



THE RELATION BETWEEN CONFLICT RESOLUTION AND EMOTIONAL INTELLIGENCE SKILLS AMONG STAFF NURSES DURING COVID-19 PANDEMIC

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Abstract

Background: The conflict has a critical effect on healthcare professionals. Consequently, it affects patient care too. To prevent or limit conflict, emphasis must be focused on emotional intelligence, especially in stressful situation such as COVID-19.

Aim: To assess the relation between conflict resolution and emotional intelligence skills among staff nurses during Covid-19 pandemic.

Design: A descriptive relational research design.

Setting: The current study was carried out at Atfih Central Hospital which is affiliated to Ministry of Health.

Subjects: A purposive sample of 104 staff nurses who worked with Covid 19 patients selected from isolation units.

Data collection tools: Tool (1) Sociodemographic sheet to collect data regarding the characteristic of staff nurses, Tool (2) conflict style questionnaire, Tool (3) emotional intelligence scale.

Results: The study subjects reported that 82.7% of the staff nurses had an average level regarding conflict style, On the other hand, 16.3% of them had strong style. Regarding emotional intelligence, 59.6% of them had moderate emotional intelligence and 35.6% of them had high level emotional intelligence.

Conclusion: There was a statistical positive correlation between conflict resolution and emotional intelligence among staff nurses.

Recommendations: Findings suggested that healthcare organizations should prioritize the development of emotional intelligence skills among nurses through targeted interventions and training programs. By investing in emotional intelligence development, healthcare organizations can better equip nurses with the necessary skills to manage conflict and promote a supportive work environment during times of crisis.

Keywords: COVID-19, Conflict Resolution, Emotional Intelligence.

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1. Introduction

The World Health Organization announced that the COVID-19 crisis had reached the level of a pandemic and a public health emergency [1]. Healthcare individuals are at a greater risk of contracting the virus, with a higher prevalence of COVID-19 compared to the general population. Furthermore, healthcare individuals are more susceptible to experience psychological problems [2].

The psychological well-being of nurses can be impacted by a variety of factors. Previous research suggests that personal characteristics, including gender, age, education level, marital status, and having children, may be associated with mental health problems among staff nurses. In addition, external factors such as workload, work-related stress, work environment, and training, also have a significant impact on the mental health of nurses [3].

In any organization where individuals collaborate and communicate, conflicts are bound to happen. Conflict is a multifaceted process that can produce both adverse and beneficial consequences [4]. Although nurses are the largest group of healthcare professionals in any healthcare setting, they are still susceptible to conflicts and are not immune to them [5].

Effective conflict resolution skills are crucial for all nurses, including nursing leadership. However, nurses lack these skills and tend to evade or disengage from conflict when they are faced with it. Successful conflict management requires effective communication skills that emphasize resolution and positive outcomes, including skills such as discussing issues without assigning blame and to prevent misunderstandings and communication breakdowns, it is important to clearly express oneself [6].

A type of intelligence known as emotional intelligence involves a one's capacity to identify and comprehend their own feelings as well as those of others, and to utilize these emotions as a reference for their conduct [7]. An individual can be considered emotionally intelligent if they possess the ability to identify, comprehend, apply, and manage their emotions effectively [8].

Emotional intelligence (EI) is often linked with practical applications, particularly within the nursing profession, as it reflects the impact of traumatic experiences in various job situations [9]. Currently, emotional intelligence is acknowledged as a critical element that affects work performance [10].

Nurses are exposed to psychosocial hazards at work, this can lead to adverse effects on a one's physical and mental well-being as a result of stress. Having emotional intelligence is an essential

safeguard against psychosocial hazards, as It has been linked to better physical and psychological well-being, job satisfaction, greater sense of responsibility towards work, and decreased burnout [11].

The COVID-19 crisis has affected over 1 million people worldwide, overwhelming many healthcare systems and directly impacting healthcare workers, such as nurses, who are on the frontlines of the battle to protect the lives of those affected. Examining the conflicts that nurses face during their response to the crisis can be helpful in providing support to them and creating procedures and strategies to improve their readiness [12].

Significance of the study:

The first recorded instance of COVID-19 in Egypt occurred on February 14, 2020, when a young man from Wuhan, China, tested positive. Between January 3, 2020, and August 17, 2021, the count of COVID-19 cases was consistently revised, resulting in a total of 285,465 verified cases and 16,625 fatalities [13]. Throughout the COVID-19 pandemic, an important percentage of nurses in Egypt, amounting to 76%, were reported to be more likely to experience workplace conflicts due to low levels of emotional intelligence [14]. Emotional intelligence is responsible for 58% of professional success, regardless of job category of all the workplace skills a person can possess which is the single strongest predictor of performance [15].

A study conducted to investigate the emotional well-being of healthcare individuals in Peru during the COVID-19 outbreak found that a high percentage of healthcare individuals experienced stress (93%), anxiety (86%), frustration (77%), burnout (76%), and a sense of being overwhelmed (75%). Among the healthcare individuals, nurses were more prone to exhaustion (76%) than other healthcare staff (63%). Furthermore, 45% of the nurses reported a lack of emotional support [16]. According to research, numerous disciplines, including nursing, have identified a link between emotional intelligence and positive outcomes, as well as effective conflict resolution styles. During the COVID-19 crisis, staff nurses were susceptible to negative emotions that led to interpersonal conflicts, which negatively impacted their job performance. As a result, emotional intelligence is now recognized as a critical attribute in improving nursing performance and mitigating nurse burnout.

2. Subjects and Methods

A. Technical design:

The technical design encompasses the setting, subjects, and instruments used for gathering data.

I- Research design:

A Descriptive relational research design was used in the present study to achieve the purpose of the study.

