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The relationship between emotional intelligence and empathy among nursing students at the college of nursing, Abha, King Khalid University

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Abstract

Objectives: To determine the relationship between emotional intelligence, and empathy of nursing students.

Methods: A convenience sample of 153 nursing students participated in this descriptive-correlational study. Who registered for the 2022-2023 academic year. This study was conducted at the King Khalid University, College of Nursing, ABHA, Kingdom of Saudi Arabia.

Data: The Schutte Self-Report Emotional Intelligence Test, the Jefferson Scale of Empathy, and demographic and educational factors were used to collect data. SPSS was used to examine the data.

Results: The majority of nursing students, according to the data, exhibited a moderate level of emotional intelligence and empathy (79.1% and 85.6%, respectively).

Conclusion and Recommendations: The study's findings indicate that among nursing students, emotional intelligence and empathy are positively correlated. Nursing Before a student is admitted, their emotional intelligence and empathy levels should be evaluated, and during their academic career, steps should be done to improve these qualities.

Keywords: Empathy, emotional intelligence, nursing students

Introduction

The significance of psychosocial abilities like empathy, communication, and emotional intelligence (EI) is being recognized by health professionals more and more. According to Sa *et al.* (2019) ^[23], there seems to be a complex link between empathy and resilience in which each affects the other. There is mounting evidence that health professionals require a broad range of intrapersonal and interpersonal abilities to provide clinically sound and emotionally responsive care (Bertram *et al.*, 2017) ^[3]. Nursing graduates must possess "soft" people skills in addition to the technical and analytical abilities necessary for the profession. (Et *al.*, Thomas, 2021) ^[27].

Emotional intelligence is the ability to identify, understand, regulate, and express one's own feelings as well as be perceptive to the feelings of others, as well as the capability to respond and regulate them in a variety of situations. (Christianson, 2020) ^[6].

Schmidt and Hunter (2017) ^[24] Emotional intelligence (EI) is the ability to reason well, comprehend ideas, and solve problems. Two distinct notions make up emotional intelligence (EI): an emotion-related cognitive competence and behavioral proclivities and self-perceptions of one's ability to recognize and interpret emotions. Nursing students frequently find themselves in uncomfortable, sensitive social situations. The following factors may affect a nursing student's capacity for critical thought, efficient study techniques, making well-informed decisions, and empathy for patients and their families: can all be impacted by their emotional intelligence (EI). (Petrucci *et al.*, 2016) ^[21].

In order to effectively communicate with patients, healthcare personnel are said to require empathy. According to Decety (2018) ^[7], empathy is the inborn capacity to recognize, feel, and relate to the emotions of others. It is a sign of one's capacity for understanding and empathy with other people's emotions.

Empathetic nurses recognize patients' emotional responses, foster greater harmony and cooperation within the healthcare team, and raise patient satisfaction in addition to helping patients achieve better outcomes (such as improved physical and mental health and stress relief) (Zeighami *et al.*, 2020) ^[28]. Additionally, compassionate nursing techniques can lessen anxiety, dissatisfaction, and medical errors by promoting patients to adhere to treatment

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recommendations and enhancing their hospital stays (Moudatsou *et al.*, 2020)^[18].

Significance of the study

The relationship between emotional intelligence and empathy in healthcare professionals, including nurses and nursing students, has been the subject of numerous international studies; however, Saudi Arabian research has not examined these traits in nursing students (Hajibabae *et al.*, 2018; Kumar, 2018; Bertram *et al.*, 2017)^[8, 14, 3]. This study set out to determine whether emotional intelligence and empathy in nursing students are positively correlated, since improving patient care ultimately requires identifying factors that can enhance effective communication and empathetic abilities in these future nurses.

Theoretical Framework

The theoretical basis for this study was the four-branch model of emotional intelligence (EI) developed by Mayer and Salovey (1997)^[16], which evaluated the EI and empathy of senior nursing students.

Aim of the study

The aim of this study was to determine the relationship between emotional intelligence, and empathy of nursing students.

Research questions

1. What emotional intelligence levels exist among nursing students?
2. What is the empathy level of nursing students?
3. Is there a connection between nursing students' emotional intelligence and empathy?

Subjects and methods

Research design

The study employed a descriptive correlational strategy.

