

## The Association between Collaboration, Team - Effectiveness and Work Readiness among Nurses

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### Abstract

**Background:** In today's organizations, improved collaboration fosters a more productive environment and cultivates a welcoming, positive work culture, which helps retain high-potential employees over time. **Aim:** to explore the association between collaboration, team - effectiveness and work readiness among nurses at selected hospitals. **Design:** The current study employed a descriptive-correlational research design to achieve its objectives. **Setting:** the current study conducted at three hospitals as the following: Minia University emergency hospital, Minia University kidney and urology Hospital, and Misr El-Huraa hospital. **Sample:** A convenience sample of all available staff nurses (n=692). **Tools:** First tool: Nurse- Nurse Collaboration, Second tool - Team-Effectiveness questionnaire and Third tool: work- readiness questionnaire. **Results:** in relation to nurses- nurses collaboration it was found that the highest mean score was for Common goals dimension and around two third of nurses have high level of nurses to nurse collaboration. In addition to team – effectiveness it was found that highest mean score was for skills and learning dimension and two third of nurses have high level of team – effectiveness. For work- readiness result revealed that the highest mean score of nurse's work- readiness was for work competence dimension and more than two third of nurses have high work- readiness level. **Conclusion:** there was apposite correlation between nurses-nurses collaboration, team effectiveness and work readiness. **Recommendation:** Hospital managers should create educational programs aimed at providing innovative opportunities for nurses to learn about intra-professional collaboration.

**Keywords:** Nurses collaboration, team effectiveness and work Readiness

### Introduction

Healthcare organizations are complex systems in which people with varying educational backgrounds and degrees of competence must work together smoothly to provide high-quality care according to **Ojo et al. (2020)** and **Silva, Valadão et al. (2022)**, Strong interpersonal ties based on professionalism are essential for the efficient coordination of the many services provided by healthcare facilities. Professional attitudes and good communication among healthcare personnel are critical to the efficacy and efficiency of healthcare delivery (**Santos et al., 2019**).

A fundamental component of contemporary healthcare delivery models is collaboration, the process by which medical practitioners cooperate to accomplish shared objectives. Collaboration in nursing practice refers to more than just friendly cooperation; it is the smooth integration of team members' resources, expertise, and knowledge in order to maximize patient outcomes. The efficiency and efficacy of healthcare delivery are enhanced by effective collaboration, which fosters communication, mutual respect, and shared decision-making (**Ylitörmänen, Turunen, Mikkonen, & Kvist, 2019**).

Nurses are urged to work together in the modern workplace to provide the best possible care at the lowest possible cost (**Ylitörmänen, Kvist, & Turunen, 2019**). Collaboration between nurses is essential for efficient teamwork in healthcare environments. It facilitates collaborative decision-making, lowers mistake rates, maximizes resource utilization, accomplishes challenging objectives, synchronizes patient care, and raises patient outcomes and care quality. Higher job satisfaction, a decreased intention to leave the nursing profession, better care quality, and increased nursing performance have all been

linked to effective nurse-to-nurse collaboration (**Ylitörmänen, Turunen, Mikkonen, & Kvist, 2019; Ajarmeh, Rayan, Eshah, & Al-Hamdan, 2021**).

Insufficient cooperation among nursing personnel can result in various unfavorable consequences, including inadequate problem-solving, role conflicts, poor communication, and ineffective teamwork, all of which can lead to substandard patient care (**Hassona & El-Aziz, 2017; Ajarmeh, Rayan, Eshah, & Al-Hamdan, 2021**). Nurse-to-nurse collaboration is an intra-professional process in which nurses cooperate as a team to address problems with patient care or the healthcare system, politely and effectively exchanging ideas and knowledge (Emich, 2018). Healthcare team members cooperate to achieve patient care objectives (**Ma, Park & Shang, 2018**). Care teams depend heavily on nurses, who make up a sizable component of the healthcare workforce in the majority of nations (**WHO, 2017**). One of the most important tactics for improving safety culture and reducing medical errors is teamwork. According to a study (**Peñataro-Pintado et al., 2020**), cooperation and clear, effective communication are the best ways to improve patient safety culture.