II- Setting of the study:

This study was performed at Atfih Central Hospital, which belongs to the Egyptian Ministry of Health and serves a rural area. The hospital has approximately 220 staff nurses from all departments, and comprises of four floors, around 100 beds, and several units in the inpatient department (Medical, Surgical, Pediatric, and Obstetrics) as well as critical care units (Emergency, Operating Room, Hemodialysis, and Neonate).

Subjects:

A purposive sample of staff nurses who worked with COVID-19 patients were selected from all isolation units.

Sample Size:

The sample consisted of 104 subjects who were selected from isolation departments, emergency unit, and inpatient unit.

III- Tools of data collection:

The tools used for this study consist of three parts:

1) Socio-demographic sheet of staff nurses:

Designed by the researcher and includes staff nurses age, gender, marital status, level of nursing education, years of experience and duration of working during period with covid patients.

2) Conflict Style Questionnaire [17]:

The questionnaire used in this study was adopted from Rahim and Magner (1995). The aim of the questionnaire was to identify the conflict resolution styles among staff nurses and to examine how these styles vary in different contexts or relationships. The questionnaire composed of 25 items scaling conflict styles, with each style composed of 5 statements. It assessed five distinct aspects of conflict resolution styles, which were Avoidance, Competition, Compromise, Accommodation, and Collaborating styles.

Their responses or rating scale ranges from Never = 1, Seldom = 2, Sometimes = 3, Often = 4, Always = 5.

Example of statement: I avoid being “put on the spot”; I keep conflicts to myself.

Table (1): The total scoring system of conflict styles:

<50 %	Weak Style
≥50 % - <75%	Average Style
≥75 %	Strong Style

3) Emotional Intelligence Scale [18]:

The scale used in this study was adopted from Daniel Goleman (1995) To assess the degree of emotional intelligence among staff nurses. The objective of the scale is to measure six categories that include Self-awareness (11 statements), Emotion regulation (15 statements), Self-motivation (9 statements), Social awareness (9 statements), Social skills (13 statements), and Emotional Receptivity (12 statements). The scale consists of 69 items in total.

The emotional intelligence scale evaluates personal and social competencies as two distinct dimensions, adapted from Daniel Goleman's work (1995). These competencies are combined to determine an individual's overall emotional intelligence score. Individual competence includes skills such as self-awareness, self-motivation, and emotional regulation, whereas social competence

encompasses abilities including social awareness, social skills, and responsiveness to emotions.

The survey employs a 5-point Likert scale for respondents to rate their level of competency, with the choices of 1 indicating extremely low competency, 2 indicating low competency, 3 indicating uncertainty, 4 indicating high competency, and 5 indicating extremely high competency.

Example of statement: I am aware of my goals and values.

Scoring higher on the assessment indicates a greater degree of emotional intelligence in a specific sub-scale category, while a reduced score indicates a reduced level of emotional intelligence in that category. The cumulative emotional intelligence score can be obtained by summing up the scores of all individual subscales.

Table (2): The total scoring system of emotional intelligence:

<50 %	Low Emotional Intelligence
≥50 % - <75%	Moderate Emotional Intelligence

≥75 %	High Emotional Intelligence
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Field work:

This study was conducted on March 1, 2022, after obtaining acceptance and permission from Atfih Central Hospital's director. The researcher met with the staff nurses participated in the study, provided an explanation of the study's objective, and interviewed them twice a week on Sundays and Mondays. The study was carried out in three phases:

The study began with an introduction phase where the researcher clarified the objectives of the study to the staff nurses and obtained their oral or written consent to participate. The researcher visited Atfih central hospital twice a week, on Sundays and Mondays from 10 am to 1 pm, for a period of three months, during which time all the necessary scales were administered, taking 25 to 30 minutes to complete. Once permission was granted, the researcher introduced himself to the participating staff nurses to build rapport and trust.

Following the introduction phase, the researcher conducted individual interviews with each nurse during the working phase to evaluate their knowledge of conflict resolution styles, and emotional intelligence.

There was an end phase for the researcher, during which a total of 104 staff nurses (both male and female) who participated were informed that the information gathered would be kept private, handled with discretion, and utilized solely for research objectives.

B. Administrative design:

The Nursing Faculty's Vice Dean for Graduate Studies and Research provided the researcher with an approval letter addressed to the manager of Atfih central hospital, where the study was carried out. The letter clarified the study's objective and significance.

Ethical considerations:

Ethical approval was obtained from the Research Ethics Committee of the Faculty of Nursing, Helwan University (2022/028). The researcher explicitly stated to the staff nurses that involvement in the study was voluntary and

anonymous, and they were given the option to decline participation or withdraw from the study at any time without being required to provide a reason.

C. Statistical design:

The Statistical Package for Social Science (SPSS) version 28.0 was employed by the researcher to analyze the data. Mean ± standard deviation (SD) were used to present the quantitative data, while frequencies and percentages were used to present the qualitative data. The Statistical analysis was performed through utilization of SPSS software, version 28.0 to test the associations between qualitative variables under study, and the chi-square (χ²) test was utilized for this purpose. The statistical significance level was established as a p-value < 0.05. R-test was used to test the associations among the under studied variables. A Chi-square (X²) test of significance was employed to compare the proportions of two categorical variables. the significance level was determined using the probability (P-value) approach, If the P-value was less than 0.05, it was deemed significant (S.), If the P-value was less than 0.001, it was deemed highly significant (H.S.) and If the P-value was greater than 0.05, it was deemed not significant (N.S.).

