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Assessing and comparing the emotional intelligence in generalist and psychiatric nurses

Amira Alshowkan (aaalshowkan@iau.edu.sa)
Imam Abdulrahman Bin Faisal University
Neama Kamel
Imam Abdulrahman Bin Faisal University
Rayanah Alghamdi

Imam Abdulrahman Bin Faisal University

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Abstract

Aim:

Emotional intelligence (EI) is linked to individual well-being and has a positive effect on patient care. This study was aimed at assessing and comparing the EI levels demonstrated by students at one university in Saudi Arabia who studied had psychiatric and mental health nursing and those who had studied nursing fundamental of nursing courses but had not yet taken psychiatric nursing courses.

Design:

A descriptive and comparative study design

Methods:

Data were collected from all second- and third-year nursing students using the Schutte Self-Report Emotional Intelligence Test (SSEIT).

Results:

Finding indicate that students who had studied only nursing fundamentals demonstrated lower EI than those who were completing psychiatric and mental health nursing courses. Moreover, increased EI was related to the education level of the participant's father and being the eldest child in the family

Background

Emotional intelligence (EI) is a significant and desirable trait among nursing health care providers because it contributes to the initiation of appropriate interpersonal relationships (Landa & López-Zafra, 2010; Farshi, Vahidi & Jabraeili, 2015). It is also useful when managing many emotions arising from the care process, such as stress, burnout, and grief (Cherry et al., 2014; El-sayed, El-Zeiny & Adeyemo, 2014). El is defined differently depending on the model. For example, it might refer to personality traits or emotional aptitude (Roberts et al., 2010). El appears to enable people to respond appropriately to the many changes they must face in their daily lives, making it easier to maintain an optimistic state of mind and reducing abnormal emotional responses to adverse events (Zeidner, Matthews & Shemesh, 2015). Emotions and thinking styles might affect an individual's learning style (Kunkel, Kopp & Hanson, 2016) and coping methods (Suliman, 2010).

Numerous studies have examined the relationship between EI and coping patterns among students enrolled at Health College (Farshi, Vahidi & Jabraeili, 2015; Suliman, 2010; Beauvais et al., 2014; Saklofske et al., 2012). In these studies, students with greater EI and more effective coping patterns exhibited improved academic performance and better adaptive learning patterns (Nosek, 2015; Fernandez, Salamonson, & Griffiths, 2012). In addition, it is very important for individuals to be able to control their own emotions if they also aim to control others' emotions. Furthermore, individuals who have mastered their own emotions can cope with stress more effectively and adjust to working environments easily (Nelson, 2011).

Given the characteristics of the education curriculum for nursing students, who must face critical life situations such as death or pain during clinical training, such students experience significant levels of stress (Edo-Gual, Tomás-Sábado, & Aradilla-Herrero, 2011; Reeve et al., 2013; Grobecker, 2016)[.] El is directly related to social relationships, which, in turn, affect private emotional control and how people face stressful situations (Codier & Odell, 2014; Al-Hamdan, et al., 2021). Relationships between El and learning methods seem to indicate that some teaching styles, such as encouraging reflective thinking and requiring clinical assignments, help develop components of El such as motivation and interpersonal relationships (Dacre Pool, & Qualter, 2012 & Por et al., 2011).

Studying the effects of course type on El levels will provide insight into the effects of psychiatric and general courses on students' ability to identify and control their emotions, manage others' emotions, and utilize emotions. Identifying El levels among general and psychiatric nurses will reveal challenges that nursing students face and help scholars provide recommendations about nursing curricula aimed at producing nursing graduates who can deliver high-quality patient care.

