



# The Relationship between Emotional Intelligence and Clinical Performance among Maternity Nursing Students in the Labor Unit

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## Abstract

**Background:** Emotional intelligence (EI) stands as a critical component in the healthcare professions, particularly in maternity nursing, where the ability to navigate complex interpersonal relationships and effectively communicate with women, families, and colleagues is paramount. **Aim:** To determine the relationship between emotional intelligence and clinical performance among maternity nursing students in the labor unit. **Research design:** A descriptive correlational design was utilized. **Setting:** The study was conducted in (labor unit) of the obstetric and gynecological department at AL-Hussein University hospital. **Sample:** A convenience sample which included 60 students of 3<sup>rd</sup> year in maternity and gynecological nursing course. **Tools:** Two tools were used. Firstly, a structured interview schedule regarding: demographic characteristics and the SSREIT. Secondly, a clinical performance evaluation, which included: performance checklist for labor area procedures and evaluation of supportive clinical performance skills. **Result:** Reveals that, more than three quarters of the studied students had high level of emotional intelligence, more than three quarters had adequate level of Procedural skills checklist and two thirds of them had adequate level of supportive clinical performance .Totally less than three quarters of the studied students' had adequate level of total clinical performance, while more than one quarter of them had inadequate **Conclusion:** There was a highly statistical positive correlation between students' emotional intelligence and their total clinical performance .On the other hand there was not statistically significant between the studied students' demographic characteristic and their total clinical performance &emotional intelligence except age, there was a statistically significant **Recommendations:** Designing program to evaluate the effect of implementing intervention program to develop and enhance nursing students' EI abilities.

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**Keywords:** Clinical Performance in Labor Unit, Emotional Intelligence, Maternity Nursing Students

## Introduction:

Emotional Intelligence (EI) is a concept introduced by psychologist peter salovey and john Mayer in1990, which has been recognized in various areas of human life. EI defined as an individual's ability to perceive, comprehend, manage, and utilize emotions in one and others ( *Salovey,& Mayer,1990*).In other words, EI is also called EQ "Emotional Quotient", which means the ability to use, comprehend and guide one's emotions positively to reduce stress, communicate efficiently, empathize with others, get rid of obstacles, and resolve conflicts(*Sfetcu, 2023*).

In addition, EI is the ability to monitor moods, emotions and use that information to guide thoughts and behaviors. EI comprises perceiving, understanding, managing, and using emotions. Perceiving emotions is described as the ability to recognize emotions when they occur. Understanding emotions is the core of emotional intelligence, which means the ability to understand and experience the emotions of others (*Hwang, & Park, 2022*).



Emotional Intelligence has great importance in every discipline, which can help a person to supervise, work, cope with other people and be more resilient to stresses that people might face in life (*Rashad et al., 2022*). EI improves physical and mental health. Also helps maternity nursing students to develop social relations with peers and staffs in clinical setting, which can positively impact academic and clinical performance. Students with lower levels of EI are less able to regulate emotions that negatively affect overall health (*Lee, & Sim, 2021*).

Clinical practice performance is affected by EI across a variety of health areas. Clinical performance is an important part of nursing education, which focuses on developing and applying the students' knowledge, attitudes, and skills required for future professional practice. Clinical education provides students with unique educational opportunities through which skills and theories are applied in the real life situations (*Tuomikoski et al., 2020*). The practical section of nursing education has always been necessary, which has enabled maternity nursing students to practice, develop decision-making and prioritize capacities in the labor unit, enhancing clinical performance and increasing the possibility of improving maternal and child health outcomes (*Lau et al., 2020*).

The clinical performance in the labor unit focuses on providing health care to pregnant women during labor, childbirth, and the immediate postpartum period. In general, labor unit has facilities both for childbirth and for postpartum rest and observation of mothers in normal as well as complicated cases. Maternity nurse is responsible for monitoring the health of individuals giving birth and infants, providing immediate postpartum care of labor, administering medications, assisting with labor positions, and providing emotional support (*Murphy et al., 2022*).

Maternity nurses students playing an active role during different stages of labor, which procedures the possible risks associated with labor and delivery should be explained and obtain informed consent when procedures involve patient body, women must have the appropriate information to make informed choices. Since the labor begins with uterine contractions and takes hours to complete, most women suffer from labor contractions for hours before arriving at the birth center. Upon arrival, one of main needs is to be assured that judgment is correct, everything is going well, and that feeling overwhelmed and increasing pain feel is part of the usual labor (*Awe et al., 2021*).

### Significance of the study:

Although there are abundant studies evaluating the role of emotional intelligence in the workplace, Studying the impact and importance of emotional intelligence in maternity nursing performance is a new phenomenon. Developing maternity nursing student's EI skills will prepare them to compact the emotional demands of clinical practice especially in providing physical and emotional support mainly to the patients and their families. This also, will prepare them to act as transformational nurse leaders who are able to perceive and manage self-emotions or managing others' emotions and utilizing emotions and cooperating in inter professional environment that is continually changing (*Rodriguez et al., 2023*).