Setting

This study was conducted at the King Khalid University College of Nursing, ABHA, Kingdom of Saudi Arabia.

Subjects

153 nursing students enrolling in King Khalid University's bachelor's degree program at the five, seven, and eight levels during the academic year 2022/2023 were included in a convenience sample. (86, 29, and 38 students, respectively). The bulk of the students were female nursing students, living in cities, and between the ages of 21 and 22.

Tools of data collection

1. **Demographic and educational variables:** was created by the researchers to gather information on the age, gender, and place of residence of the nursing students.
2. **Jefferson Scale of Empathy:** It has 45 components and was created by Hojat *et al.* (2001)^[11] at the Jefferson

Medical School. Hojat and colleagues' 2009 original scale served as the basis for its design, which was then pared down to 20 pieces. Stronger scores indicate stronger empathy. The responses to each topic are assessed on a Likert scale that runs from strongly agree (7) to strongly disagree (1). The scores range from 20 to 140. The tool comprises 10 questions (1-6-3-6-7-8-11-12-14-18-19) that are graded in reverse order and are divided into three components: perspective-taking, compassionate care, and putting oneself in the patient's shoes. Its validity and reliability are also good. Cronbach's alpha for nursing students was 0.77. The Cronbach's alpha for the current investigation was 0.84.

3. **Schutte Self-Report Emotional Intelligence Test:** It was developed by Schutte *et al.* (1998)^[25] following review, the number of items in the initial version was reduced from 33 to 41 due to the potential for bias and the lack of inverted questions. There are twenty-one items in the questionnaire, all on five-point Likert scales ranging from strongly disagree (1) to strongly agree (5). The scores for the items are inverse. Three domains make up the measure: emotion usage, emotion management, and emotion evaluations. It has a score range of 41 to 205. It also has strong validity and reliability. For nursing students, the Cronbach's alpha was 0.86. For the current study, the Cronbach's alpha was 0.88.

Procedure

Nursing students were chosen for their training from both hospital clinical settings and schools. The researchers introduced themselves and explained the goal of the study to the nursing students. Subsequently, they made contact with enthusiastic students and asked for their voluntary participation, obtaining their informed agreement. Next, participants were given surveys to complete; they had thirty to thirty-five minutes to do so before giving the forms back to the researchers.

Pilot study

Ten percent of the fifteen nursing students participated in a pilot study to evaluate the questions' clarity and find out how long it took to complete the data collection forms. The students were part of the primary research sample since no changes were made.

Administrative and ethical considerations

After presenting the study's objectives to the dean of King Khalid University's nursing college and the ethics committee (approved No.: ECM#20215610), permission was given to carry out the research. A written explanation outlining the purpose and design of the research has been given to each nursing student taking part in the project. They were informed that they might withdraw from the study at any time and offered the option to accept or reject participation.

Results

Table 1: Comparing mean scores of empathy and emotional intelligence in terms of academic levels (n=153)

Academic levels	Empathy Mean (SD)	Emotional intelligence Mean (SD)
5 th	101.11 (9.57)	131.44 (12.38)
7 th	106.51 (12.4)	146.83 (17.12)
8 th	110.13 (12.40)	151.12 (15.60)
ANOVA test	F (4, 216) = 10.531 p < .001	F (3, 215) = 1.453 p = .188

The seventh academic level individuals had the greatest ratings for emotional intelligence and empathy (Mean = 110.13, 151.12; SD = 12.40 & 15.60, respectively). The five academic level group had lower scores for emotional

intelligence and empathy (Mean=131.44, 101.11; SD=12.38 & 9.57). Take a look at Table 1. A statistically significant difference was observed between the participants' emotional intelligence scores, but not between their study level and

empathy scores.