Because nurses care for, support, and enhance the health of diverse patients (American Nurses Association, 2010), they must cultivate practical skills and emotional intelligence (Freshwater & Stickley, 2004). A lack of emotional intelligence in nurses harms their personal well-being and can have negative health consequences for their patients (Codier, Muneno, & Freitas, 2011). Psychiatric and mental health nurses' ability to use appropriate emotional skills with patients who have been diagnosed with mental illness is very important when providing high quality of care (Cleary et al., 2011). To precisely evaluate and deliver appropriate interventions in relation to patients' biopsychosocial dimensions, psychiatric and mental health nurses should not compromise their professional nursing practice skills and emotional capabilities (Boyd, 2012). In addition, the nurse–patient therapeutic relationship is the most important element of achieving desirable patient outcomes (Norcross, & Wampold, 2011). Psychiatric and mental health nurses face many challenges because they work with patients diagnosed with depression and psychosis, which may leads such nurses to experience emotional stress and burnout (Codier, 2010).

Therefore, it is important for nurses to possess qualities such as personal authenticity, self-awareness, self-management, integrity, effective relationships, wellbeing and trust to promote patient's biopsychosocial dimensions (Karimi et al., 2021; Spano-Szekely et al., 2016). In addition there is a strong relationship between psychiatric and mental health nurses' leadership skills and EI (Spano-Szekely et al., 2016). Therefore, we assumed that certain courses such as those specializing in psychiatric and mental health nursing help develop such skills, as these courses include aspects related to understanding the self and the other and learning how to communicate and manage relationships effectively.

Thus, this study was aimed at assessing and comparing the El levels of nursing students enrolled in general and psychiatric courses in Saudi Arabia.

Study questions

What are the EI levels of third-year psychiatric and mental health nursing students and second-year nursing students enrolled in general courses?

What factors can affect EI levels among nursing students?

Methods

Study design: This study employed a descriptive and comparative study design.

Setting: The study was conducted in the College of Nursing, Saudi Arabia.

Sampling: A nonprobability convenient sample was chosen; data were collected from second-year (115 students) and third-year (129 students) undergraduate students who were willing to participate in the study.

Study collection tools

Tool I: Sociodemographic questionnaire

The researchers developed this tool after a thorough review of literature. It collected personal data such as information about gender, age, birth order, marital status, and father's education level.

Tool II: Schutte Self-Report Emotional Intelligence (SSEIT)

This well-established, broadly used questionnaire was developed in 1998 by Schutte et al. (Schutte et al. 1998) to assess El levels. It comprises 33 items divided into four categories: perception of emotions, managing one's own emotions, managing others' emotions, and utilization of emotion. Respondents answer each item using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The total score is calculated and categorized as follows: a score of 33 to 77 indicates low El, a score of 78 to 121 indicates moderate El, and a score of 122 to 165 indicates high El. The SSEIT's validity was verified, and it revealed a correspondence among the cross-sample factors. Furthermore, Cronbach's alpha was 0.87. Permission to use the SSEIT was obtained from the authors.

Data collection process

The researchers obtained the ethical approval to collect data from Institutional Review Board after approval the dean of the Nursing College.

The second- and third-year students were approached at the end of the term during their usual class times, and the study's objective, the research methodology, and the intended use of the results were described to them.

Ethical Consideration: Ethical authorization to perform this study was obtained from the Institutional Review Board (IRB) of university. The second- and third-year nursing students were approached through their course coordinator. Each student was received a research package and that included questionnaires and information sheets. The informed consent was obtained from all students The study's aim, procedure, and significance were explained orally and reinforced via written consent forms. All students were aware that their participation was voluntary and that no identifying individual data would be collected. Furthermore, students' participation would not affect their college enrollment status, grades, or any university services they obtained.

Data Analysis

Data analysis: Data was analyzed using the Statistical Package for Social Science (SPSS) software version 26. Descriptive analyses were performed to provide general view of the study sample. As for the level of EI and the differences between second- and third-year nursing students' EI levels, a T-test and one-way ANOVA were utilized.