Emotional Intelligence should be incorporated into maternal child health nursing curricula to help students in facing challenging situations. Given the generally higher levels of stress found in healthcare, maternity nursing students may benefit from coaching as to how to effectively manage their emotions. in order to prepare them for working effectively in their work environment (*Cleary et al., 2018*).

Due to the scarcity of Egyptian studies that explore the correlation between emotional intelligence (EI) and clinical performance specifically in the field of maternity nursing, this study aims to fill this gap. The primary objective is to determine the relationship between emotional intelligence and clinical performance among maternity nursing students working in the labor unit. By conducting this study, valuable insights into the influence of EI on the clinical performance of maternity nursing students can be gained, contributing to the existing body of knowledge in this area.

### Aim of study:

The current study aimed to determine the relationship between emotional intelligence and clinical performance among maternity nursing students in the labor unit.

**Research question:**

1. Is there relationship between nursing students' emotional intelligence and their clinical performance in the labor unit?
2. Is there relationship between nursing students' emotional intelligence and their demographic characteristics?

**Research design:**

Descriptive correlational research design was utilized in the study. Descriptive correlational research is a research design method that involves observing behavior to describe attributes objectively and systematically and predicts how variables are naturally related in the real world, without any attempt by the investigator to alter them or assign causation between them, the main objective of descriptive research is to create a description of the current state of affairs whereas correlational research helps in comparing emotional intelligence and clinical performance and stating the relationship in-between (Genelza, & Dequito, 2022).

**Setting:**

The study was conducted in (labor unit) of the obstetric and gynecological department- at AL Hussein University hospital which affiliated to Al-Azhar University Hospitals.

**Sampling:****Sample type:**

Convenience sample was used in the current study.

**Sample size:**

The sample size included 60 students of 3<sup>rd</sup> year in maternity and gynecological nursing course in the first semester academic year (2022-2023) of faculty of nursing, Al-Azhar University.

**Tools for data collection:**

Data were collected using two tools after reviewing the related literature of the study:

**Tool I: Structured Interviewing Questionnaire:****Part 1: Demographic characteristics of maternity nursing students:**

This part composed of (4) question aimed to collect data about age, residence, parent's level of education and students' birth order.

**Part 2: The Schutte Self Report Emotional Intelligence Test (SSEIT):**

The test was used to assess the student's emotional intelligence. It was originally developed by (Salovey & Mayer 1990), modified by Schutte et al., 1998. This test includes 33 items; these items comprising four subscales were described by (Ciarrochi et al., 2001) and adopted by researcher as follows:

- Perception of Emotions (10 items).
- Managing on Emotions (9items)
- Managing Others' Emotions (8 items)
- and Utilization of Emotion (6 items)

**SSEIT Scoring system:**

The test was contained 33 items, each question was assigned a score (3) agree, (2) for neutral, (1) for disagree. The total SSEIT score ranged from 33 to 99 and were categorized as:

- Low EI (33 to 46)
- Moderate EI (47 to 72)
- High EI (73-99)

**Tool II: Evaluation of Clinical Performance for maternity nursing students:**

It consists of two following parts:

**Part I: Clinical/Procedural skills checklist.**

This part was used to assess maternity nursing students' performance for obstetrics and gynecologic nursing procedures in labor unit which is developed by maternity and gynecological nursing department at faculty of nursing Al-Azhar University after reviewing related literature (Kilpatrick et al2021). It contains five procedures :nursing management of the 1<sup>st</sup> Stage of labor(15 items) , Handling(28 items) , Placenta examination(14 items) , Perineal care(16 items) and Immediate baby care (27 items).

**Total Clinical /procedural skills scoring system.**

The checklists was contained 100 steps ,each step was assigned a score of (1) for done,(0) for not done ,the maximum possible total score was 100 grades this score was summed and were converted into percent score it was classified into 2 categories :

- Adequate level if score  $\geq 85\%$  ( $\geq 85$  grades)
- Inadequate level if score  $< 85\%$  ( 0-84 grades)

**Part II: Supportive clinical performance skills:**

It was adapted from (Ibrahim et al .2016), to evaluate students' supportive clinical performance skills. It includes five components, which are nursing care plan (5 items), communication (4items), clinical reasoning/ problem solving (5items), professional & ethical conduct (8items), and oral/written presentations (7 items).

**Total Supportive clinical performance skills scoring system:**

This part was contained 29 items; each item was assigned a score using 1 (never), 2(adequately) and 3 (always). The maximum possible total score was 87 grades this score was summed and were converted into percent score it was classified into 2 categories:

- Adequate of Supportive clinical performance skills1 if score  $\geq 85\%$  (74-87grades).
- Inadequate of Supportive clinical performance skills if score  $< 85\%$  (29-73).

**Validity:**

Revision of the tools for clarity, relevance, comprehensiveness, understanding, and applicability was done by panel of three expertises' in maternal and newborn health nursing department and two expertise in psychiatric health nursing department at Helwan University to measure the content validity of the tools.