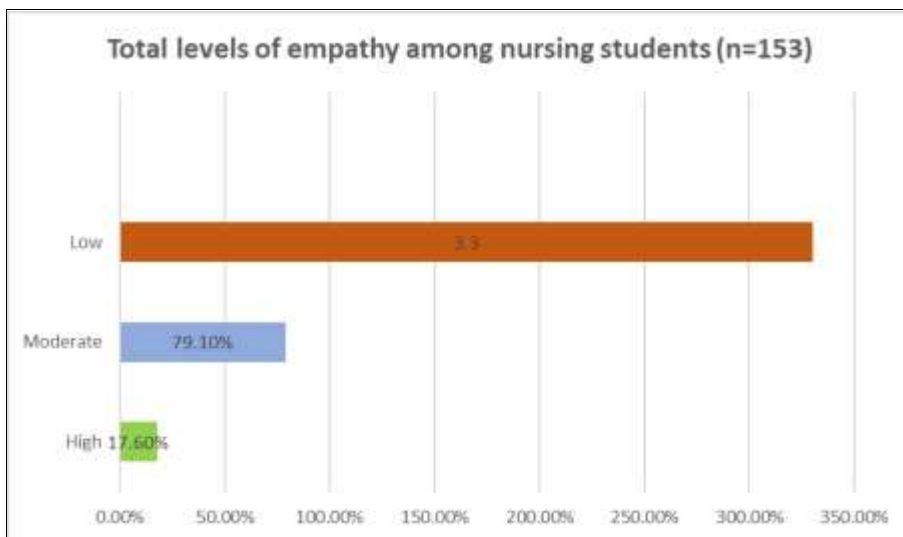


Fig 1: Total levels of empathy among nursing students (n=153)

According to Figure 1, 79.1% of nursing students had a moderate degree of empathy, whereas just 3.3% of students had a low level.

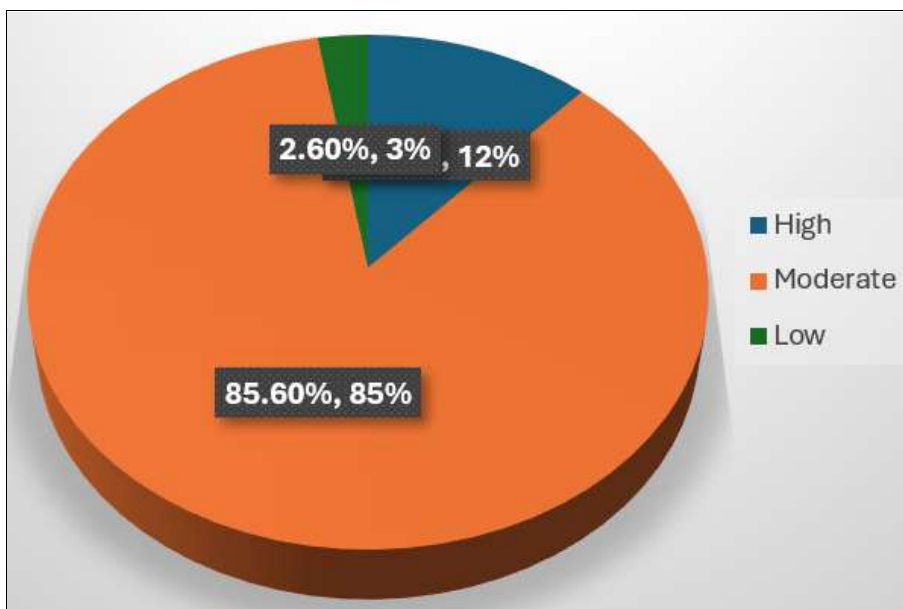


Fig 2: Total levels of emotional intelligence among nursing students (n=153)

According to the data presented in Figure 2, 2.6% of nursing students had low emotional intelligence, whereas 85.6% of students had intermediate emotional intelligence.

Table 2: Correlation between empathy and emotional intelligence score among the nursing students (n= 153)

Variables		Empathy
Emotional intelligence	R	0.499
	P	$p < .001$

According to Table (2), emotional intelligence and empathy had a positive association ($r=0.499$ & $p < .001$).

Discussion

Emotional intelligence, empathy, and other fundamental concepts in nursing help organize interpersonal and communication skills. Additionally, they form the cornerstone for the establishment of positive relationships between nurses and patients, the creation of therapeutic alliances, efficient patient and family communication, and the ability to identify

affective messages and emotions in others. Because of this, these ideas are now crucial while looking for excellent, compassionate, and humane nursing care (Abe *et al.*, 2018) [1]. The results of the current study showed that when nursing students' academic status in college increased, so did their empathy scores. Empathy was impacted by previous healthcare work experience prior to enrollment in an undergraduate nursing program.

