospital.					
▪ Elshatby Maternity Hospital.	27.23±3.544	22.96±3.066	29.33±3.766	32.90±3.822	31.25±4.733
▪ Elshatby Pediatric Hospital.	24.31±4.626	19.77±3.563	27.23±5.231	29.85±7.872	28.46±6.654
▪ Elhadara University Hospital.	26.13±4.224	22.25±3.955	28.63±3.889	31.75±7.305	29.13±3.091
▪ University Students Hospital.	25.80±4.329	22.40±3.418	29.67±4.203	31.33±6.894	31.00±5.757
▪ University Students Hospital.	26.33±2.828	22.22±2.819	30.11±2.248	33.22±4.206	28.67±6.144
Test of significance	F= 1.626 P=0.175	F= 2.465 P=0.051*	F= 0.994 P=0.415	F= 0.989 P=0.418	F= 1.174 P=0.328
Working unit					
▪ Medical and surgical inpatient units	26.33±3.998	22.30±3.502	29.00±4.203	31.96±5.806	30.52±5.442
▪ Critical and Intensive care units	26.62±3.678	22.27±3.001	29.38±3.511	32.65±4.445	30.04±4.845
Test of significance	T= 0.101 P=0.752	T= 0.001 P=0.970	T= 0.171 P=0.680	T= 0.306 P=0.582	T= 0.157 P=0.693
Years of experience since graduation					
▪ < 10	27.44±2.186	22.00±2.345	27.78±2.489	32.11±1.537	30.11±3.408
▪ 10-	25.68±3.695	21.68±3.006	28.36±3.652	30.76±4.943	29.34±4.350
▪ 20-	26.05±4.100	22.05±3.760	29.64±4.147	33.23±6.697	30.32±6.395
▪ 30+	29.33±4.185	25.50±3.119	32.25±4.712	36.00±4.954	35.08±5.616
Test of significance	F= 3.357 P=0.022*	F= 4.806 P=0.004*	F= 3.821 P=0.013*	F= 3.666 P=0.015*	F= 4.269 P=0.007*
Years of experience in the current position					
▪ < 5	26.76 ± 2.879	22.00±2.168	28.14±2.414	31.29±3.783	29.10±3.032
▪ 5-	25.95±4.399	21.92±3.544	28.79±4.338	31.13±5.493	29.66±5.947
▪ 10-	25.86±3.705	22.05±3.442	29.38±3.354	32.52±6.047	30.62±3.968
▪ 15-	27.50±3.477	23.75±3.646	30.42±4.999	35.17±4.877	33.33±5.758
▪ 20+	35.00±0.000	30.00±0.000	40.00±0.000	45.00±0.000	45.00±0.000
Test of significance	F= 1.795 P=0.137	F= 2.177 P=0.078	F= 2.751 P=0.033*	F= 3.052 P=0.021*	F= 3.789 P=0.007*

F= ANOVA Test T= Student T Test * Statistically significant at ≤0.05

Table 5 shows that there were no statistically significant differences among mean scores of first-line nurse managers' emotional intelligence in relation to their age, educational level, working hospital, working unit, years of experience since graduation and in the current position.

Table 5: The relationship between the studied first-line nurse managers' emotional intelligence and their demographic characteristics

Items	Mean Scores of Emotional Intelligence		Test of significance
	M ± S, D		
Age			
▪ 30-	80.08±12.535		F=1.870 P=0.160
▪ 40-	83.97±13.965		
▪ 50+	75.15±19.676		
Level of education			
▪ Technical Secondary Nursing School	78.38±15.229		F= 0.512 P=0.601
▪ Technical Nursing Institute Diploma	81.44±14.309		
▪ Bachelor of Science in Nursing	83.75±5.315		
Hospital name			
▪ Main University Hospital	78.69±14.571		F= 1.080 P=0.371
▪ Elshatby Maternity University Hospital	83.23±16.089		
▪ Elshatby Pediatric University Hospital	77.00±15.757		
▪ Elhadara University Hospital	86.40±11.426		
▪ University Students Hospital	81.44±12.541		
Working unit			
▪ Med. and surg. inpatient units	79.60±14.502		T= 1.403 P=0.239
▪ Critical and Intensive care units	83.50±13.598		
Years of experience since graduation			
▪ < 10	84.89 ± 12.098		F= 0.629 P=0.598
▪ 10-	81.30±13.517		

▪ 20- ▪ 30+	79.77±15.913 76.67±16.395	
Years of experience in current the position		
▪ < 5 ▪ 5- ▪ 10- ▪ 15- ▪ 20+	82.38 ± 12.217 80.71±13.760 83.10±13.932 76.00±17.909 50.00±0.0000	F= 1.754 P=0.145

F= ANOVA Test T= Student T Test * Statistically significant at ≤ 0.05

V. Discussion

Understanding how Eland conflict management correlate can be used to improve interpersonal relationships in a healthcare facility. When conflict is approached with high levels of EI, it creates an opportunity for learning effective interpersonal skills and enhance productivity⁽¹⁹⁾. The present study was conducted to investigate the relationship between first-line nurse managers' emotional intelligence and their conflict management styles at Alexandria university hospitals. This study reported a significant positive correlation between first-line nurse managers' overall emotional intelligence and their usage of accommodating style and negative correlations with each of competing and avoiding conflict management styles.