**Reliability:**

Cronbach's Alpha coefficient test was used to assure homogeneity of tool as:

Alpha Cronbach Reliability Analysis of the Used Tool 1 Self-report emotional intelligence 33-0.899 and tool 2 Total Clinical performance 129 - 0.952

**Ethical considerations:**

Official permission to conduct the proposed study was obtained from the Ethical Research Committee, Faculty of Nursing- Helwan University. Participation in the study was voluntary, and subjects were given complete information about the study and their role before signing the informed consent. Ethical considerations included explaining the purpose and nature of the study, stating the possibility to withdraw at any time, and maintaining confidentiality of the information where it was not accessed by any other party without the participants' ethics, values, culture, and beliefs.

**Pilot study:**

The pilot study was done on 10% of the sample, (6) undergraduate maternity nursing students from the 3rd year. The pilot study was carried out to confirm understanding, clarity, efficiency, applicability of the tools and to determine required time to fulfill tools. Those participants were included in the main study as there were no modifications in the tools.

**Field work:**

The researcher reviewed the current, local, and international related literature on various aspects of the study using books, periodicals, journals, magazines, and the internet, with the aim of acquiring in-depth knowledge about the study. Then tools were designed and evaluated for validity and reliability.

- An approval was obtained from faculty of Nursing Helwan University and the studied nursing students to give a written agreement to participate in the study.
- An official permission included the title and purpose of study submitted to the director of Al Hussein hospital to get approval for data collection to conduct the study.
- The process of data collection was conducted in the period from the beginning of October to the end of December, consuming 3 months, after obtaining all official permissions. The researcher was going to the hospital 2 days/week (on Sunday & Monday) in the morning shift 9.00am to 2.00 pm.
- First, the researcher met the studied nursing students and introduced herself to them and gave a brief explanation about the study and its purpose to gain their confidence and trust to participate in the study, and then the consent was obtained from them before any data collection.
- After that, the researcher stated the assessment process, which the investigator used tool 1 to assess maternity nursing student's demographic data and their emotional intelligence. The questionnaire required to fill was given to all students. Students filled the questionnaire; it took about 20 minutes for each student to complete the questionnaire.
- The researcher checked the completeness of each filled sheet to ensure the absence of any missing data.
- Then the researcher used tool 2 to assess maternity nursing student's level of clinical performance through assessing their clinical & supportive skills in the labor unit (the researcher assessed clinical practice inside delivery room by observing the studied students' performance and following procedures steps, while supportive skills assessed by observing students communication, ethics, solving problems, making decision, application of nursing process with women and evaluating presentation skills all the time inside area).
- The studied nursing students were assured that the information collected would be treated confidentially and that it would be used only for the study.
- The researcher was present all the time during fulfilling the forms to answer any questions.

**Statistical Analysis:**

Recorded data were analyzed using the statistical package for social sciences, version (28). Quantitative data were expressed as mean  $\pm$  standard deviation (SD). Qualitative data were expressed as frequency and percentage. The Chi-square test was used to compare between qualitative data. Pearson's correlation coefficient (r) test was used to assess the degree of association between two sets of variables.

**Results:**

**Table (1):** Shows demographic characteristic of the maternity nursing students. There were less than half (46.7 %) of the studied students were aged 21 years with mean age  $20.77 \pm 0.698$  years. The same table clarified that three quarters (75.0 %) of the maternity nursing students were from rural areas. Also less than two thirds (60.0 %) of the studied students' parents had university education. Regarding students' birth order, less than half (46.7%) of the maternity nursing students were the middle child.

**Table (2):** Shows the mean score of the subscales of the studied students' emotional intelligence that includes (perception of emotions, managing own emotions, managing others emotions and utilizing of emotions).

**Figure (1):** Reveals that, more than three quarters (78.4 %) of the studied students had high level of total self-report emotional intelligence and less than one fifth (18.3 %) of them had moderate level of total self-report emotional intelligence while, only (3.3%) of them had low level of total self-report emotional intelligence.

**Table (3):** Illustrates the studied students' total clinical/Procedural skills checklist regarding nursing management of the 1<sup>st</sup> stage of Labor, handling, placenta examination, perineal care and immediate baby care.

**Table (4):** Reveals the studied students total supportive Clinical performance skills that include evaluation of (Nursing care plan, communication, clinical reasoning /problem-solving, Professional &ethical conduct and oral/written presentation

**Figure (2):** show that, more than three quarters (76.7 %) of the studied students had competence level of Clinical/Procedural skills checklist and less than quarter (23.3%) of them had incompetence level. While two thirds (66.7 %) of the studied students had competence level of supportive clinical performance and almost one third (33.3%) of them had incompetence level. Totally less than three quarters (71.7 %) of the studied students had competence level of total clinical performance, while more than one quarter (28.3 %) of them had incompetence level of total clinical performance.