3. Results

According to the demographic characteristics of the staff nurses (n=104). (63.5%) of them were between 25 and less than 35 years old, with a mean and standard deviation of (28.7 ± 5.84). Additionally, 91.3% of the staff nurses were female, and 84.6% of them were married. Regarding education, 63.5% of the participants had graduated from a nursing institute, and in terms of experience, 48.1% of them had 5-10 years of experience, with a mean and standard deviation of (7.44 ± 4.43). Finally, regarding the length of time spent working with COVID-19 patients, 37.5% of the staff nurses had worked for 6-12 months or more than 12 months, with a mean and standard deviation of (9.31 ± 4.73). (Table 1).

Table (1): Number and percentage distributions of staff nurses regarding to their sociodemographic characteristics. (N= 104).

Personal data		
	No	%
Age		
<25	23	22.1

25-<35	66	63.5
>35	15	14.4
Mean± SD	28.7 ± 5.84	
Sex		
Male	9	8.7
Female	95	91.3
Marital status		
Single	16	15.4
Married	88	84.6
Level of education		
Nursing Diploma	28	26.9
nursing Institute	66	63.5
Bachelor of Nursing	10	9.6
Experience years		
<5 years	30	28.8
5-10 years	50	48.1
>10 years	24	23.1
Mean± SD	7.44 ±4.43	
Duration of work with covid 19 patients		
<6 Months	26	25.0
6-12 Months	39	37.5
>12 Months	39	37.5
Mean± SD	9.31 ± 4.73	

Figure (1) indicates that collaboration and avoidance conflict styles had the highest scores for conflict styles among staff nurses (43% and 35%, respectively). In contrast, competition conflict style had the lowest score (21%). **Figure (2)** reveals that 82.7% of staff nurses had an average level of conflict style, On the other hand, 16.3% of them had a strong conflict style.

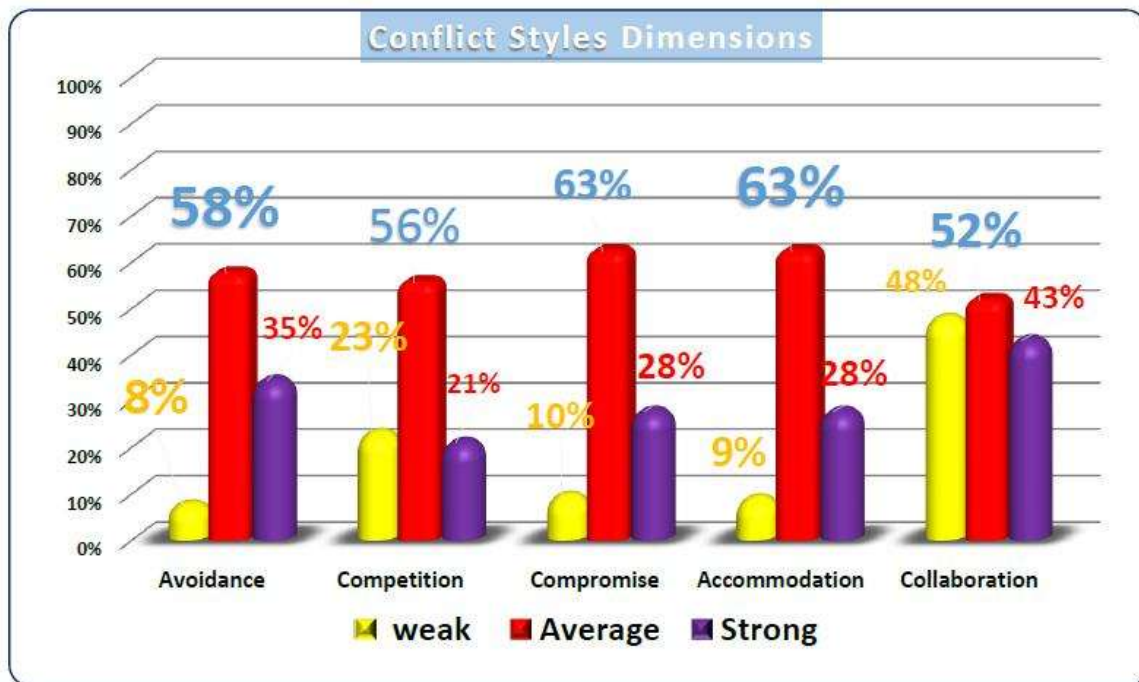


Figure (1) Percentage distribution of staff nurses regarding to the dimensions of their conflict styles. (N= 104).