It was not surprising that these results are supported and strengthened by the significant positive correlations found between each of motivating oneself and empathy dimensions of EI and each of accommodating and compromising styles which are dissimilar to the correlations found between the same EI dimensions and competing and avoiding styles in the present study. Moreover, social skills dimension was correlated positively with accommodating and negatively with avoiding, while managing emotion was negatively correlated with competing style. This means that all of the studied first-line nurse managers used all conflict management styles with different levels depending on the situation and the more they are emotionally intelligent especially for those the most experienced ones the more they use styles like collaborating and compromising in confronting conflicts in a way that the needs/goals of both sides of conflict are met. This may be explained in the light of the work culture that appreciate values as cooperation and considering others' needs and suggests that emotionally intelligent individuals may use various conflict management styles to deal with conflict more constructively according to the conflict type.

These results matches the results of Al-Hamdan et al. (2019) who found a significant relationship between emotional intelligence and conflict management styles, as high EI was associated with the use of collaborating style, compromising style and accommodating style, while low EI was associated with the use of competing style and avoiding style⁽⁴⁾. Also, the results of various studies (Vashisht et al. 2018; Garcia and Maniago 2018; BaşoğulandÖzgür, 2016; Hopkins andYonker, 2015; MonteiroandBalogun, 2015; Chan et al., 2014; Mohamed andYousef, 2014) go in the same line with current study results^(17, 21-23, 31-33).

On the other hand, the study of the Pandey et al. (2015) contradicted the result of the present study, as it revealed that high EI was associated with the use of avoiding style⁽³⁴⁾. Furthermore, the study of Riaz et al. (2012) concluded that high EI was associated with the use of collaborating, compromising, avoiding, and competing styles while emotional intelligence had no significant effect on accomodating style, which does not fully support the outcomes of the current study⁽³⁵⁾.

The majority of the participants in the present study had moderate levels of emotional intelligence. The highest mean scores percentages of emotional intelligence scales were the empathy and motivating oneself, whereas the lowest were managing emotions and self-awareness. This may be attributed to that the concept is relatively new and is not included much in the management training programs given to the nurse managers in the studied hospitals. These results match the result of Al-Hamdan et al.(2019) and Basogul and Ozgur(2016)^(4, 22). By comparison to the present study, MohamedandYousef(2014) found that emotional intelligence level was mild among studied nurse managers⁽²³⁾. Unlike, Garcia and Maniago(2018) found high level of EI among middle managers of selected higher educational institutions in Central Luzon with selfmanagement dimension as the highest scored followed by social skills, social awareness and selfawareness⁽³¹⁾.

Moreover, the results in the present study revealed that the most frequently used conflict management styles among first- line nurse managers were collaborating and compromising while the least used style was avoiding with the highest percentages of them used all styles in a fair level. This can be explained as no dominant conflict management style is used by the first-line nurse managers in the present study, that may be due to their experience as about one-half of them had from 10 to less than 20 years of experience that may lead them to realize that no one style can fit all situations. In this respect, Vivar(2006) suggested that there is no appropriate or

inappropriate style to deal with conflict. However, detecting initial symptoms of conflict and adopting the most effective behavior to conflict resolution is essential in nursing units⁽³⁶⁾. These results exactly matches the results of Al-Hamdan et al.(2019) who found that the most commonly used conflict management styles among Jordanian nurse managers were the collaborating and compromising styles, whereas the least commonly used style was the competing style⁽⁴⁾. This go in the same line with the result of Chan et al. (2014) and Al-Hamdan et al. (2016)^(21,37).

In contrast, a study done by Pandey et al.(2015) reported that the avoiding style is most frequently used for conflict management⁽³⁴⁾. On the other hand, Mohamed and Yousef(2014) concluded that forcing and smoothing conflict management styles were the most two used by the nurse managers⁽²³⁾. Moreover, Başoğul and Özgür(2016) suggested that nurses used the avoiding, competing, and accommodating strategies at a moderate level, while they used the compromising and collaborating strategies at a mild level⁽²²⁾.