**Table (5):** Highlights that there was no statistically significant between the studied students' total self-report emotional intelligence and their residence, parent level of education and student birth order  $p > 0.05$ , while there was statically significance differences between the studied students' total self-report emotional intelligence and their age  $p \leq 0.05^*$ .

**Table (6):** Highlights that there was no statistically significant between the studied students' total clinical performance and their residence, parent level of education and student birth order  $p > 0.05$  .While, there was a statistically significant differences between the studied students' total clinical performance and their age  $p \leq 0.05^*$ .

**Table (7):** Reveals, that there was a statistically significant differences between the studied students' total self-report emotional intelligence and total clinical performance  $p \leq 0.05^*$ .

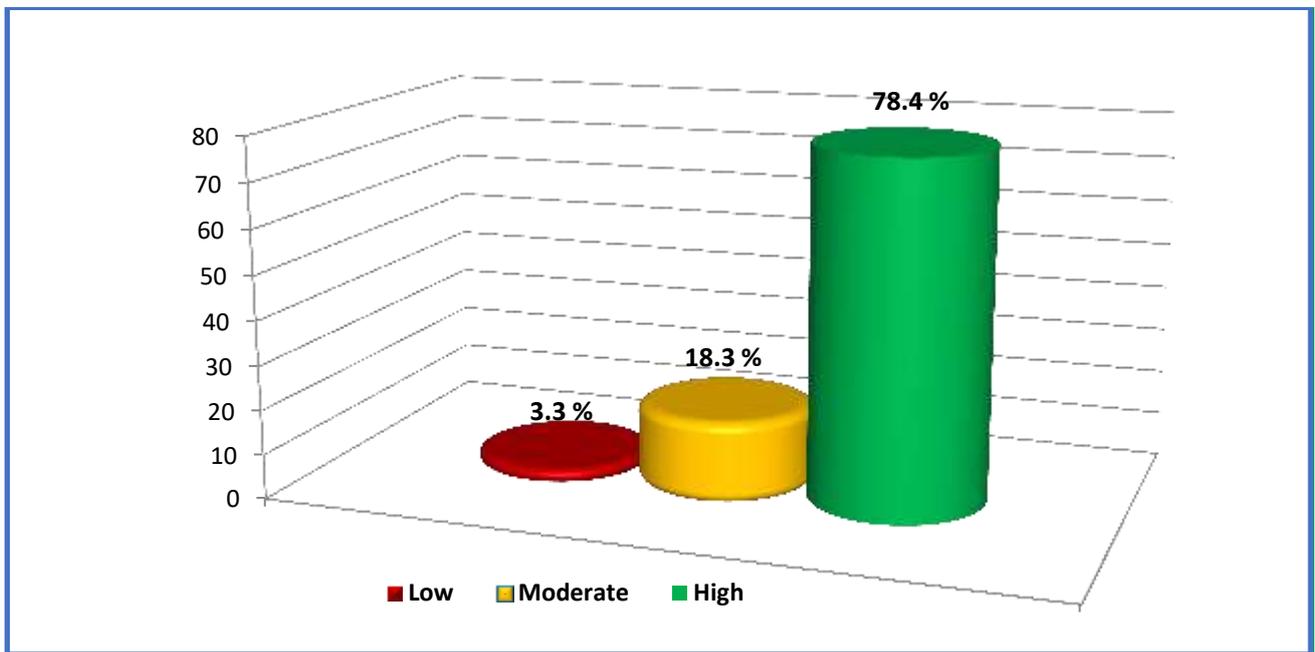
**Table (8):** clarifies that, there was a highly statistical positive correlation between Total self-report emotional intelligence and their total clinical performance at (P-value  $\leq 0.001$ ).

**Table (1):** Distribution of the maternity nursing students regarding their socio-demographic characteristic (n=60).

Demographic characteristic	No.	%
<b>Age/ years</b>		
20	23	38.3
21	28	46.7
22	9	15.0
<b>Mean <math>\pm</math>SD</b>	<b>20.77<math>\pm</math>0.698</b>	
<b>Residence</b>		
Rural	45	75.0
Urban	15	25.0
<b>Parent level of education</b>		
Basic education	7	11.7
Secondary education	15	25.0
University education	36	60.0
Post graduate	2	3.3
<b>Students' birth order</b>		
First	22	36.7
Middle	28	46.7
Last	9	15.0
The only child	1	1.7

**Table (2):** Distribution of the studied students regarding their self-report emotional intelligence parts (n=60).

Emotional intelligence Items	Items subscale	Score range	Min	Max	Mean± SD
Perception of Emotions	10	10-30	10	<b>29</b>	24.02±3.811
Managing of Emotions	9	9-27	12	<b>26</b>	22.45± 3.301
Managing Other's Emotions	8	8-24	8	<b>24</b>	21.12±3.237
Utilization of Emotion	6	6-18	7	<b>18</b>	15.82±2.896
<b>Total Emotional intelligence</b>	<b>33</b>	<b>33-99</b>	<b>44</b>	<b>93</b>	<b>83.40±10.469</b>