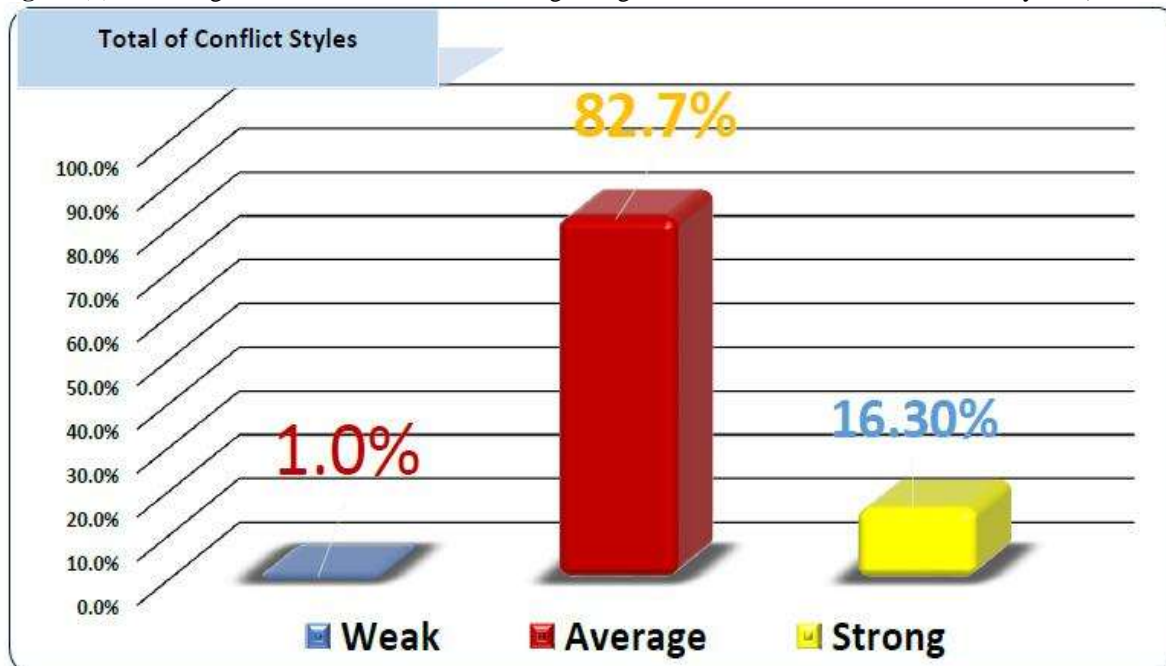


Figure (2) Percentage distribution of staff nurses regarding to their total conflict styles. (N= 104).

Regarding the emotional intelligence, shows that emotional receptivity and self-motivation had the highest scores dimensions of emotional intelligence (70% and 49%, respectively), while emotion regulation and social awareness had the lowest scores (32% and 31%, respectively) (Figure 3). Additionally, (Figure 4) illustrates that (35.4%) of staff nurses exhibited high levels of personal

competence subscale of emotional intelligence, while a similar proportion (33.7%) of them displayed high levels of social competence subscale. (Figure 5) indicates that (59.6%) of participants demonstrated moderate emotional intelligence, while (35.6%) of them exhibited high emotional intelligence.

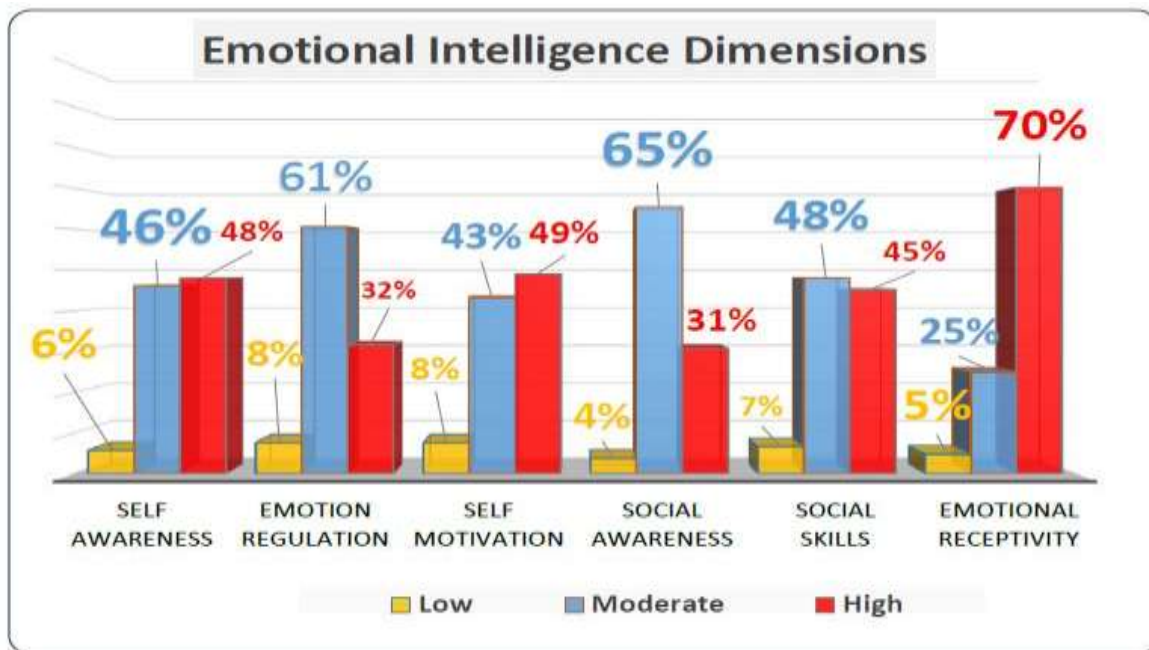


Figure (3): Percentage distribution of staff nurses regarding to the dimensions of their total emotional intelligence. (N= 104)