Results

Table 1 presents the undergraduate nursing students' sociodemographic characteristics. More than two thirds (68.9%) of the study's participants were female, and nearly half of participants had fathers who had either university or secondary education (43.4% and 42.2%, respectively). As the table shows, the mean of age was 20.63 years. Nearly half of the studied subjects (48.4%) were born first born. Almost all studied subjects (93%) were.

Table 2 presents the academic characteristics of the undergraduate nursing students. Among the participants, 52.9% had completed the psychiatric and mental health nursing course, and 47.1% had completed the fundamentals of nursing course. As for the clinical performance achievement, 54.9% had excellent performance, nearly one third of (33.6%) had very good performance, and 11.5% had good performance.

Table 3A, B presents information about El levels. Among the participants, 88.5% had high and moderate El levels, and only 11.5% had low El levels. The mean score for the ability to manage one's own emotions is 36.99, whereas this score was 31.95 for managing others' emotions, 30 for perceptions of emotions, and 23.85 for utilization of emotions.

Table 4 show that there was no significant difference in scores for females (M = 1.55, SD = 0.65) and males (M = 1.84, SD = 0.69); t (242) = 3.13, p = 0.382. These results indicate that there was no difference in the reported EI level between female and male nursing students. An independent-samples t-test was conducted to analyze total EI score by gender.

However, there was a significant difference in the scores for single (M = 1.67, SD = 0.68), and married (M = 1.24, SD = 0.44), t (242) = 2.6, p = 0.01 students. Specifically, married students reported higher EI levels

than single students did.

An independent-samples t-test was conducted to compare the total EI scores of nursing students who had completed the fundamentals of nursing course and those who had completed the psychiatric and mental health nursing course. There was a significance difference in EI scores for the fundamentals of nursing students (M = 1.97, SD = 0.59), and psychiatric and mental health nursing students (M = 1.36, SD = 0.62), t (242) = 7.81, p = 0.006. These results indicate that fundamentals of nursing students have lower EI levels compared psychiatric and mental health nursing students.

Table 5 represent a one-way between-subjects ANOVA was performed to compare EI levels in relation to birth order (i.e., first, middle, last). There was a significant difference in EI levels at the $p \le 0.05$ level for birth order [F (2,241) = 614.99, P = .00]. Post hoc comparison using the Tukey HSD test indicated that the mean scores for first-born children (M = 1.08, SD = .28) were significantly different those for middle (M = 1.93, SD = .263) and last-born children (M = 2.9, SD = .301). Taken together, these results indicate that first-born nursing students have the highest EI levels.

There was a significant effect of father's education level on students' EI levels at the $p \le 0.05$ level for the four education level categories [F (3,240) = 72.52, P = .00]. Post hoc comparison using the Tukey HSD test indicated that the mean scores for postgraduate education (M = 1.00, SD = .00) were significantly different from university (M = 1.37, SD = .485), secondary (M = 1.65, SD = .555), and basic education (M = 2.89, SD = .320). These results indicate that a student's EI level will be higher if their father's education level is higher.

A one-way between-subjects ANOVA was conducted to compare EI levels in relation to the students' clinical performance. There was a significant difference in EI levels at the $p \le 0.05$ level for the clinical performance [F (2,241) = 707.02, P = .00]. Post hoc comparison using the Tukey HSD test indicated that the mean scores for excellent grades (100 – 90) (M = 1.14, SD = .35) differed significantly from those for very good grades (89 – 80) (M = 2, SD = .00). However, good grades (79 – 70) (M = 3, SD = .00) did not differ significantly from very good grades.

Discussion

Emotions are central to nursing practice, and El is a valuable skill that can affect the quality of nurses' work, including clinical decision-making, critical thinking, nursing care plan implementation, communication, and knowledge use in practice. Teaching staff in nursing schools should know that nursing students have different levels of emotional maturity, which can help them overcome the considerable stress levels present in this profession. Identifying El levels in general and psychiatric nurses can help to track the challenges nursing students face, lead to the development of nursing curriculum recommendations, and produce nursing school graduates who can deliver high-quality patient care (Rostambeygi, & Barkhordari, 2013).