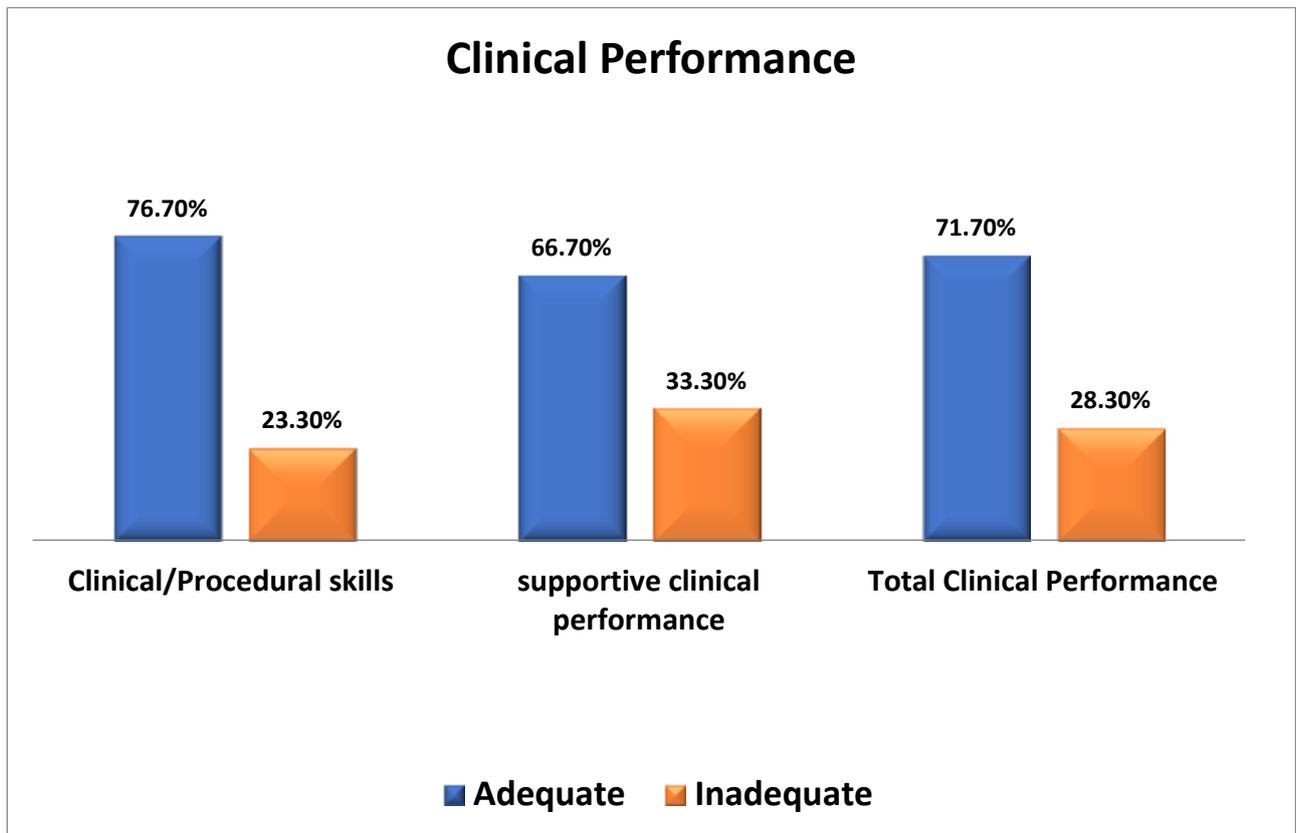
**Figure (1):** Distribution of the studied students regarding their total self-report emotional intelligence

**Table (3):** Distribution of the maternity nursing students regarding clinical/Procedural skills checklist parts (n=60).

Clinical/Procedural skills checklist parts	Items	Score range	Min	Max	Mean± SD
Nursing management of the 1 <sup>st</sup> stage of Labor	15	0-15	11	<b>15</b>	13.97±1.301
Handling	28	0-28	22	<b>28</b>	26.32± 2.087
Placenta examination	14	0-14	11	<b>14</b>	13.08±1.013
Perineal care checklist	16	0-16	13	<b>16</b>	15.38±1.091
Immediate baby care checklist	27	0-27	17	<b>27</b>	24.18±2.873
<b>Total</b>	<b>100</b>	<b>0-100</b>	<b>81</b>	<b>100</b>	<b>92.93±5.749</b>

**Table (4):** Distribution of maternity nursing students regarding their total supportive clinical performance parts (n=60).

supportive clinical performance parts	Items	Score range	Min	Max	Mean± SD
Evaluation-Nursing care plan	5	5-15	5	15	12.83± 2.301
Evaluation- Communication	4	4-12	5	12	11.02±2.127
Clinical reasoning /problem solving.	5	5-15	7	15	13.83±2.148
Professional &ethical conduct	8	8-24	8	24	22.23±3.864
Oral/written presentation	7	7-21	7	21	17.83±4.846
<b>Total</b>	<b>29</b>	<b>29-87</b>	<b>33</b>	<b>87</b>	<b>78.18±12.831</b>



**Figure (2):** Percentage distribution of the studied students regarding their total clinical performance (clinical/ Procedural skills checklist& supportive clinical performance).