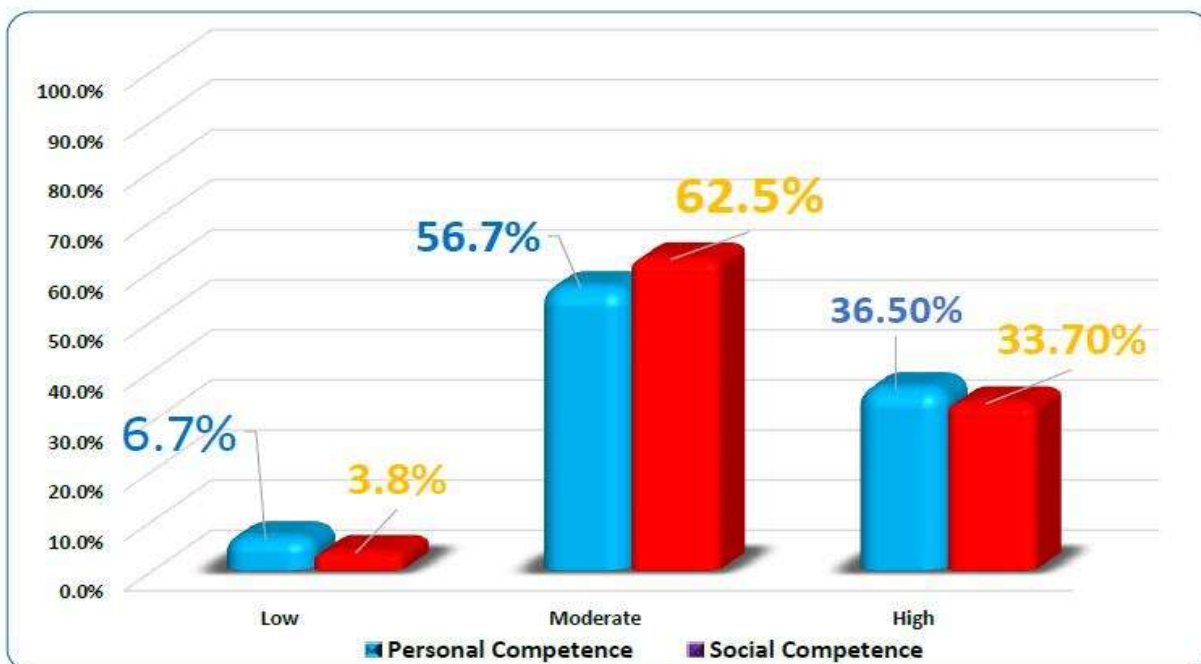


Figure (4): Percentage distribution of staff nurses regarding to their personal and social competence. (N= 104)

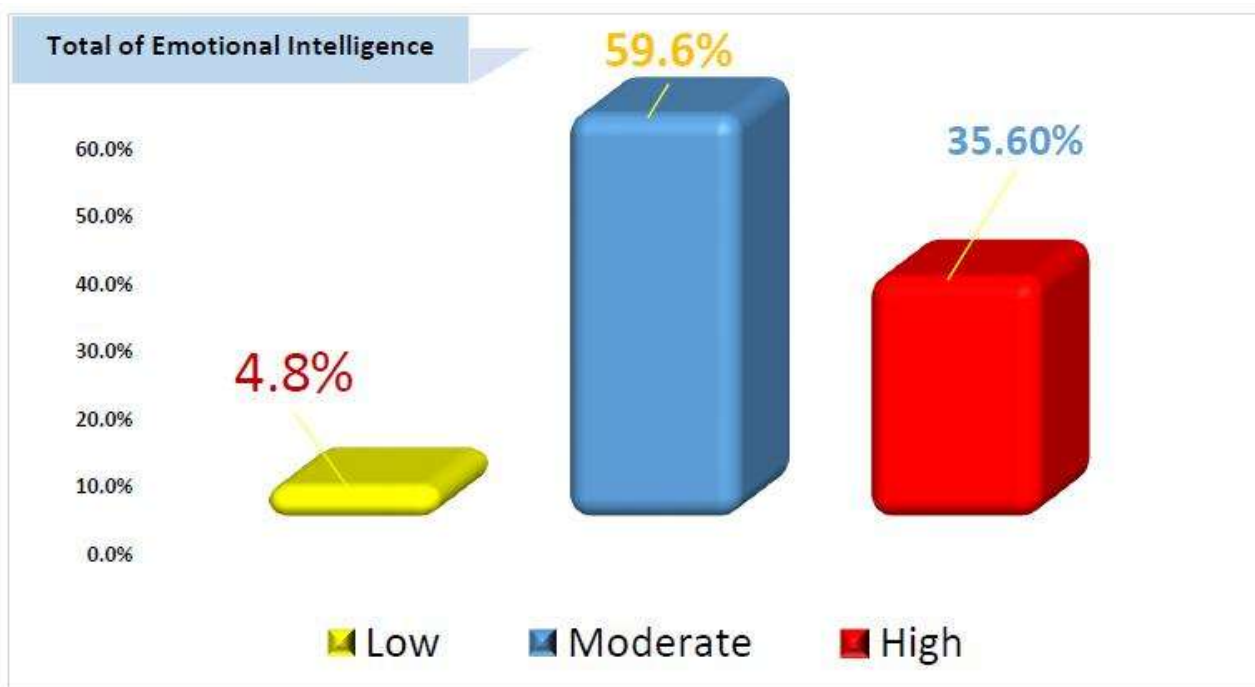


Figure (5) Percentage distribution of staff nurses regarding to their total emotional intelligence. (N= 104).

There was no statistically significant relation between the total of conflict styles and sociodemographic characteristics of staff nurses (Table 2). Also there were no statistically significant associations observed between the total

emotional intelligence score and sociodemographic characteristics (Table 3). There was highly statistically significant relation between total of emotional intelligence and total of conflict styles among staff nurses (Table 4).

Table (2): The relation between total conflict styles and sociodemographic characteristics among staff nurses. (N= 104).

Items	Total conflict style						X ²	p
	Weak style		Average style		Strong style			
	N	%	N	%	N	%		
Age							7.083	0.123 N.S
<25	0	0.0	18	78.3	5	21.7		
25-30	0	0.0	57	86.4	9	13.6		
>35	1	6.7	11	73.3	3	20.0		
Gender							0.332	.847 N.S
Female	0	0.0	7	77.8	2	22.2		
Male	1	1.1	79	83.2	15	15.8		
Marital status							253	.881 N.S
Single	0	0.0	13	81.3	3	18.8		
Married	1	1.1	73	83.0	14	15.9		
Level of education							4.950	.292

Nursing Diploma	1	3.6	22	78.6	5	17.9		N.S
nursing Institute	0	0.0	54	81.8	12	18.2		
Bachelor of Nursing	0	0.0	10	100.0	0	0.0		
Experience							8.050	0.090 S
<5 years	0	0.0	25	83.3	5	16.7		
5-10 years	0	0.0	45	90.0	5	10.0		
>10 years	1	4.2	16	66.7	7	29.2		
Duration of work with covid 19 patients								
<6 Months	0	0.0	25	96.2	1	3.8	6.069	.194 N.S
6-12 Months	0	0.0	30	76.9	9	23.1		
>12 Months	1	2.6	31	79.5	7	17.9		

Table (3): The relation between total emotional intelligence and sociodemographic characteristics among staff nurses. (N= 104).