Students with similar work experience showed higher levels of empathy, in comparison. Students at the eighth academic level showed the biggest difference, suggesting that the undergraduate nursing program can reduce inequality by helping students with work experience develop a stronger sense of empathy compared to those without. Stated differently, pupils who interact with patients more often grow more empathetic. It may be related to the growing independence of students and their continued interaction with patients in clinical settings. This outcome is in line with.

The majority of nursing students had a moderate level of emotional intelligence, according to the investigation's

findings.

This could be due to a variety of social and cultural issues, which have the potential to lower children's motivation levels in the classroom and impact their emotional intelligence. As a result, more has to be done to encourage and assist pupils in developing their emotional intelligence skills. These results contradict those of studies by Monish *et al.* (2023) ^[17], Castelino and Mendonca (2023) ^[5], and Almansour (2023) ^[2], which discovered that the majority of nursing students possessed high emotional intelligence. The usage of several EI assessment instruments is one reason why the results could differ.

The eighth academic level had the greatest emotional intelligence score, according to a comparison of the emotional intelligence scores of nursing students at a nursing college in the fifth and seventh academic levels.

Based on the outcomes, it's probable that emotional intelligence can be improved. Throughout their years of school, students may also develop and evolve. This conclusion is supported by research by Herr *et al.* (2018) ^[10] and Budler *et al.* (2022) ^[4], which show that third-year nursing students have stronger emotional intelligence than first-year students.

The purpose of this study was to determine how emotional intelligence and empathy relate to nursing students. The findings demonstrate a favorable correlation between emotional intelligence and empathy, with emotional intelligence scores increasing in lockstep with empathy. These results suggest that those with higher emotional intelligence have greater empathy and emotional regulation abilities in addition to having a better understanding of interpersonal cues.

Developing emotional intelligence is a useful tactic for promoting nurses' emotional development and the formation of empathic connections. Emotional intelligence is related to human emotions and how they function. These results are in line with Oh *et al.* (2016) ^[19], Bertram *et al.* (2017) ^[3], and Silva & Júnior (2019) ^[26].

Conclusion

The majority of nursing students showed only middling levels of empathy and emotional intelligence. The emotional intelligence and empathy of nursing students were found to be positively correlated.

Recommendation

Nursing before being admitted, applicants should have their emotional intelligence and empathy evaluated. During their academic careers, students should also take the initiative to continue developing these abilities. Effective strategies for teaching emotional intelligence include modeling, soft skill training programs, supportive supervision, and mentoring. Creating workshops that bolster interpersonal skills, incorporating empathy-focused training courses into the nursing curriculum, and utilizing cutting-edge techniques like role-playing, simulation, storytelling, reflective discussion, and direct patient listening are all ways to improve empathy.

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References

1. Abe K, Niwa M, Fujisaki K, Suzuki Y. Associations between emotional intelligence, empathy and personality in Japanese medical students. *BMC Med Educ.* 2018;18:47.