As for EI levels, the majority of the subjects in this study had high or moderate EI levels. The mean score for managing one's own emotions was 36.99, whereas it was 31.95 for managing others' emotions, 30 for perceptions of emotions, and 23.85 for utilization of emotions. These results indicate that nursing students have good emotional awareness levels. This result is supported by Helenpuii and Barman (2018), who described EI levels among undergraduate nursing students. Of the 150 students who participated in this study, nearly half (50.7%) had high EI levels. However, there is still a need to improve EI for the remaining half of the nursing students. To develop students' EI, nurse educators should include EI in their institutions' nursing curriculum. Psychiatric and mental health nursing education programs already teach and emphasize these necessary elements, which might have affected their students EI levels. For instance, they teach the importance of self-awareness and how to empathize with others, both of which influence students' EI.

The present study revealed no difference in the reported El levels between female and male nursing students. This result is supported by Sanchez-Ruiz et al., (2010) who observed that sex does not create a significant difference, and women have a higher level of emotional intelligence only in the social sciences. This was also reported by Moawed, Gemeay, and Elsayes (2017). However, several other studies reported contradictory results (Halıçınarlı, Bender, 2013; Austin et al., 2007; Harrod, & Scheer, 2005). The lack of difference in the present study might be due to the fact that male and female students completed the mental health course, which addressed feelings and how to be aware of them.

The study's findings indicate that students with high EI levels tended to have fathers with high education levels. This result is consistent with finding of Akbar et al., (2011) who found that students with literate parents scored higher than students with illiterate parents did. This finding is similar to some extent to the findings Farooq1 et al., (2011) who indicated that father's education level had a significant effect on students' overall academic achievement. This might occur because fathers with high education levels are well informed about the role of parents in their children's emotional development. They know the importance of spending time with their children, which directly and indirectly influences the children's EI. Similarly, Harrod and Scheer (2005) found that EI level is positively related to parents' education (Lankashini et al., 2017)

Moawed, Gemeay, and Elsayes (2017) found that parents' education levels are associated with their children's El. There was statistically significant positive relationship between total El, mother's education, and family income (p = 0.008, p = 0.004, and p = 0.034, respectively) for Tanta students. For Riyadh students, there was a statistically significant positive relationship between total El and father's education. This might have occurred because of Riyadh is more modern than Tanta, and the two cities have various cultural differences.

The present study also revealed that first-born children have higher El scores than do middle and last-born children. This finding is supported by Helenpuii and Barman (2018), but it contradicts those of Venkteshwar and Warrier (2017), who assessed the effects of birth order on students' El and found no significant differences between birth order and El (Venkteshwar, & Warrier, 2017). This might have

occurred because a first-born child might receive a great deal care from their parents, who may be at the beginning of their marital lives, have minimal responsibilities, and have more time to spend with their child, all of which directly and indirectly influence children's El.

This study's overall findings indicate that students who completed the psychiatric and mental health nursing course demonstrated higher EI than those who completed the fundamentals of nursing course. High clinical performance was related to higher El, and there was statistically significant positive relationship between total El and academic performance. Thus, as academic performance increases, El also increases. This result is in line with those of Moawed, Gemeay, and Elsayes (2017), who compared El among nursing students in Riyadh, Saudi Arabia, and Tanta, Egypt, and found that El and clinical performance are related. In addition, this study's findings are supported by those of Chamundesari (2013), who found that El and academic achievement among students at the higher secondary level are positively correlated with each other and significant at the 0.01 level.

Limitations:

This study's sample was limited to only one nursing college at Saudi Arabia, so it is difficult to generalize the results.

Relevance for clinical practice

It is important to pay attention and be aware of the factors that affect improving the level of emotional intelligence among university students by including this in the curricula and the various educational experiences, directly and indirectly.