Items	Total of Emotional Intelligence						X ²	p
	Low		Moderate		high			
	N	%	N	%	N	%		
Age							3.030	0.553
<25	1	4.3	13	56.5	9	39.1		
25-30	2	3.0	41	62.1	23	34.8		
>35	5	13.3	8	53.3	5	33.3		
Gender							0.0719	0.698
Female	0	0.0	5	55.5	4	44.4		
Male	5	5.3	57	60.0	33	34.7		
Marital status							.137	0.934
Single	1	6.3	9	60.2	6	37.5		
Married	4	4.5	53	56.3	31	35.2		
Level of education							2.156	0.707
Nursing Diploma	2	7.1	14	50.0	12	42.9		
nursing Institute	3	4.5	42	63.6	21	31.8		
Bachelor of Nursing	0	0.0	6	60.0	4	40.0		
Experience							2.893	0.576
<5 years	1	3.3	20	66.7	9	30.0		
5-10 years	2	4.0	31	62.0	17	62.0		

>10 years	2	8.3	11	45.8	11	45.8			
Duration of work with covid 19 patients									
<6 Months	1	3.8	16	61.5	9	34.6	4.594	0.332	
6-12 Months	0	0.0	24	61.5	15	38.5			
>12 Months	4	10.3	22	56.4	13	33.3			

Table (4): Relation between total of conflict styles and emotional intelligence among staff nurses. (N= 104)

Items	Total of Emotional Intelligence						X2	P
	Low		Moderate		High			
	N	%	N	%	N	%		
Total Conflict styles							21.52	0.000**
Weak	1	20	0	0	0	0		
Average	4	80	53	85.5	29	78.4		
Strong	0	0	9	14.5	8	21.6		

There was a positive correlation between emotional intelligence and conflict styles among staff nurses (Table 5). Table (6) shows that the 'avoidance' conflict style and the total score of emotional intelligence have a positive correlation, as well as compromise with the 'total of emotional

intelligence and emotion regulation'. Collaboration also has a positive correlation with 'self-awareness, emotion regulation, social skills, and total of emotional intelligence'. On the other hand, a negative correlation was observed between social skills and competition.

Table (5): The correlation between emotional intelligence and conflict style among staff nurses. (N= 104)

Items	R	P Value
Conflict style & emotional intelligence	0.60	0.007**

Table (6): The correlation between emotional intelligence dimensions and conflict style dimensions among staff nurses. (N= 104)

Items		Self-awareness	Self-motivation	Emotion regulation	Social awareness	Emotional Receptivity	Social Skills	Total of emotional intelligence
Avoidance	R	0.177	-0.006	0.153	0.180	0.179	0.119	.237*
	P	0.072	0.952	0.121	0.068	0.070	0.230	0.015
Competition	R	-0.096	-0.120	-0.139	0.067	-0.157	-0.25*	-0.101
	P	0.331	0.227	0.160	0.496	0.111	0.009	0.307
Compromise	R	.238*	0.162	.244*	-0.005	0.134	0.152	.323**
	P	0.015	0.100	0.013	0.956	0.174	0.124	0.001
Accommodation	R	-0.035	-0.090	0.101	0.038	0.033	0.041	0.030
	P	0.721	0.362	0.306	0.704	0.739	0.680	0.763

Collaboration	R	.294**	0.167	.328**	-0.049	0.145	.353*	.257**
	P	0.002	0.090	0.001	0.619	0.142	0.000	0.009
Total of Conflict style	R	0.102	0.100	0.113	0.055	0.031	0.129	0.60
	P	0.302	0.311	0.255	0.582	0.758	0.192	0.007**

R= spearman correlation p= p value

4. DISCUSSION

Nurses working in clinical settings may be impacted by conflict, stressful scenarios, and a substantial amount of emotional labor. Emotional intelligence is a crucial concept in nursing, as it enables individuals to recognize their own emotional capacity and that of others, thereby assisting them in navigating challenging situations, tackling intricate issues, and comprehending the ramifications of their actions [19].

Nurses, who are frequently in contact with patients, are among the groups at high risk of physical and mental health issues through the COVID-19 crisis. Recent literature has shown that nurses are experiencing significant exhaustion due to several factors, including direct exposure to infected patients, inadequate equipment intended for personal protection, and the possibility of being infected with the virus and diffusing it to others [20].

This section presents an analysis and interpretation of the outcomes of the study that assessed the relation between conflict resolution and the emotional intelligence skills among staff nurses during the COVID-19 crisis, the findings of the current study indicated that slightly over two-thirds of the staff nurses were aged between 25 and less than 35 years old (Mean± SD 28.7 ± 5.84), and most of them were female.

Regarding the educational level, nearly two-thirds of them attended technical institutes. While almost half of the staff nurses had worked for 5-10 years, regarding the duration of work with Covid-19 patients, nearly half of them had worked for 6-12 months, and more than 12 months. According to the researcher, the reason for the higher number of female participants is because the nursing field has more demand from females in Egypt, and technical institutes have more turnout than Bachelor's degrees.