Various studies have explored the impact of collaboration between nurses on patient outcomes. It has been found that the level of collaboration among nurses varies depending on the patient care environment, and nurses who perceive collaboration more positively report higher job satisfaction (**Ma et al., 2018**). Additionally, better collaboration is observed among nurses working within the same unit, which correlates with a lower intention to leave their positions (**Ma et al., 2018**). The effectiveness of nursing teams, defined as the extent to which a group of nurses achieves its objectives and fulfills its responsibilities, is

closely intertwined with collaboration. High-performing teams harness the diverse expertise and perspectives of their members to tackle complex healthcare challenges, foster innovation, and adapt to ever-changing clinical settings. On the other hand, ineffective teamwork can result in communication breakdowns, role ambiguity, and suboptimal patient outcomes. (Ma et al., 2018 )

Providing safe and dependable patient care requires effective nurse teamwork and communication. Most sentinel occurrences can be attributed to breaks in communication. Errors can be avoided and patient hazards can be decreased by promoting teamwork and guaranteeing efficient communication. Alkhaqani (2023) asserts that the adoption of simple tools and practices can have a significant positive impact on perceptions of teamwork and patient safety. Recent years have seen a notable increase in interest in the idea of job preparedness among nurses, in addition to cooperation and team effectiveness.

The knowledge, abilities, and characteristics that allow nurses to smoothly go from academic settings to professional practice and successfully carry out the responsibilities of their jobs are collectively referred to as work readiness (Ajarmeh, Rayan, Eshah, & Al-Hamdan, 2021 ). Clinical competency, emotional intelligence, flexibility, and critical thinking skills are some of the elements that go into being prepared for the workforce. These components are essential for nurses to successfully manage the complexity of healthcare delivery and give high-quality patient care (Li and colleagues, 2020). Work readiness is a complex idea that needs more investigation to fully comprehend its components and characteristics as well as how it affects the likelihood of a smooth transition to practice.

Several research works have examined the variables impacting preparation for the workforce. job preparedness among recently graduated nurses has been linked to a number of criteria, including leadership experience, academic pursuits, job experience, interpersonal interactions, and motivation to pursue nursing as a career (Li et al., 2020). Likewise, studies have shown that individual characteristics, such as reasons for deciding to become a nurse and past medical experience, can have a big influence on job readiness (Li et al., 2020, 2022). These results highlight the significance of taking into account a number of variables when evaluating and fostering work preparedness in aspiring nurses.

Educators and hospital administrators can get important insights by identifying the things that help or hinder students' ability to be work-ready, which will help them create methods that will help newly graduated nurses succeed. Emotional intelligence, psychological capital, interpersonal communication, self-adjustment, students' perceptions of the clinical education environment, leadership experience, academic scholarship, prior work experience, and willingness to pursue nursing as a career are among the factors that have been identified in several studies as determining graduate nurses' work readiness (Masole & van Dyk, 2016; Tentama et al., 2019). Dudley et al., (2020). Reported that, having a thorough understanding of these variables can help with the development of focused treatments and programs that improve new graduate nurses' preparation for the workforce, thereby facilitating their smooth transition.

The literature currently in publication has not sufficiently examined the relationships between cooperation, team effectiveness, and job preparedness in nursing practice, despite the importance of these concepts being widely

recognized. By examining the relationship between nurse cooperation, team effectiveness, and job readiness, this study aims to close this gap. Our goal is to better understand these constructs' interactions and influences within the context of nursing practice through this research, which will help develop more all-encompassing approaches to assisting nursing teams and fostering smooth transitions into professional practice.

### **Significance of the study**

A crucial element for a thriving team in modern businesses is collaboration, which stands out as paramount. Enhanced teamwork leads to better cooperation and consequently boosts team performance, allowing teams to achieve goals that would be unattainable individually. It not only creates a more productive work environment but also a friendly, upbeat work culture that helps retain high-potential individuals over the long term. By putting strategic collaborative procedures into place, teams can come together and take calculated risks to move the organization forward. According to a recent study from Cornerstone On Demand, 38% of employees believe there is not enough teamwork at work. Additionally, according to 33% of these participants, senior staff encouragement is crucial for promoting teamwork within the organization. Sanchez, John (2024).

Examining how teamwork, collaboration, and work preparedness interact can help identify the skills and qualities that are necessary for nursing professionals to be prepared for the challenges of clinical practice. Beyond clinical expertise, work preparedness also includes critical thinking, emotional intelligence, flexibility, and communication skills. Nursing education programs, preceptorship initiatives, and professional development activities can all benefit from understanding the factors that influence nurses' work preparedness. This will help to ensure that nurses have the knowledge and abilities needed to succeed in their professions. Healthcare businesses may cultivate a workforce more equipped to provide patients with high-quality treatment and adjust to the changing healthcare environment by addressing these variables (Hayter, 2017).