Work to improve societal awareness regarding the emotional intelligence and what it is? What are its components and how to improve it for children and the role of the father and mother together in this?

To examine the effectiveness of training programs on EI levels among nursing and health care personnel in general, an evaluation study can be conducted.

RECOMMENDATION

El training should be implemented for nursing and health care providers. In addition, the concept of El should be incorporated into the basic nursing curriculum to promote the development of the necessary El abilities to work with patients in various clinical settings. Finally, El training should be implemented for parents and their children in school.

Conclusion

Students who completed fundamentals of nursing course had a lower El levels compared to students who completed a psychiatric and mental health nursing course. Moreover, increased El was related to higher paternal education levels and being a first-born child. There is a need to improve El among health care provider as to meet the increasing expectations of clients in today's competitive health care industry.

This study is a preliminary attempt to assess El levels among nursing students. Further studies are necessary to assess the correlation of El and various other influential factors, such as the presence of alexithymia and the lack of mental health hygiene practices. An evaluative study can be performed to assess the effectiveness of training programs on El levels among nursing and health care providers in general.

Declarations

(a) Ethics Approval and Consent to Participate:

-Ethical approval to perform this study was obtained from the Institutional Review Board (IRB) at the Imam Abdulrahman Bin Faisal University.

-The informed consent was obtained from all students and all the study participants.

-The study was carried out in accordance with the relevant guidelines and regulations.

(b) Consent for Publication:

Not applicable

(c) Availability of data and materials:

The data that support the findings of this study are available from the corresponding author (E-mail: aaalshowkan@iau.edu.sa) upon reasonable request.

(d) Competing interests: None.

(e) Funding: None.

(f) Acknowledgment: None

(g) Author's Contribution: A.A prepared conceptualization, methodology, and formal analysis. A.A and N.K. wrote the main manuscript text and R.A. prepared tables and references. All authors reviewed the manuscript.

References

- Akbar, M., Shah, A.A., Khan, E.A., Akhter, M. (2011). Relationship between emotional intelligence and academic achievement among higher secondary school students. *Pakistan Journal of Psychology*, 42(2), 43-56.
- Al-Hamdan, Z., Alyahia, M., Al-Maaitah, R., Alhamdan, M., Faouri, I., Al-Smadi, A., & Bawadi, H. (2021). The relationship between emotional intelligence and nurse-nurse collaboration. *Journal of Nursing Scholarship*, *53*(5), 615-622. https://doi.org/10.1111/jnu.12687