Aldhafeeri [21] reported that in a study titled "The Relationships of Emotional Intelligence, Leadership Behaviors, and Conflict Management Styles in Pre-Licensure Nursing Students," which is in the same field as the existing study, the majority of the participants were women, and their mean age was 21.7 years old. Their argument was that there was no statistical correlation between emotional intelligence and conflict resolution with sociodemographic characteristics. **Beitler et al.**

[22] noted that age could make a difference in emotional intelligence, while **Al-Hamdan et al. [23]** disagreed and reported that sociodemographic factors like gender, age, religious beliefs, and education did not influence the selection of conflict styles.

The results of this study revealed that the majority of the participants had an average level in terms of conflict style, comprising more than 80% of the sample. Conversely, less than 20% of the sample exhibited a strong conflict style, characterized by high levels of collaboration and avoidance, while the competition style had the lowest score.

A cross-sectional study titled 'A qualitative study on the roles and responsibilities of nurse consultants in Hong Kong' was conducted (N = 568). Their results differed from the current study, as they found that nursing students primarily used obliging and integrating styles to manage conflict with clinical supervisors, while the dominating style was used the least, as it was considered an inefficient method for dealing with conflict [24]. The concept of conflict management has been investigated in the nursing context, and research has indicated that nurses tend to utilize the compromising style to address conflicts [25]. However, other studies have shown that nurses primarily employ an avoidance style when managing conflicts. Furthermore, they tend to use the dominating style less frequently since they perceive it as an ineffective approach to conflict resolution. This finding is consistent with the present study. Therefore, there is no consensus regarding the conflict resolution styles that nurses utilize the most [26].

Patton [27] indicated that avoidance is a commonly utilized communication style by both nurses and doctors, as discussed. Additionally, **Al-Hamdan et al. [23]** proposed that clinical nurse managers used the integrating style to the greatest extent and the dominating style to the least extent. Based on findings about conflict strategies, nurses used the avoiding (58%), competition (56%), compromising (63%), accommodation (63%), and collaboration (52%) approaches to a moderate degree, while they utilized the compromising and integrating approaches to a mild degree. In a similar study, **Rovithis et al. [4]** identified nurses who used the obliging, compromising, integrating, dominating, and avoiding conflict resolution approaches to a moderate level.

Managing conflict, from the researcher's perspective, depends on the situation and the nurse's experience. The nurse must assess and interpret the situation in order to determine how to handle the conflict, The COVID-19 crisis has added stress to the demands of nurses, causing difficulties in concentration and feelings of anxiety or being overwhelmed. This high level of stress can directly affect the intensity of conflict and its management.

According to the study's results on emotional intelligence, over than half of the study subjects demonstrated moderate levels of both self-competence and social competence, while nearly a third of them experienced an elevated level of self-competence and social competence. From the researcher's viewpoint, nursing is gaining more attention from top management through training programs and an enhanced working environment, which may explain the increased levels of emotional intelligence among nurses.

A study conducted by **Foster et al. [28]** in Australia using a longitudinal repeated measures design to examine emotional intelligence among nurses found that the overall emotional intelligence score was low. In contrast to the present study's findings, the research suggested that incorporating emotional intelligence into nursing curricula would be beneficial.

In a study conducted by **Easa [14]** entitled "Nurses' Emotional Intelligence and Stress at the Workplace During the COVID-19 crisis," it was found that Egyptian nurses exhibit a moderate level of proficiency in emotional intelligence skills. This is consistent with the notion that nurses, particularly new ones, lack emotional competency due to inadequate emotional intelligence training and a lack of emphasis on emotional intelligence as a central topic in nursing curricula.

Developing training programs, support groups, and networks that focus on emotional control could be beneficial for nurses working in hospitals. These initiatives can help enhance emotional intelligence skills and improve coping with work-related stress, as reported by **Foster et al. [29]**. Other studies have also reported comparable findings, particularly in regards to the connection between the interpersonal and intrapersonal facets of emotional intelligence, as discussed by **Montes-Berges and Augusto-Landa [30]**.

Some studies have reported that the emotional intelligence of nurses is ideal, such as **Barkhordari et al. [31]** who published their findings in the Iranian Journal of Nursing Research under the title "Measuring Emotional Intelligence of Nursing Students." Similarly, **Konstantinou et al. [32]** published in the Journal of Education, Society and Behavioral Science, entitled "Emotional Intelligence and Its Impact on

Emotional Factors Among Nurses," also reported on emotional intelligence among nurses.

Another studies have reported low emotional intelligence scores among nurses. For instance, **Codier and Odell [33]** reported low emotional intelligence scores among nurses in their published study entitled "Measured Emotional Intelligence Ability and Grade Point Average in Nursing Students." Similarly, **Benington [34]** reported on low emotional intelligence scores among associate degree nursing students in their study entitled "Emotional Intelligence and Sociodemographic Status in Associate Degree Nursing Students."

According to the researcher's perspective, differences in emotional intelligence scores among nurses in various studies may be attributed to variations in assessment tools or definitions of emotional intelligence used. However, despite these discrepancies, the findings highlight the importance of improving emotional intelligence skills among nurses and the need to implement measures to address this issue.

Additionally, the current study demonstrates a significant and strong statistical relationship between personal and social competence. These results align with the conclusions of prior studies such as **Parker et al. [35]** and **Mansel [36]** in their studies titled "Emotional intelligence and post-secondary education", In the researcher's opinion, both personal and social aspects of emotional intelligence complement each other in terms of competency.

Regarding the relation between emotional intelligence and conflict style among staff nurses, this study indicates an important correlation between the total emotional intelligence score and the overall conflict style adopted by staff nurses.