The present study revealed that there were no statistically significant differences among first-line nurse managers' emotional intelligence in relation to their demographic characteristics. These results matches the results of Garcia and Maniago(2018) except that EI improves with age⁽³¹⁾. On the other hand, conflict management styles among first-line nurse managers differ significantly regarding their age in accommodating and avoiding styles that increased by increasing the age, working hospital in compromising that was slightly higher in the Main University hospital and the least in the Maternity University hospital, years of experience since graduation in all styles and years of experience in the current position in accommodating, competing and avoiding styles. Conflict management styles scored higher with increasing the years of experience.

In this respect, Al-Hamdan et al.(2019) found that conflict management styles significantly differed according to hospital type and years of experience and no significant differences were found in relation to age and gender of the participant⁽⁴⁾. Also, a study done by Başoğul and Özgür (2016) reported no significant differences between conflict management styles and age or the marital status of nurses while significant differences in the competing style were found according to their education and in integrating style according to working units and years of experience, the higher scores was among the low experience⁽²²⁾.

Moreover, Mohamed and Yousef(2014) found that the avoiding style was more used by nurses with more years of experience and explained that as the cool indifferent attitude that is usually gained after years of dealing with conflict⁽²³⁾. In congruence with these findings and explanation, Kantek and Kavla (2007) mentioned that nurse managers who are older and have management experience need to be encouraged to use effective conflict management styles⁽³⁸⁾.

VI. Conclusion

The present study concluded that the first-line nurse managers' overall emotional intelligence was positively correlated with accommodating conflict management style and negatively correlated with each of competing and avoiding styles. Moreover, the majority of the participants in the present study had moderate levels of emotional intelligence and the most frequently used conflict management styles among them were collaborating and compromising while the least used one was avoiding.

On the other hand, some conflict management styles among first-line nurse managers differ significantly regarding their age, working hospital, years of experience since graduation and in the current position, while there were no statistically significant differences among first-line nurse managers' emotional intelligence in relation to their demographic characteristics.

VII. Recommendations

The current study suggests that health care organizations would strengthen the emotional intelligence of their nurse managers through creating awareness and conducting training programs about emotional intelligence and conflict management to enhance their conflict management skills and problem solving to make better decisions in difficult situations. In addition, learning how to handle conflict in a productive style in different situations can enhance teamwork, productivity and reducing problems such as nursing shortage that may results from nurses' dissatisfaction.

Furthermore, integrating emotional intelligence topic into the nursing curriculum will prepare nursing students to understand themselves and to be able to make better professional relationships and managing/confronting different situations. Replicating the present study in various health care setting with larger number of subjects covering all management levels in nursing will strengthen the study. Further researches are needed to study the impact of organizational culture on emotional intelligence and conflict management skills.