**Table (5) :** Statistically relation between total self-report emotional intelligence and demographic characteristics among maternity nursing students.

Items	Low (n=2)		Moderate (n=11)		High (n=47)		Chi-square	
	No.	%	No.	%	No.	%	X <sup>2</sup>	p-value
<b>Age/years</b>								
20	2	100.0	8	72.7	13	27.7	11.059	0.026*
21	0	0.0	2	18.2	26	55.3		
22	0	0.0	1	9.1	8	17.0		
<b>Residence</b>								
Rural	2	100.0	8	81.8	34	72.3	1.117	0.572
Urban	0	0.0	2	18.2	13	27.7		
<b>Parent level of education</b>								
Basic education	1	50.0	1	9.1	5	10.6	5.876	0.437
Secondary education	1	50.0	4	36.4	10	21.3		
University education	0	0.0	6	54.5	30	63.8		
Post graduate	0	0.0	0	0.0	2	4.3		
<b>Students' birth order</b>								
First	0	0.0	3	27.3	19	40.4	4.199	0.650
Middle	1	50.0	7	63.6	20	42.6		
Last	1	50.0	1	9.1	7	14.9		
The only child	0	0.0	0	0.0	1	2.1		

**Table (6) :** Statistically relation between total clinical performance and demographic characteristics among maternity nursing students.

Items	Inadequate (n= 17)		Adequate (n= 43)		Chi-square	
	No.	%	No.	%	X <sup>2</sup>	p-value
<b>Age/years</b>						
20	12	70.6	11	25.6	11.509	0.003*
21	5	29.4	23	53.5		
22	0	0.0	9	20.9		
<b>Residence</b>						
Rural	13	76.5	32	74.4	0.027	0.575
Urban	4	23.5	11	25.6		
<b>Parent level of education</b>						
Basic education	2	11.8	5	11.6	0.981	0.806
Secondary education	5	29.4	10	23.3		
University education	10	58.8	26	60.5		
Post graduate	0	0.0	2	4.7		

Items	Inadequate (n= 17)		Adequate (n= 43)		Chi-square	
	No.	%	No.	%	X <sup>2</sup>	p-value
<b>Students' birth order</b>						
First	6	35.3	16	37.2	2.708	0.439
Middle	8	47.1	20	46.5		
Last	2	11.8	7	16.3		
The only child	1	5.9	0	0.0		

Chi-square test, \* statistically significance  $p \leq 0.05$ , No statistically significance  $p > 0.05$

**Table (7) :** Statistically relation between total self-report emotional intelligence and total clinical performance among maternity nursing students.

Self-report emotional	Clinical performance				Chi-square	
	Inadequate (n= 17)		Adequate (n= 43)			
	No.	%	No.	%	X <sup>2</sup>	p-value
Low (n=2)	2	11.8	0	0.0	13.211	0.010*
Moderate (n=11)	10	58.8	1	2.3		
High(n=47)	5	29.4	42	97.7		

**Table (8):**Correlation between Total self-report emotional intelligence and clinical performance among maternity nursing students.

Scale	Total clinical performance	
	R	p- value
Total self-report emotional intelligence	0.789	0.000**

Pearson Correlation Coefficient, \* \* statistically significance  $p \leq 0.001$

### Discussion:

Nursing is a stressful profession which needs a high degree of (EI) particularly when health care is delivered for women during the perinatal period. Hence, EI is essential to help them to control their emotions; as loss of ability to control emotions will increase fear, stress, and inhibit the quality of care to be delivered. Also EI plays a significance role in clinical performance as it directly affects different aspects of patient care and professional interactions (Soriano et al., 2023).

The present study that aimed to determine the relationship between emotional intelligence and clinical performance among maternity nursing students in the labor unit at AL Hussein University hospital which affiliated to Al-Azhar University Hospitals. Regarding demographic characteristics, the findings of current study indicate that near to the half of the studied students were aged 21 years with Mean  $\pm$ SD (20.77 $\pm$ 0.698). This study result is agree with Dou, et al. (2022), who conducted a study in china on "Influence of emotional intelligence on the clinical ability of nursing interns" and found that near to half aged 21 years old.



Regarding to the area of residence this study finding clarify that, three quarters of the studied students coming from rural areas is a notable finding. This finding agree with **Abdelaal et al, 2020**, who conducted a study in Egypt on "The Relationship between Emotional Intelligence and Workplace Stress among Maternity Nurses ", and found that three quarter of the studied students were from rural area .