In conclusion, research on the connection between nurses' collaboration, team performance, and work preparedness has a lot of promise to improve healthcare delivery systems, support evidence-based practice, and raise the wellbeing and professional satisfaction of nursing staff. This work advances ongoing efforts to improve nursing standards and advance the health , welfare of individuals and communities by expanding our understanding of these important constructs. Healthcare organizations can cultivate environments that promote collaboration, improve team effectiveness, and guarantee that nurses are adequately prepared to tackle the demands of their roles by implementing informed interventions and practices. This can ultimately result in improved patient outcomes and overall quality of healthcare (Dudley et al., 2020).

### **Aim of the study:**

- The current research aims to explore the association between collaboration, team - effectiveness and work readiness among nurses at selected hospitals.

### Research questions:

- What are the levels of nurses' perception regarding to nurse collaboration, team - effectiveness and the work readiness?
- What are relationships among nurses' collaboration, team effectiveness and work readiness?
- What are relationships between nurses' characteristics and nurses' collaboration, team effectiveness and work readiness?

### Subjects and Methods

#### Research Design

A descriptive-correlational research design was utilized to accomplish the goal this study.

#### Study Setting:

The present study was implemented at (Minia Emergency University Hospital; Renal and Urology University Hospital and Misr - El-Huraa Hospital).

#### Study Sample

A convenience sample comprising all available staff nurses (n=692) who were on duty during the study period, provided direct patient care, and consented to participate was utilized. The sample included nurses from Minia University Emergency Hospital (289), Minia University Kidney and Urology Hospital (218), and Misr El-Huraa Hospital (185).

#### Data Collection Tools

Three tools were used to collect data for the present study.

**Tool I: Nurse collaboration Scale:** it consists of two parts:

Part I: **Personal characteristics data sheet:** The researchers created to gather information on nurse's age, gender, residence, educational level, and experience years.

Part II: **Nurse collaboration questionnaire:**

It is a self-administered questionnaire adapted from (Dougherty and Larson ,2010). It was used to assess nurses' collaborative behaviors level, It consists of (23 items) classified into four dimensions as follow, 1<sup>st</sup> dimension Conflict management (5 items) 2<sup>nd</sup> dimension Common goals (3 items), 3<sup>rd</sup> dimension Communication and coordination (7 items )and 4<sup>th</sup> dimension Professionalism and autonomy (8 items).

**Scoring system:** A three-Likert scale, with (1) denoting never, (2) sometimes, and (3) for always, Overall scores were divided into levels as follows: -

- low collaboration from (23–38)
- moderate collaboration from (39-54)
- High collaboration from (55-69)

**Tool II- Team-Effectiveness questionnaire:** It is a self-administered questionnaire adapted from (Northouse, 1997), It was used to assess Team-Effectiveness level among nurses, It was consisting of (56) items classified into eight dimension as Purpose and goals (7) items, Roles(7) items, Team processes (7) items, Team relationships (7) items, Intergroup relation (7) items, Problem solving (7) items, Passion and commitment (7) items, and Skills and learning (7) items.

**Scoring system:** Responses were rated on three-point scale as (1 = disagree, 2=neutral, and 3 = agree), was range from (56 to 168), The scores were interpreted as follow:

- Low level of nurses' connectivity ranged from 56 to 93,
- Moderate level of nurses' connectivity ranged from 94 to 131
- High level of nurses' connectivity ranged from 132 to 168.

#### Tool III: work- Readiness questionnaire:

It is a self-administered questionnaire adapted from (Walker et al. 2015 ), it was used to assess nurses' response levels about work-readiness. It consists of (46) items classified into four dimensions as follow: 1<sup>st</sup> dimension Work competence (10) items, 2<sup>nd</sup> dimension Organizational acumen (11)items,3<sup>rd</sup> dimension Social intelligence (16) items and 4<sup>th</sup> dimension Personal work characteristics (9 items).