References

- [1]. McKibben L. Conflict management: importance and implications. *British Journal of Nursing*. 2017 Jan 26;26(2):100-3.
- [2]. Sullivan EJ. *Effective leadership and management nursing*. 8th ed. Boston: Pearson Inc; 2012.
- [3]. Marquis BL, Huston CJ. *Leadership roles and management functions in nursing: Theory and application*. Lippincott Williams & Wilkins; 2015.
- [4]. Al-Hamdan Z, Adnan Al-Ta'amneh I, Rayan A, Bawadi H. The impact of emotional intelligence on conflict management styles used by Jordanian nurse managers. *Journal of nursing management*. 2019 Apr;27(3):560-6.
- [5]. Valentine PE. A gender perspective on conflict management strategies of nurses. *Journal of Nursing Scholarship*. 2001 Mar;33(1):69-74.
- [6]. Slauch KA, Hasson RH. *Controlling the costs of conflict: How to design a system for your organization*. John Wiley & Sons; 2012 Jul 16.
- [7]. Afzalur Rahim M. Toward a theory of managing organizational conflict. *International journal of conflict management*. 2002 Mar 1;13(3):206-35.
- [8]. Marquis BL, Huston CJ. *Leadership roles and management functions in nursing: Theory and application*. Lippincott Williams & Wilkins; 2009.
- [9]. Filley AC. *Interpersonal conflict resolution*. Scott, Foresman; 1975.
- [10]. Goleman D. *Working with emotional intelligence*. Bantam; 1998.
- [11]. Ford BQ, Tamir M. When getting angry is smart: Emotional preferences and emotional intelligence. *Emotion*. 2012 Aug;12(4):685.
- [12]. Morrison JB. *The relationship between emotional intelligence competencies and preferred conflict-handling styles: A correlational analysis of selected registered nurses in southern Mississippi*. Doctoral dissertation, Capella University.2005.
- [13]. Vanderpol J. What is emotional intelligence.2011. Availableat: <http://www.Johannavanderpol.com/index.php/free-tools>. Last retrieved on: 28/11/2019
- [14]. Sala F. *Emotional competence inventory (ECI): Technical manual*. Boston: Hay/McBer Group. 2002.
- [15]. GolemanD, Boyatzis R, McKee A. *Primal leadership: Realizing the power of emotional intelligence* (Harvard Business School Press, Boston).2002.
- [16]. Ealias A, George J. Emotional intelligence and job satisfaction: a correlational study. *Research journal of commerce and behavioral science*. 2012 Feb;1(4).
- [17]. Vashisht R, Singh K, Sharma S. Emotional intelligence and its relationship with conflict management and occupational stress: A meta-analysis. *PACIFIC BUSINESS REVIEW INTERNATIONAL*. 2018 Oct 1;11(4):30-8.
- [18]. Jordan PJ, Troth AC. Emotional intelligence and conflict resolution in nursing. *Contemporary Nurse*. 2002 Aug 1;13(1):94-100.
- [19]. Morrison J. The relationship between emotional intelligence competencies and preferred conflict-handling styles. *Journal of Nursing Management*. 2008 Nov;16(8):974-83.
- [20]. Shih HA, Susanto E. Conflict management styles, emotional intelligence, and job performance in public organizations. *International journal of conflict management*. 2010 Apr 27;21(2):147-68.
- [21]. Chan JC, Sit EN, Lau WM. Conflict management styles, emotional intelligence and implicit theories of personality of nursing students: A cross-sectional study. *Nurse education today*. 2014 Jun 1;34(6):934-9.
- [22]. Baçoğul C, Özgür G. Role of emotional intelligence in conflict management strategies of nurses. *Asian nursing research*. 2016 Sep 1;10(3):228-33.
- [23]. Mohamed FR, Yousef HR. Emotional intelligence and conflict management styles among nurse managers at Assiut University Hospitals. *International Journal: Educational and Practice*. 2014;5(5):160-5.
- [24]. McElhane R. Conflict management in nursing administration. *Nursing Management*. 1996;27(3):33-37.
- [25]. Marquis BL, Huston CJ. *Management decision making for nurses: 124 case studies*. Lippincott; 1998.
- [26]. Rahim MA, Psenicka C. Conflict management strategies as moderators or mediators of the relationship between intragroup conflict and job performance. *NIACM 17th Annual Conference Paper 2004 Jun 15*.
- [27]. Schaubhut NA. Technical brief for the Thomas-Kilmann conflict mode instrument description of the updated normative sample and implications for use CPP research department, 2007 Available at https://www.kilmanndiagnostics.com/sites/default/files/TKI_Technical_Brief.pdf (Accessed on 5 April 2018).
- [28]. Robbins SP. *organisationalbehaviour in Southern Africa*. Pearson South Africa; 2009.
- [29]. Hunsaker PL. *Training in management skills*. Prentice Hall; 2001.
- [30]. Mahmoud H. *Emotional intelligence among Baccalaureate students at the Faculty of Nursing, Alexandria University: A cross-sectional study*. MasterThesis, Alexandria University.2013.
- [31]. Garcia CC, Maniago JD. Emotional intelligence and conflict management styles of Filipino middle managers in select higher education institutions. *Asian Journal of Interdisciplinary Research*. 2018 Dec 15;1(1):42-55.
- [32]. Hopkins MM, Yonker RD. Managing conflict with emotional intelligence: Abilities that make a difference. *Journal of Management Development*. 2015 Mar 2;34(2):226-44.
- [33]. Monteiro NM, Balogun SK. Psychosocial predictors of relationship conflict styles as mediated by emotional intelligence: A study of Botswana adults. *SAGE Open*. 2015 May 21;5(2):2158244015587558.
- [34]. Pandey S, Sajjanapu S, Sangwan G. Study on effect of emotional intelligence on conflict resolution style. *Indian Journal of Science and Technology*. 2015;8(6):71-81.
- [35]. Riaz MN, Batool N, Riaz MA. Emotional intelligence as a predictor of conflict management styles. *Pakistan Journal of Psychology*. 2012 Jun 1;43(1).
- [36]. Vivar CG. Putting conflict management into practice: a nursing case study. *Journal of nursing management*. 2006 Apr;14(3):201-6.
- [37]. Al-Hamdan Z, Nussera H, Masa'deh R. Conflict management style of Jordanian nurse managers and its relationship to staff nurses' intent to stay. *Journal of nursing management*. 2016 Mar;24(2):E137-45.
- [38]. Kantek F, Kavla I. Nurse-nurse manager conflict: how do nurse managers manage it?. *The health care manager*. 2007 Apr 1;26(2):147-51.