2. Almansour AM. The level of emotional intelligence among Saudi nursing students: A cross-sectional study. *Belitung Nursing Journal.* 2023;9(5):471.
3. Bertram K, Randazzo J, Alabi N, Levenson J, Doucette JT, Barbosa P, *et al.* Strong correlations between empathy, emotional intelligence, and personality traits among podiatric medical students: A cross-sectional study. *Educ Health (Abingdon).* 2017;29:186-194.
4. Budler LC, Gosak L, Vrbnjak D, Pajnkihar M, Štiglic G. Emotional Intelligence among Nursing Students: Findings from a Longitudinal Study. *Healthcare.* 2022, 10(10).
5. Castelino PS, Mendonca TL. The Relationship between Emotional Intelligence, Self-Esteem, and Empathy among Nursing Students - A Pilot Study (Part 1). *Journal of Health and Allied Sciences.* 2023;22(2):1-5.
6. Christianson KL. Emotional intelligence and critical thinking in nursing students: integrative review of literature. *Nurse Educ.* 2020;45(6):E62-e65.
7. Decety J. The neural pathways, development and functions of empathy. *Curr. Opin. Behav. Sci.* 2018;3:1-6.
8. Hajibabae F, Farahani MA, Ameri Z, Salehi T, Hosseini F. The relationship between empathy and emotional intelligence among Iranian nursing students. *Int. J Med. Educ.* 2018;9:239-243.
9. Håkansson Eklund J, Holmström IK, Ollén Lindqvist A, Sundler AJ, Hochwälder J, Marmstål Hammar L, *et al.* Empathy levels among nursing students: A comparative cross-sectional study. *Nursing Open.* 2019;6(3):983-989.
10. Herr N, Butcher B, Weber T. Emotional Intelligence, Pain Knowledge, and Pain Attitudes of Nursing Students. *Pain Manag. Nurs.* 2018;17:159-168.
11. Hojat M, Mangione S, Nasca TJ, Cohen MJM, Gonnella JS, Erdmann JB, *et al.* The Jefferson scale of physician empathy: Development and preliminary psychometric data. *Educ. Psychol. Meas.* 2001;61:349-365.
12. Hojat M, Vergare MJ, Maxwell K, Brainard G, Herrine SK, Isenberg GA, *et al.* The devil is in the third year: A longitudinal study of erosion of empathy in medical school. *Acad. Med.* 2009;84(9):1182-1191.
13. Kesbaki MS, Rohani C. Changes in the level of nursing students' empathy during four years education. *J Med. Edu.* 2020;19(2):1-5.
14. Kumar K. Relationship between emotional intelligence and empathy among student nurses. *Int. J Sci. Res.* 2018;7(07):910-913.
15. Matta-Solis HH, Perez-Siguas RE, Matta-Solis EP. Empathy in nursing students who initiate pre-professional practices in a private university of Lima. In: *EDULEARN20 Proceedings. IATED; c2020.* p. 8642-8647.
16. Mayer JD, Salovey P. What is emotional intelligence? In: Salovey P, Sluyter D, editors. *Emotional development and emotional intelligence: Education implications.* New York, NY: Basic Books; c1997. p. 3-31.
17. Monish V, Lahari P, Christopher P, Bhuvanaree R, Nagarani R, Nandini R, *et al.* Emotional Intelligence among Bsc Nursing Students. *JETIR.* 2023;10(6):613-678.
18. Moudatsou M, Stavropoulou A, Philalithis A, Koukouli S. The Role of Empathy in Health and Social Care Professionals. *Healthcare (Basel, Switzerland).* 2020;8(1):26.
19. Oh EJ, Lee MH, Ko SH. Influence of emotional intelligence and empathy on the facilitative communication ability of psychiatric nurses. *J Korean Acad. Psychiatr. Ment. Health Nurs.* 2016;25(4):283-293.
20. Paola F, Sergio R, Loris B, Serena S, Nunzio P, Rosaria

- DL, *et al.* Evaluation of empathy among undergraduate nursing students: A three-year longitudinal study. *Acta Bio Med.* 2020;90(98):8874.
21. Petrucci C, La Cerra C, Aloisio F, Montanari P, Lancia L. Empathy in health professional students: A comparative cross-sectional study. *Nurse Educ. Today.* 2016;41:1-16.
 22. Petrucci C, Gaxhja E, La Cerra C, Caponnetto V, Masotta V, Dante A, *et al.* Empathy Levels in Albanian Health Professional Students: An Explorative Analysis Using the Jefferson Scale of Empathy. *SAGE Open*; c2021. p. 1-10.
 23. Sa B, Ojeh N, Majumder MAA. The relationship between self-esteem, emotional intelligence, and empathy among students from six health professional programmes. *Teach Learn Med.* 2019;31(5):536-543.
 24. Schmidt FL, Hunter JE. Select on Intelligence. In: *The Blackwell Handbook of Principles of Organizational Behaviour.* Wiley; c2017. p. 1-14.
 25. Schutte NS, Malouff JM, Hall LE, Haggerty DJ, Cooper JT, Colden CJ, *et al.* Development and validation of a measure of emotional intelligence. *Pers. Individ. Dif.* 1998;25:167-177.
 26. Silva JT, Júnior AT. Association between emotional intelligence and empathy among medical students: A single center cross-sectional study, Brazil. *Rev. Bras Educ. Med.* 2019;45(1):1-9.
 27. Thomas DS, Natarajan J, Valsaraj BP. Emotional intelligence and its associated factors among nursing students in a middle eastern university. *Int. J Nurs. Educ.* 2021;13(01):61-67.
 28. Zeighami R, Rafiie F, Parvizi S. Concept Analysis of Empathy in Nursing. *J Qual. Res. Health Sci.* 2020;1(1):27-33.