- 3. American Nurses Association. (2010). *Scope and standards of practice* (2nd ed.). Silver Spring, Maryland.
- Austin, E., Evans, P., Magnus, B., & O'Hanlon, K. (2007). A preliminary study of empathy, emotional intelligence and examination performance in MBChB students. *Medical Education*, 41(7), 684-689. https://doi.org/10.1111/j.1365-2923.2007.02795.x
- Beauvais, A., Stewart, J., DeNisco, S., & Beauvais, J. (2014). Factors related to academic success among nursing students: A descriptive correlational research study. *Nurse Education Today*, *34*(6), 918-923.<u>https://doi.org/10.1016/j.nedt.2013.12.005</u>
- 6. Boyd, M. (2012). *Psychiatric nursing contemporary practice*. Wolters Kluwer / Lippincott Williams & Wilkins.
- Dacre Pool, L., & Qualter, P. (2012). Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning And Individual Differences*, *22*(3), 306-312. https://doi.org/10.1016/j.lindif.2012.01.010
- Chamundeswari, D. (2013). Emotional Intelligence and Academic Achievement among Students at the Higher Secondary Level. *International Journal Of Academic Research In Economics And Management Sciences*, 2(4). https://doi.org/10.6007/ijarems/v2-i4/126
- 9. Cleary, M., Horsfall, J., Deacon, M., & Jackson, D. (2011). Leadership and Mental Health Nursing. *Issues In Mental Health Nursing*, *32*(10), 632-639. https://doi.org/10.3109/01612840.2011.584362
- 10. Codier, E. (2010). Research in brief. Journal of Psychiatric and Mental Health Nursing, 17, 940-948.
- Codier, E., & Odell, E. (2014). Measured emotional intelligence ability and grade point average in nursing students. *Nurse Education Today*, *34*(4), 608-612. https://doi.org/10.1016/j.nedt.2013.06.007
- Codier, E., Muneno, L., & Freitas, E. (2011). Emotional Intelligence Abilities in Oncology and Palliative Care. *Journal of Hospice & Palliative Nursing*, *13*(3), 183-188. https://doi.org/10.1097/njh.0b013e31820ce14b
- 13. Cherry, M., Fletcher, I., O'Sullivan, H., & Dornan, T. (2014). Emotional intelligence in medical education: a critical review. *Medical Education, 48*(5), 468-478. https://doi.org/10.1111/medu.12406
- 14. Edo-Gual, M., Tomás-Sábado, J., & Aradilla-Herrero, A. (2011). Fear of death among nursing students. *Enferm. Clin., 21*(3), 129-135. https://doi.org/10.1016/j.enfcli.2011.01.007
- 15. El-sayed, S., El -Zeiny, H., & Adeyemo, D. (2014). Relationship between occupational stress, emotional intelligence, and self-efficacy among faculty members in faculty of nursing Zagazig University, Egypt. *Journal Of Nursing Education And Practice*, 4(4). https://doi.org/10.5430/jnep.v4n4p183
- 16. Farshi, M., Vahidi, M., & Jabraeili, M. (2015). Relationship between Emotional Intelligence and Clinical Competencies of Nursing Students in Tabriz Nursing and Midwifery School. *Research and Development in Medical Education*, 4(1), 91-95. https://doi.org/10.15171/rdme.2015.015
- Fernandez, R., Salamonson, Y., & Griffiths, R. (2012). Emotional intelligence as a predictor of academic performance in first-year accelerated graduate entry nursing students. *Journal of Clinical Nursing*, *21*(23-24), 3485-3492. https://doi.org/10.1111/j.1365-2702.2012.04199.x