**Scoring system Responses were rated on three-point scale as (1 = disagree, 2=neutral, and 3 = agree), was range from (46 to 138), The scores were interpreted as follow:**

- low work-readiness level (46 – 76)
- moderate work-readiness level (77- 107)
- high work-readiness level and (108-138)

#### Validity:

The three instruments were translated into Arabic by a skilled interpreter to correspond with the staff nurses' educational background. The tools were translated twice: first into Arabic and once again into English. Three nursing administration specialists from Minia University's Faculty of Nursing—a professor and two assistant professors—evaluated the tool for content, coverage, clarity, terminology, length, structure, and overall appearance. Many sentences were reworded and grammatical faults were fixed in response to their input.

#### Reliability

The Cronbach's Alpha test was used to assess the internal consistency and homogeneity of the study questionnaires, and the results showed that nurse- nurse collaboration questionnaire had an internal consistency of (0.86), team-effectiveness questionnaire had an internal consistency of (0.87) and work-readiness questionnaire had an internal consistency of (0.78).

#### Pilot study:

A pilot research including 10% of the participants was carried out to evaluate the usefulness and comprehensibility of the study tools. It took the responders fifteen to twenty minutes to finish the tools. The outcomes of the pilot research served as the basis for the final version of the tools. The pilot study sample was incorporated into the primary investigation as there were no modifications made to the instruments.

#### Ethical considerations:

The Minia University Faculty of Nursing's Ethical Committee of Scientific Research provided formal written clearance. The study's purpose and the participants' ethical rights were both specified in the study materials. Each participant was given a code number, ensuring their identity and confidentiality. Names were not included in the

questionnaire. Participation in the study was optional, and participants were advised of their freedom to refuse or withdraw at any time. The data was gathered with confidentiality in mind and was only applied to study. Written agreement was given by the participants to take part in the study.

**Procedure**

Researchers distributed the study questionnaires by interacting with participants throughout both morning and afternoon shifts. During these meetings, researchers explained the study's objective, provided help on filling out the questionnaires, and assured participants that the data would be used purely for scientific research. Completing the

questionnaire took fifteen to twenty minutes. The completed forms were promptly collected and examined to ensure no information was missing. Data collecting took done from start of December 2023 to end of January 2024.

**Statistical design**

Data input and statistical analysis were performed using the Statistical Package for Social Science (SPSS) version 27. Descriptive statistics were employed to analyze the data. The correlation coefficient test revealed the direction and intensity of correlations between research variables. T-tests and ANOVA were utilized to discover differences between selected variables. A p-value of less than 0.05 was regarded to indicate a significant result.

**Results:**

**Table (1): Nurses' personal characteristics data (n= 692)**

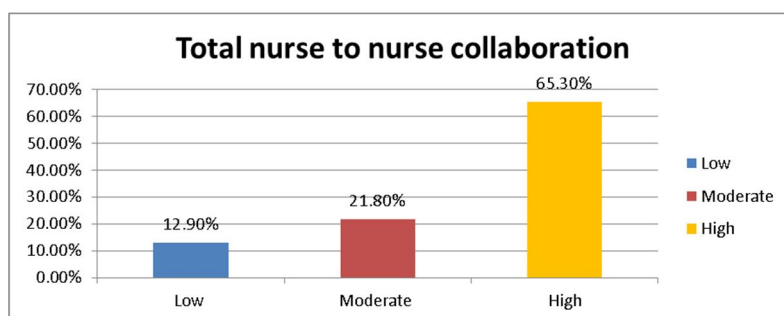
personal characteristics data	No.	%
<b>Gender</b>		
• Male	261	37.7
• Female	431	62.2
<b>Age</b>		
• 20-30yrs	386	55.7
• 31-40yrs	208	30.1
• ≥41yrs	98	9.8
Mean ±SD	30.2±8.54	
<b>Residence</b>		
• Ruler	505	72.9
• Urban	187	27.1
<b>Educational qualification</b>		
• Diploma of nursing	106	15.3
• Technical nursing institute	512	74
• Bachelor of nursing	74	10.7
<b>Years of experience</b>		
• 1-10yrs	309	44.7
• 11-20yrs	231	33.4
• ≥21yrs	152	21.9

Table 1 provides the personal characteristics of the staff nurses. It shows that roughly two-thirds (62.2%) of the nurses were female. More than half (55.7%) of the nurses were aged between 20 and 30 years, with a mean age of 30.2 ± 8.54 years. Over two-thirds (72.9%) of the participants were from rural areas. About three-quarters (74%) of them received a technical institute. Additionally, more than two-fifths of the nurses had between 1 and 10 years of experience.