As regard the studied student's parental education current study results indicated that less than two-thirds of the students' parents had university education is interesting. This might suggest that a significant proportion of the students come from educated families. These findings disagree with **Belay, & Kassie, (2021)**, who conducted a study in Ethiopia on" Emotional Intelligence and Clinical Performance of Undergraduate Nursing Students during Obstetrics and Gynecology Nursing Practice; Mizan-Tepi University, South West Ethiopia" and found that less than one fifth of the students' parents had university education.

According to the current study findings near to the half of the maternity nursing students were the middle child, these agree with **Ibrahim et al. (2016)**, who conducted a study in Egypt on" Relationship Between Nursing Students' Emotional Intelligence and Their Clinical Performance During Obstetrics and Gynecologic Nursing Practical Training", and found that about half were born second among their siblings.

Regarding EI parts, the present study clarified that the majority of the studied students had high level of total self-report emotional intelligence about managing on emotions, managing other's emotions and utilization of emotion respectively .This result is consistent with results reported by **Almansour, (2023)**, who carried out the study entitled "the level of emotional intelligence among Saudi nursing students" in KSA and reported that the major of students reported high levels of EI about managing on emotions, managing other's emotions and utilization of emotion respectively .

Regarding total self-report emotional intelligence, the present study clarified that maternity nursing students self-report emotional intelligence dimensions indicated that more than three quarters of the studied students had high level of emotional intelligence and less than one fifth of them had moderate level of total self-report emotional intelligence. From the researchers' point of view this results may be due to the great focus on psychological and social aspects of nursing during the study years in the nursing faculties.

These findings agree with **Chang & Tsai, (2022)**, who carried out the study entitled "The Effect of University Students' Emotional Intelligence, Learning Motivation and Self-Efficacy on Their Academic Achievement-Online English Courses", in china and concluded that more than three quarters of the students reported high levels of emotional intelligence.

On the other hand, **Trigueros, et al., (2020)** who carried out the study entitled "Relationship between Emotional Intelligence, Social Skills and Peer Harassment", in Spain and reported low level of students' emotional intelligence.

From the researcher's point of view this discrepancy between the present study and other studies might be attributed to different age groups and different educational courses.

Regarding clinical/procedural skills Parts, the current study clarified that about three quarters of the studied students had adequate level checklist regarding nursing management of the 1<sup>st</sup> stage of labor, handling and immediate baby care. These findings agree with **Jumaah, et al., (2020)**who carried out the study in Iraq on "Assessment of Nurse-midwives' Knowledge, and Practice in Delivery Room at Al-Najaf City" and reported that about three quarters of the them had adequate level regarding management of the 1<sup>st</sup> stage of labor , handling and immediate baby care.

According to third stage of labor more than half of them had inadequate level of clinical/Procedural skills checklist regarding placenta examination. These findings disagree with, **Muzeya & Julie, (2020)** who carried out the study entitled "Student midwives' knowledge, skills and competency in relation to the active management of the third stage of labor: A correlational study" in South Africa and reported that the majority of studied students achieved adequate level.



From the researcher's point of view this discrepancy due to lack of experience of the studied students which require from clinical instructors focus on improving the studied students weakness points in clinical practice inside labor area.

Regarding maternity nursing students' supportive clinical performance parts findings of current studies revealed that, more than three quarters of maternity nursing students had adequate level regarding evaluation of communication , clinical reasoning /problem solving, and professional &ethical conduct respectively, and less than three quarter had competent level regarding oral/written presentation These findings of the present study agreed with **Fteiha, & Awwad, (2020)**, who studied "EI and its relationship with stress coping style ", in UAE and reported high percentage of adequate level of supportive clinical skills.

While half of them had inadequate level of total supportive clinical performance regarding evaluation of nursing care plan, which indicates a specific area that may require attention and targeted intervention. This study result is agreed with **Yeşil&Baran. (2023)**, who studied "A retrospective descriptive study of NANDA-1 nursing diagnoses used by midwives working in obstetrics and gynecological services" in Turkey and found that half of studied nursing students had inadequate level of regarding evaluation of nursing care plan.

Regarding total clinical/procedural skills, the present study revealed that more than three quarter of the studied students had competence level, while, less than one quarter of them had incompetence level. These findings disagree with **Shabana & Fathy, (2021)** in the study entitled "The relation between student's achievement and their satisfaction level post attending training at delivery Room" in Egypt and reported that more than the half of students achieved low level of skills. From the researcher point of view this disparity due to the difference between students level of education.

Regarding maternity nursing students' total supportive clinical performance findings of current studies revealed that two thirds of the studied students had adequate level and one third of them had incompetent level, it came along with **Yildirim-Hamurcu, Terzioglu ,(2022)**. In the study entitled "Nursing students perceived stress interaction with emotional intelligence and self –leadership" and reported that about two thirds of the studied students had adequate level about total supportive skills.