The study results on the connection between emotional intelligence and conflict management styles were equivalent to those reported by **Chan et al. [24]** among nurses, who conducted a qualitative research on the functions and duties of nurse specialists in Hong Kong, and by **Al-Hamdan et al. [23]** among nurse directors, who published a study entitled "The Impact of Emotional Intelligence on Conflict Management Styles Used by Jordanian Nurse Managers" in the Journal of Nursing Management.

According to **McCloughen and Foster [19]**, nurses who exhibited emotionally intelligent attitudes, such as reflecting on their emotions, perceiving and expressing them appropriately, were able to manage conflict effectively. This suggests that an individual's degree of emotional intelligence may influence their capacity to handle conflict.

This study found that nurses with higher emotional intelligence scores inclined to use the integrating style when resolving conflicts, while those with

lower emotional intelligence scores tended to use the avoiding style.

Numerous studies have demonstrated a favorable association linking emotional intelligence and conflict resolution, with emotional intelligence being linked to various styles of conflict resolution, including integrating, compromising, and dominating. Additionally, emotional intelligence has been determined as an anticipator of employee innovation in a published study titled "Systematic Literature Review on Emotional Intelligence and Conflict Management"[37].

In a study entitled "Role of emotional intelligence in conflict management strategies of nurses" with 92 participants, it was discovered that the integrating strategy was displayed a positive correlation with a high degree of emotional intelligence, while the avoiding strategy was displayed a negative correlation with a high degree of emotional intelligence [38]. Similarly, another study published in Research Journal of Recent Sciences identified an affirmative connection between the integrating conflict management approach and a high degree of emotional intelligence [39].

With regards to the connection between emotional intelligence and sociodemographic features, this study showed that no statistically significant correlation was observed between emotional intelligence and sociodemographic features. This lack of correlation may be explained by the fact that socio-demographic data can vary from one population to another or from one geographical area to another. Additionally, there may be other factors that could affect emotional intelligence, such as training or personal experiences.

Along the same lines as **Yu et al. [40]**, who found that gender was not a significant factor in resilience in their study deployed in the International Journal of Nursing Studies titled "Personal and work-related factors associated with nurse resilience: A systematic review," this study also found no statistically significant association between resilience and gender. However, this finding contradicts the results of studies by **Ren et al. [41]** and **Netuveli et al. [42]**, which suggested that females demonstrate higher resilience than males.

A study findings revealed an important association between gender and emotional intelligence, with female nurses demonstrating higher levels of emotional intelligence compared to male nurses, according to a study performed by **Aljarboa et al. [43]**. This gender difference perhaps because elderly nurses with greater experience working with patients and colleagues tend to be better at reading and understanding others' emotions.

The affirmative correlation between age and emotional intelligence can be attributed to continuous learning and acquired knowledge. This

outcome aligns with previous research, which suggests that emotional intelligence scores are typically higher among older adults compared to younger adults [44], as a study entitled "Factorial invariance and latent mean differences of scores on trait emotional intelligence across gender and age". The present study found no important statistical association between conflict resolution and sociodemographic characteristics. This result is in line with the study's findings on emotional intelligence, suggesting that conflict resolution may be more influenced by workplace training and environment rather than sociodemographic factors.

A comparative study conducted by **El Dahshan and Moussa [45]** titled "Levels and types of conflict experienced by nurses in the hospital settings" revealed that younger nurses experienced more conflicts than their older counterparts. This finding was consistent with **Polat et al. [46]**, who also found that the age of nurses can influence their conflict resolution skills. However, a study conducted by **Yeung et al. [47]** and published in the International Journal of Conflict Management reported a negative association between age and conflict resolution, which contrasts with the previous findings.

Similarly, a study conducted by **Mageda et al. [48]** found an association between interpersonal conflict among nurses and several demographic factors, such as younger age, being married, and having less than five years of experience. According to the researchers, this could be attributed to various factors such as work load, emotional attrition, dealing with fatal illness and death, poorly planned work shifts, lack of supportive relationships, and role ambiguity. These findings align with those of **Kurki [49]**, who reported that job stress was more prevalent among younger and new graduate nurses compared to their older counterparts.

Likewise, the study's findings demonstrated that a majority of married nurses had lower conflict resolution skills compared to their unmarried counterparts. This suggests that balancing work and motherhood can be challenging, as married nurses may have to juggle multiple responsibilities. These findings align with the social role theory of gender differences, which posits that women are expected to prioritize family responsibilities over work duties. These results align with those of **Polat et al. [46]**, who also supported this theory.

A previous study conducted by **Grzywacz et al. [50]** has shown that work-related conflict may result in various adverse effects for nurses, such as physical and mental fatigue, emotional strain, diminished work proficiency, heightened potential for nursing mistakes, and decreased capacity to deliver excellent patient care. These outcomes are consistent with the outcomes of the current study.

5. CONCLUSION

The majority of the study subjects reported having an average level of conflict style, while less than one-fifth reported having a strong style. They experienced a high level of using collaboration and avoidance styles, while competition was the least used style by nurses through the COVID-19 crisis. Regarding emotional intelligence, about two third

Recommendations

- Conduct educational programs for nurses about emotional intelligence and how to improve it.
- Develop educational programs to prepare nurse leaders who can identify and manage conflict.
- Conduct further studies to assess gaps in the knowledge about emotional intelligence and nursing practice and how to fulfil them.
- Establish new methods for assessing the efficacy of training initiatives designed to enhance emotional intelligence and conflict resolution capabilities for nurses.

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of the nurses had moderate emotional intelligence, and more than one-third had high emotional intelligence. Emotional receptivity and self-motivation received the highest scores, while emotion regulation and social awareness received the lowest scores. There was a statistical positive correlation between conflict resolution and emotional intelligence among staff nurses.

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