**Table (2) Mean score of nurses 'perception of nurse to nurse collaboration (no.=692).**

Dimensions	Minimum	Maximum	Mean	±SD	Mean %
Conflict management	5	15	12.23	2.79	80
Common goals	3	9	7.94	2.13	87.7
Communication and coordination	7	21	16.42	4.59	87
Professionalism and autonomy	8	24	18.90	5.13	78.7
<b>Total</b>	23	69	54.6	12.44	79.1

Table (2) declare that the highest mean percentage (87.7%) of nurse's perception of nurse to nurse collaboration dimension was for Common goals. and the lowest mean percentage (78.7%) was for professionalism and autonomy. The total mean proportion of nurse to nurse collaboration was (79.1%).



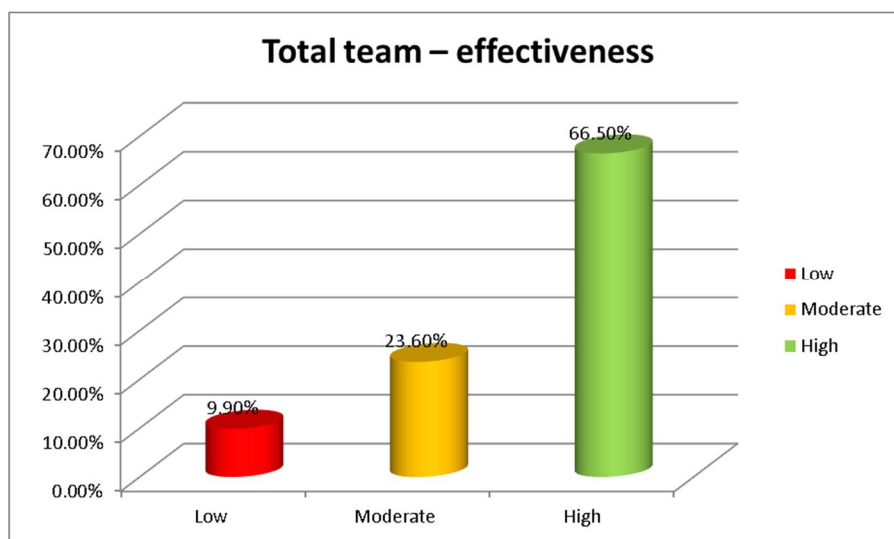
**Figure (1) Total Levels of the nurses' perception regarding nurse to nurse collaboration (no.=692).**

Figure 1 illustrates the levels of nurse-to-nurse collaboration among the participants. Approximately two-thirds (65.3%) of the nurses demonstrated a high level of collaboration. About one-fifth (21.8%) exhibited a moderate level of collaboration, while 12.9% of the nurses had a low level of collaboration.

**Table (3) Mean score of nurse’s team – effectiveness (no.=692).**

Dimensions	Min	Max	Mean	±SD	Mean %
Purpose and goals	7	21	16.58	4.70	78.5
Roles	7	21	16.36	4.59	77.6
Team processes	7	21	18.42	5.60	78.6
Team relationships	7	21	17.41	4.67	82.8
Intergroup relation	7	21	16.42	4.60	78
Problem solving	7	21	16.69	3.79	79
Passion and commitment	7	21	18.45	5.79	87.7
Skills and learning	7	21	18.99	5.96	90
Total	56	168	133.1	25.9	79.2

Table 3, shows that the highest mean percentage 90%.for the nurses' team effectiveness dimension for skills and learning, The lowest mean percentage77.6%. was for roles, The total mean percentage of the nurses' team effectiveness was 79.2%.