Regarding total clinical performance the study findings indicated that the findings from the clinical/procedural skills checklist and supportive clinical performance assessments reveal a positive trend among maternity nursing students, near to three-quarters demonstrated adequate level of total clinical performance, while more than one-quarter exhibited inadequate performance. These results collectively indicate that a significant majority of students feel adequate and proficient in both the hands-on clinical procedures and the non-clinical aspects of patient care within the context of maternity nursing. These finding agree with **Thompson et al., (2016)** in USA reported that more than two thirds of the studied nursing students achieved adequate level in clinical/procedural skills in the study entitled "A clinical procedures curriculum for undergraduate medical students: the eight-year history of a third-year immersive experience.

Regarding Relation between emotional intelligence and demographic characteristics among maternity nursing students the study findings revealed that there was no statistically significant difference between the studied students' total self-report emotional intelligence and their residence, parent level of education, and student birth order. These findings agree with **Ordu et al., (2022)**, who studied "The relationship between nurses' emotional intelligence skills and positive mental health", in Turkey and found that there was no statistically significant difference between the studied students' total self-report emotional intelligence and their residence, parent level of education, and student birth order.

According to the current study there was a statistically significant difference between the studied students' total self-report emotional intelligence and their age. This suggests that age may be a significant factor in determining emotional intelligence levels among student. These findings agree with **Martínez-Marín et al. (2021)** who carried out study in Spain on "Gendered self –concept and gender as predictors of emotional intelligence " and found that there was statistically significant difference between the studied students' emotional intelligence and their age.



While the current study findings disagreement with study done by **Shahin, M. A. (2020)** "Emotional intelligence and perceived stress among students in Saudi health colleges" in KSA and reported that there was no statistically significant difference between the studied students' emotional intelligence and their age.

As regard the relation between total clinical performance and demographic characteristics among maternity nursing students the study findings concluded that no statistically significant difference between the studied students' total clinical performance and their residence, parent level of education, and student birth order. In the same line, a study by **Getie et al., (2021)**. "Clinical practice competencies and associated factors among graduating nursing students attending at universities in Northern Ethiopia" investigated that no impact of demographic factors on the clinical performance of nursing students.

The current study revealed that there was a statistically significant difference between total clinical performance and age. This suggests that age may play a significant role in determining clinical performance among students. These findings agree with **Komasawa, et al. (2022)** who conducted study in japan on "Comparison of younger age and older medical student performance outcomes" and reported that higher age indicated better clinical performance.

These findings disagree with **Terry, &Peck, (2020)** who conducted study in Australia on "Academic and clinical performance among nursing students" and found that there was no statistically significant difference between the clinical performance and age.

Regarding Relation between total self-report emotional intelligence and total clinical performance among maternity nursing students, there was a statistically significant difference between the studied students' total self-report emotional intelligence and total clinical performance. These findings agree with **Belay, & Kassie, (2021)** reported a strong positive relationship between emotional intelligence and clinical practice performance among nursing students ( $p < 0.001$ ).

This result implies that students with higher levels of self-reported emotional intelligence may demonstrate better clinical skills and performance in healthcare settings, students who possess higher EI scores may exhibit greater proficiency in managing complex clinical scenarios, collaborating with healthcare teams, and providing patient-centered care.

As regard to correlation between total self-report emotional intelligence and clinical performance ,the current study there was a highly statistically significant positive correlation between total self-report emotional intelligence and total clinical performance, suggests a strong relationship between students' emotional intelligence levels and their clinical competencies. The significant positive correlation underscores the crucial role of emotional intelligence in shaping students' clinical abilities. Higher levels of emotional intelligence, encompassing skills such as self-awareness, empathy, and effective communication, likely contribute to enhanced clinical decision-making, patient interactions, and overall performance in healthcare settings. In the same line with **Ramadan et al. (2020)** who conducted a study in Egypt on "The Effect of Emotional Intelligence Program on Nursing Students' Clinical Performance during Community Health Nursing Practical Training and reported that there was a strong correlation between emotional intelligence and clinical performance  $p < 0.0001$ . On the other hand, **Alipour et al., (2024)** who reported that there was no significant correlation between students' performance and emotional intelligence in the study entitled "Investigating the relationship between emotional intelligence and self-esteem with educational performance in paramedical students" in Iran.

### Conclusion:

Based on the results of the present study, answering of research questions and achievement of aim it can be concluded that there was a highly statistical positive correlation between maternity nursing students' EI and their clinical performance in the labor unit. On the other hand there was not statistically significant between the studied students' demographic characteristic and their total clinical performance & emotional intelligence except age, there was a statistically significant

### Recommendation:

**Based on the results of this study, the following recommendations were proposed:**

- Implementing intervention programs to develop and enhance nursing students' EI abilities.



- Applying training courses and seminars about EI for the maternity nursing students to improve their own EI skills.
- Making counseling sessions about EI to help nursing students to verbalize their feelings about their clinical experiences.

#### Further Recommendations

- The study should be replicate on larger sample, different settings, and courses and apply different program with longer follow-up periods.
- Holding training courses and seminars about EI should be conducted for the nursing educators in order to develop and improve their own and students' EI skills.

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