- 18. Freshwater, D., & Stickley, T. (2004). The heart of the art: emotional intelligence in nurse education. *Nursing Inquiry*, *11*(2), 91-98. https://doi.org/10.1111/j.1440-1800.2004.00198.x
- Grobecker, P. (2016). A sense of belonging and perceived stress among baccalaureate nursing students in clinical placements. *Nurse Education Today*, *36*, 178-183. https://doi.org/10.1016/j.nedt.2015.09.015
- 20. Karimi, L., Leggat, S.G., Bartram, T. et al. Emotional intelligence: predictor of employees' wellbeing, quality of patient care, and psychological empowerment. BMC Psychology 9, 93 (2021). https://doi.org/10.1186/s40359-021-00593-8
- Kunkel, C., Kopp, W., & Hanson, M. (2016). A Matter of Life and Death: End-of-Life Simulation to Develop Confidence in Nursing Students. *Nursing Education Perspectives*, *37*(5), 285-286. https://doi.org/10.1097/01.nep.000000000000029
- Helenpuii, Ms & Barman, H. (2018). Emotional Intelligence among Undergraduate Nursing Students. IOSR Journal Of Nursing And Health Science, 7, pp. 17-22. https://doi.org/10.9790/1959-0706111722
- 23. Halıçınarlı E., Bender M. T. (2006). Cited in Nazan Yelkikalan et al.(2013) Emotional Intelligence Characteristics Of Students Studying At Various Faculties And Colleges of Universities *European Scientific Journal*. April edition vol. 8, No.8. https://doi.org/10.19044/esj.2012.v8n8p%25p
- 24. Harrod, N., & Scheer, S. (2005). An exploration of adolescent emotional intelligence in relation to demographic characteristics, *40*(159), 503-12.
- 25. Farooq1 M.S., Chaudhry1 A.H., Shafiq1, G M. Berhanu. (2011). Factors affecting students' quality of academic performance: a case of secondar school level. *Journal of Quality and Technology Management, 7*(2), 01-14.
- 26. Landa, J., & López-Zafra, E. (2010). The Impact of Emotional Intelligence on Nursing: An Overview. *Psychology, 1*(1), 50-58. https://doi.org/10.4236/psych.2010.11008
- 27. Lankashini, M., Lakmali, V., Lenagala, S., Liyanage, A., & Arambepola, C. (2017). Level of emotional intelligence and its association with person-related characteristics among grade 8 students in a suburban setting. *Ceylon Journal Of Medical Science*, *54*(1), 27. https://doi.org/10.4038/cjms.v54i1.4805
- Moawed, S., Gemeay, E., & Elsayes, H. (2017). emotional intelligence among nursing students: a comparative study. *International Journal Of Novel Research In Healthcare And Nursing*, 4(1), 359-369.
- 29. Nelson, D., & Low, G. (2011). *Emotional intelligence*. Boston: Prentice Hall.
- 30. Norcross, J., & Wampold, B. (2011). Evidence-based therapy relationships: Research conclusions and clinical practices. *Psychotherapy*, *48*(1), 98-102. https://doi.org/10.1037/a0022161
- 31. Nosek, M. (2015). A cross sectional exploration of emotional intelligence in US baccalaureate nursing students. *Journal Of Nursing Education And Practice*, 5(11). https://doi.org/10.5430/jnep.v5n11p29

- Por, J., Barriball, L., Fitzpatrick, J., & Roberts, J. (2011). Emotional intelligence: Its relationship to stress, coping, well-being and professional performance in nursing students. *Nurse Education Today*, *31*(8), 855-860. https://doi.org/10.1016/j.nedt.2010.12.023
- Reeve, K., Shumaker, C., Yearwood, E., Crowell, N., & Riley, J. (2013). Perceived stress and social support in undergraduate nursing students' educational experiences. *Nurse Education Today*, *33*(4), 419-424. https://doi.org/10.1016/j.nedt.2012.11.009
- 34. Roberts, R., MacCann, C., Matthews, G., & Zeidner, M. (2010). Emotional Intelligence: Toward a Consensus of Models and Measures. *Social And Personality Psychology Compass*, 4(10), 821-840. https://doi.org/10.1111/j.1751-9004.2010.00277.x
- 35. Saklofske, D., Austin, E., Mastoras, S., Beaton, L., & Osborne, S. (2012). Relationships of personality, affect, emotional intelligence and coping with student stress and academic success: Different patterns of association for stress and success. *Learning And Individual Differences*, *22*(2), 251-257. https://doi.org/1016/j.lindif.2011.02.010
- 36. Sánchez-Ruiz, M., Pérez-González, J., & Petrides, K. (2010). Trait emotional intelligence profiles of students from different university faculties. *Australian Journal Of Psychology*, 62(1), 51-57. https://doi.org/10.1080/00049530903312907
- Spano-Szekely, L., Quinn Griffin, M., Clavelle, J., & Fitzpatrick, J. (2016). Emotional Intelligence and Transformational Leadership in Nurse Managers. *JONA: The Journal of Nursing Administration*, 46(2), 101-108. https://doi.org/10.1097/nna.000000000000303
- Schutte, N., Malouff, J., Hall, L., Haggerty, D., Cooper, J., Golden, C., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality And Individual Differences*, *25*(2), 167-177. https://doi.org/10.1016/s0191-8869(98)00001-4
- 39. Suliman, W. (2010). The Relationship Between Learning Styles, Emotional Social Intelligence, and Academic Success of Undergraduate Nursing Students. *Journal of Nursing Research*, *18*(2), 136-143. https://doi.org/10.1097/jnr.0b013e3181dda797
- 40. Rostambeygi, P., & Barkhordari, M. (2013). Emotional intelligence in nursing students. *Journal Of Advances In Medical Education & Professionalism*, *1*(2), 46-50.
- 41. Venkteshwar, A., &Warrier, U. (2017). The effect of birth order in the emotional intelligence of net generation students. *International Journal of Management, 8*(6), 69-75.
- Zeidner, M., Matthews, G., & Shemesh, D. (2015). Cognitive-Social Sources of Wellbeing: Differentiating the Roles of Coping Style, Social Support and Emotional Intelligence. *Journal Of Happiness Studies*, *17*(6), 2481-2501. https://doi.org/10.1007/s10902-015-9703-z