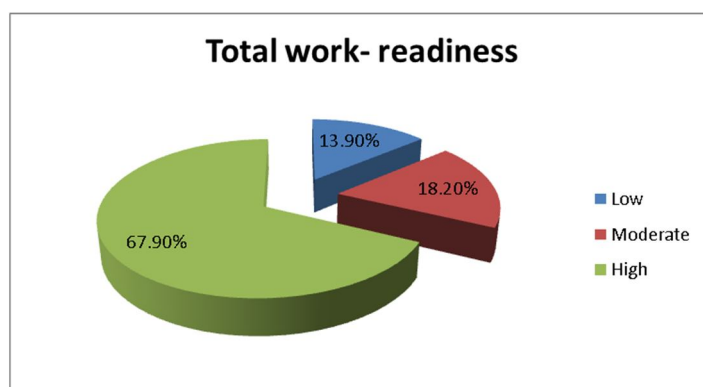
**Figure (2) Percentage distribution of total nurses’ team – effectiveness (no.=692).**

Figure 2 illustrates the levels of team effectiveness among the nurses. Around two-thirds (66.5%) of the nurses exhibited a high level of team effectiveness. Approximately one-fifth (21.8%) displayed a moderate level of effectiveness, while 12.9% of the nurses showed a low level of effectiveness.

**Table (4) Mean score of nurse’s work- readiness (no.=692).**

Dimensions	Minimum	Maximum	Mean	±SD	Mean %
Work competence	10	30	22.9	1.98	76.3
Organizational acumen	11	33	24.19	1.69	73
Social intelligence	16	48	34.16	1.63	71
Personal work characteristics	9	27	18.71	1.55	69.2
Total	46	138	109.7	24.8	79.4

Table 4 presents the nurse's work-readiness dimension. The highest mean percentage, at 76.3%, was observed for work competence, while the lowest mean percentage, at 69.2%, was for personal work characteristics. The total mean percentage of nurse's work-readiness was 79.4%.



**Figure (3) Percentage distribution of total nurse’s work- readiness (no.=692).**

Figure 3 illustrates the levels of work readiness among the nurses. More than two-thirds (67.9%) of the nurses demonstrated a high level of work readiness. Approximately one-fifth (18.2%) exhibited a moderate level, while 13.9% of the nurses had a low level of work readiness.

**Table (5): correlation between Nurse- nurse collaboration, Team-effectiveness and work-readiness among Nurses (no.=692).**

Variables		Nurse- nurse collaboration	Team-effectiveness	work-readiness
Nurse- nurse collaboration	r	-	.829**	.872**
	p	-	0.000	.000
Team-effectiveness	r	.829**	-	.852**
	p	0.000	-	.000
work-readiness	r	.872**	.852**	-
	p	.000	.000	-

Table 5 indicates highly statistically significant positive correlations among various factors. There is a correlation coefficient of  $r = 0.829^{**}$ , with  $p = 0.000$ , between nurse's nurse-nurse collaboration and their level of team effectiveness. Similarly, there is a highly statistically significant positive correlation ( $r = 0.872$ , \*\*,  $p = 0.000$ ) between nurse's nurse-nurse collaboration and work readiness. Additionally, there is a highly statistically significant positive correlation ( $r = 0.852$ , \*\*,  $p = 0.000$ ) between nurse's team effectiveness and nurses' work readiness.

**Table (6): Relation between of nurse to nurse collaboration & Team- effectiveness and Work-readiness among nursing staff personal data at selected Hospitals (no=692).**

Personal data	Nurse- nurse collaboration		Team- effectiveness		Work-readiness	
<b>Age</b>						
	Mean	+SD	Mean	+SD	Mean	+SD
20-30yrs	54.43	12.55	133.1	26.14	109.5	24.99
31-40yrs	56.32	11.78	132.1	24.37	111.4	24.59
<40yrs	53.01	7.81	144.3	27.42	111.3	13.50
Anova P-value	.901(.406)NS		.344(.709)NS		.236(.790)NS	
<b>Years of experience</b>						
	Mean	+SD	Mean	+SD		
1-10yrs	54.32	12.61	132.73	26.38	109.36	25.18
11-20yrs	57.28	11.01	134.33	21.89	112.87	23.01
≤21yrs	51.01	9.89	134.50	30.40	104.50	9.19
Anova P-value	2.03(.131)NS		.135(.873)NS		.729(.483)NS	

<b>Educational qualification</b>						
	Mean	+SD	Mean	+SD		
Diploma	56.39	10.6	135.78	23.11	112.45	21.73
Technical	54.34	12.7	132.41	26.53	109.29	25.37
Bachelor	53.45	13.14	132.86	25.75	108.13	25.99
Anova P-value	1.45(.227)NS		.499(.583)NS		.664(.574)NS	
<b>Gender</b>						
	Mean	+SD	Mean	+SD		
Male	54.59	12.88	133.85	25.86	110.62	25.52
Female	54.68	12.32	132.74	25.93	109.49	24.71
T-test (P-value)	.087(.331)NS		.474(.636)NS		.501(.617)NS	
<b>Marital statuses</b>						
	Mean	+SD	Mean	+SD	Mean	+SD
Ruler	53.93	13.1	131.49	27.01	109.05	26.01
Urban	55.29	11.8	134.30	24.87	110.36	23.89
T-test (P-value)	2.081(.150)NS		2.22(.155)NS		.474(.491)NS	