Tables

Table 1: Sociodemographic characteristics of the undergraduate nursing students (N = 244)

Variables	Category	Frequency	Percentage	
Gender	Female	168	68.9	
	Male	76	31.1	
Age	Mean = 20.63,	SD = .611		
Birth order	First	118	48.4	
	Middle	95	38.9	
	Last	31	12.7	
Father's education level	Postgraduate	8	3.3	
	University	106	43.4	
	Secondary	103	42.2	
	Basic	27	11.1	
Marital status	Single	227	93	
	Married	17	7	

 Table 2: Academic characteristics of the undergraduate nursing students (N = 244)

Variables	Category	Frequency	Percentage
Courses studied	Fundamentals of Nursing	115	47.1
	Psychiatric and Mental Health Nursing	129	52.9
Clinical performance	100-90 "Excellent"	134	54.9
acmevement	89-80 "Very good"	82	33.6
	79-70 "Good"	28	11.5

Table 3A: Emotional intelligence levels and subscales

Variables	Category	Frequency	Percentage	
Emotional intelligence score	122-165	115	47.1	
	78-121	101	41.4	
	33-77	28	11.5	

Table 3B: Emotional intelligence levels and subscales

El Subscales	Minimum	Maximum	Mean	Std. Deviation
Managing one's own emotions	28	45	36.99	4.326
Managing others' emotions	24	40	31.95	4.701
Perceptions of emotions	19	45	30.00	10.089
Utilization of emotions	18	30	23.85	3.608

Table 4: Correlation between emotional intelligence levels and sociodemographic factors

Variables/L	evel of El (±)	Ν	Mean ± SD	F	Т	df	P- Value (Sig)
Gender	Female	168	1.55 ± .654	.768	3.130	242	.382
	Male	76	1.84± .694		3.061	137.5	
Marital Status	Single	227	1.67 ± .684	9.87	2.6	242	.002*
	Married	17	1.24± .437		3.8	22.36	
Course Studied	Fundamental of Nursing Course	115	1.97± .591	7.78	7.81	242	.006*
	Psychiatric and Mental Health Nursing Course	129	1.36 ± .622	_	7.83	241.01	

*Significant at P £ 0.05

Table 5: ANOVA analysis of the correlation between emotional intelligence levels and sociodemographic and academic variables

Variables/El Level (±)		Ν	Mean ± SD	F	df	P-Value (Sig)
Birth Order	First	118	1.08 ± .280	614.99	2	.000*
	Middle	95	1.93 ± .263		241	
	Last	31	2.90 ± .301			
Father's Education Level	Postgraduate	8	1.00 ± .00	72.52	3	.000*
	University	107	1.37 ± .485		240	
	Secondary	103	1.65 ± .555			
	Basic	27	2.89 ± .320			
Clinical Performance	Excellent (100- 90)	134	.35 ± .03	707.02	2	.000*
	Very good (89-80)	82	2.0 ± .00		241	
	Good (79-70)	28	3.0 ± .00			

*Significant at P £ 0.05