\*  $p < 0.05$  (significant) T-test: P – value based on independent sample t-test, F-test P – Value based on compares mean, NS= No Significant difference \* statistically significant difference

**Table (6)** revealed that there was no statistically significant differences among the studied variable nurse to nurse collaboration & team -effectiveness and work readiness , and their personal data.

**Discussion**

Healthcare facilities are complex settings where experts with various educational backgrounds work together to provide high-quality care (Aydogdu, 2024). To improve patient care quality and outcomes, staff nurses at different levels collaborate (Levy-Malmberg, Boman, Lehwaldt, Fagerström, & Lockwood, 2024). In this situation, putting patient-centered care first and avoiding medical errors are essential (Watanabe et al., 2023). A successful transfer to practice requires an understanding of the complex idea of job preparedness, encompassing its dimensions and attributes (Almotairy, Nahari, Moafa, & Alanazi, 2022). job preparedness is influenced by a number of factors, including interpersonal skills, leadership experience, academic

background, job experience, and willingness to practice nursing.

In our investigation, we aimed to explore the relationship between collaboration, team effectiveness, and work readiness among nurses. In the initial phase, we focused on nurses' perceptions of collaboration, team effectiveness, and work readiness. Our findings revealed that the majority of nurses exhibited high levels of collaboration, particularly in domains such as communication, coordination, and conflict management. This could be attributed to factors such as a shared understanding of organizational goals, the establishment of professional relationships, mutual appreciation among colleagues, the extensive experience of staff members, a culture of mutual respect, and minimal competition among staff.

The results are in agreement with a number of worldwide studies. For example, a mixed study conducted in **China by Wu, Li, Huang, and Jiang (2024)** discovered that nurses had high levels of collaboration, communication, and teamwork. In a similar vein, a study carried out in the USA by **Williams, Franco-Rowe, Knudtson, Tung, & Allison (2024)** verified that nurses exhibited a high degree of integration and teamwork. Furthermore, **Watanabe et al. (2023)** found that nurses in Japan demonstrated a high degree of collaboration, which in turn fostered a sense of trust and empathy among them. Together, these studies support the idea that nurse collaboration is a common and crucial component of healthcare delivery in a variety of cultural situations.

Our results are consistent with those of a qualitative study carried out in Canada by **Levesque, Etherington, Lalonde, and Stacey (2022)**. According to their research, nurses demonstrate a high degree of interprofessional collaboration in the workplace and stress the need of clear communication in making sure that their perspectives are heard. In a similar vein, **Wei et al. (2020)** confirmed through a systematic review study that nurses collaborate in a highly effective manner that includes both systematic collaboration processes and relationship development. The aforementioned research bolster the significance of proficient teamwork between nurses and other healthcare workers in providing high-quality patient care.

However, the results of qualitative investigations by **Butler, Fox (2024)** and **Tan, Chua, McKenna, Tan, Lim, & Liaw (2023)** refuted the conclusions. Their findings clarify why there is a lack of person evaluation and communication style among the nurses, which leads to limited collaboration. Furthermore, in a systematic review study, **Hong (2023)** contends that nurses must enhance collaborative practice in the workplace. **Aligns Zumstein and Grace (2023)** demonstrate the necessity for better nurse teamwork.

The findings of our study suggested that the majority of nurses exhibited a high level of team effectiveness, with roles and team processes emerging as the domains with the highest mean scores. This could be attributed to several factors, including role and goal clarity among the nursing staff, a strong sense of work commitment, and positive relationships within the team. When nurses have a clear understanding of their roles and responsibilities within the team, coupled with a shared commitment to achieving common goals, it fosters a cohesive and effective working environment. Additionally, positive intragroup relationships contribute to open communication, collaboration, and mutual support among team members, further enhancing overall team effectiveness.

Our findings are consistent with those of **Sato, Harada, Suzukamo, Tonomura, and Izumi (2023)**, who found that nurses demonstrated a satisfactory level of team effectiveness in a quasi-experimental study conducted in **Japan**. Similarly, **Mee Young (2018)** observed a positive level of team effectiveness among Korean nurses. These studies corroborate our findings and indicate that nurses across different cultural contexts exhibit high levels of team effectiveness, which is crucial for providing quality patient care and fostering a supportive work environment. In contrast, the findings of a qualitative study conducted in Istanbul disapproved of **Aydogdu (2024)**. The findings indicate a lack of respect, a lack of distinction between professional and personal duties, little engagement, and poor communication. at a similar vein, a study carried out at

Finland's five university teaching hospitals by **Azimirad et al. (2022)** contends that aspects of teamwork and communication, such as decision-making and dispute resolution abilities and appreciating team members, require reinforcement.

In a qualitative study by **Geltmeyer et al. (2022)**, the loss of team effectiveness emerged as a central theme. Nurses reported feeling a loss of control and a sense of disconnect from their clinical practice while working in mixed nursing-care teams. This loss of effectiveness was attributed to experiencing role ambiguity, struggling with responsibility, and encountering a lack of trust within the team. On the other hand, **Duma and Laair (2023)** identified four major themes in their qualitative research among Ghanaian nurses. These themes included practice reforms, practitioner reforms, training reforms, and policy reform. These findings highlight the need for comprehensive reforms across various aspects of nursing practice, training, and policy to enhance the effectiveness and quality of care provided by nurses in Ghana.

The findings of our study indicate that the majority of nurses exhibit a high level of readiness, with work competencies and social intelligence emerging as the domains with the highest mean percentages. This aligns with research conducted by **Almotairy et al. (2023)** in Saudi Arabia, where nurses also demonstrated a high level of work readiness. Similarly, **Ma, Zhu, Liu, and Liu (2023)** reported moderate to high levels of work readiness among nurses in Beijing.

Additionally, **Almotairy, Nahari, Moafa, and Alanazi (2022)** found that nurses exhibited high levels of readiness across all readiness domains. **Tarhan, Doğan, and Kürklü (2022)** observed a moderate level of readiness and social intelligence among nurses. **Li, Huang, Fong, Chen, & Song (2022)** reported a reasonable level of work readiness among nurses in **China**. **Walters, Hoffart, Kring, Whitley, Horne, and Almotairy (2022)** declared high scores on all readiness dimensions, although unexpected differences in readiness dimensions were identified in their analysis. These findings collectively highlight the overall high level of readiness among nurses across different regions and provide valuable insights into the various dimensions of readiness that contribute to their effectiveness in the workplace.

In contrast, **Schofield et al. (2022)** found that less than half of nurses exhibited a low level of readiness, with the highest mean score in all domains being "to what extent" in a study conducted in Canada. This suggests that a significant portion of nurses in their study may not have felt adequately prepared for their work roles. Similarly, **Serafin et al. (2022)** reported that Polish nurses experienced numerous difficulties indicating a lack of readiness to work. These findings suggest that readiness levels among nurses can vary across different contexts and populations, and there may be specific challenges or barriers that need to be addressed to improve readiness levels in certain regions or healthcare settings.

The second part related to the association between collaboration, team effectiveness, and work readiness among nurses. The findings of our study supported significant positive correlations between nurses' collaboration and team effectiveness, nurses' collaboration and work readiness, and team effectiveness and work readiness. This can be attributed to nurses' high levels of communication, social intelligence, and coordination, coupled with a sense of autonomy. These factors directly contribute to improving team relationships, leading to enhanced conflict management, autonomy, work commitment, and overall readiness. It's worth noting that there is limited research covering these variables



comprehensively. However, **Tarhan, Doğan, and Kürklü (2022)** reported a statistically significant correlation between nurse-nurse collaboration and work readiness in a study conducted on Turkish nurses. This further supports the notion that collaboration among nurses is a crucial factor influencing their readiness for work, which has implications for the quality of patient care and overall healthcare outcomes.

### Conclusion

There was a positive correlation between nurses-nurses collaboration, team effectiveness and work readiness.

### Recommendation:

- Hospital managers should develop educational programs that focus on creating innovative opportunities for nurses to learn about intra-professional collaboration in the practice setting.
- Regular team-building activities
- Effective communication training
- Interdisciplinary collaboration workshops

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