



ASSOCIATION OF SELF-DIRECTED LEARNING WITH EMOTIONAL INTELLIGENCE AMONG STUDENTS IN PRIVATE AND PUBLIC SECTORS NURSING INSTITUTES IN DISTRICT PESHAWAR

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Abstract

Background: Higher education is acknowledged to include self-directed learning (SDL) as one of its primary goals. The capacity to control one's emotions and produce happy feelings is essential for supporting self-directed learning (SDL) and emotional intelligence (EI), two concepts that are critical to nursing students' learning in both clinical and academic contexts.

Objective: This study aims to evaluate undergraduate nursing students at Peshawar's public and private nursing colleges' preparedness for self-directed learning as well as their emotional intelligence.

Methodology: Between December 2022 and March 2023, a descriptive cross-sectional (analytical) study was conducted at each of Khyber Pukhtankhwa four nursing colleges. This study involved 271 undergraduate students from public and private institutions who were enrolled in second, third, and fourth year Bachelor of Science in Nursing programs as well as second year Post RN BSN programs. The relevant institutions granted their consent for the data gathering. The Self Directed Learning Readiness (SDLR) questionnaire and the Emotional Intelligence Scale were used to gather data.

Results: The mean age of the nurses was 30.8 years, and around 80% of them were female. Nursing students exhibit an appropriate degree of SDLR, as indicated by their mean score of 161.6043. Students' EI and SDLR showed a statistically significant correlation, with P values less than 0.05 in the majority of components indicating a desire for self-learning. A significant contribution to raising emotional intelligence is self-directed learning. A sort of self-directed learning strategy that is gaining traction in place of the lecture method in the educational system is problem-based learning.

The effectiveness of PBL has been amply demonstrated by international research across numerous fields. Nonetheless, there is a paucity of research on PBL in Pakistani nursing education.

Conclusion: It is acknowledged that one of the main goals of higher education is self-directed learning. According to the study, those who demonstrated a sufficient degree of preparation for self-directed learning also exhibited high levels of emotional intelligence. The association between a student's EI status and SDLR proficiency is also seen in this study. The importance of emotional intelligence (EI) on self-directed learning and the role that SDL plays in higher education were the study's conclusions. The study provides sufficient evidence to suggest that the emotionally intelligent students were self-directed.

Keywords: Readiness, Self-Directed Learning, Emotional Intelligence, Nursing Institute, Students

Introduction:

The capacity for self-directed learning among nursing students and professionals is seen as a prerequisite for success in the ever-evolving world of contemporary healthcare facilities.¹ The goal of self-directed learning (SDL) is to get students involved in their own education.² In self-directed learning, students define their own objectives, examine a specific issue, track their own learning, and evaluate their progress.³ Because students are in charge of their own education, self-directed learning places a strong emphasis on their emotional intelligence. For this reason, the demands of the learning environment and the students' SDL and EI competencies should be balanced.⁴

Self-directed learning can be achieved through a variety of methods, such as reflective journals, group projects, self-reading, and skill-building exercises. Teachers can help students develop their critical thinking and learning assessment skills by using SDL. For this reason, a few universities provide creative and unconventional educational options.⁵ Students are typically given lectures in traditional learning environments, which deters them from learning on their own. When teachers support their students' learning appropriately, it has been seen that students are engaged and take ownership of their education.⁶ Contextual learning occurs when students are able to recall the material covered in the subject-centered manner of lectures. Conversely, SDL encourages conceptual learning, in which pupils learn concepts rather than replicating what they have already learned.⁷ Students need to engage in self-directed learning since it sharpens their lifetime learning and critical thinking skills. The ability of SDL to motivate kids to learn is another benefit. Students' confidence is increased through self-directed learning. Students now have control over their education thanks to SDL, which raises student happiness and educational quality.⁸

Three key emotional competency characteristics are included in the conceptualization of emotional intelligence. The first measurement, which is the capacity to precisely perceive and specify one's own emotions as well as those of others in a socially acceptable manner, includes the evaluation and expression of feelings in oneself and in others.⁹ In the learning process, especially self-directed learning, emotion is essential.¹⁰ Nevertheless, it can also have unfavorable consequences that hinder learning.¹¹ The second assessment, which focuses on the ability to manage and control one's own and other people's emotions in order to achieve particular objectives, takes into account the laws of emotions in both parties. The third measurement, which focuses on the ability to use one's own emotional intelligence (EI), which is the newly recognized part of intelligence in literature, addresses the use of emotions in adaptive approaches.¹²

The majority of researchers acknowledged having made substantial progress in comprehending the nature parts, attributes, causes, and impacts of change approaches in the development of emotional intelligence of the individual.¹³ Thirteen Along with helping students become more proficient in critical autonomous information acquisition, EI's primary goal has evolved to support students in becoming self-directed, experienced individuals. Put simply, there is an issue with self-directed learning that pertains to the local framework.¹⁴ Thus, the goal of the current study is to investigate

how graduate nursing students at public and private nursing schools in Peshawar, Khyber Pukhtankhwa, relate to emotional intelligence and self-directed learning.

Methodology:

This cross-sectional study was conducted in Khyber Pukhtankhwa, in Peshawar. In all, 271 undergraduate students were enlisted in the study from several nursing schools, including Post Graduate College of Nursing, Institute of Nursing Sciences Khyber Medical University, Northwest Nursing College, and Rehman Nursing College.

This study was carried out over a four-month period, from December 2022 to March 2023, with the Advance Studies & Research Board (ASRB) at KMU's clearance. The study included full-time enrolled students in the Generic BSN Program's years II, III, and IV as well as the Post-RN BSN program's year II. The study excluded nursing students enrolled in BSN and Post RN programs who did not want to participate.

The Self-Directed Learning Readiness Scale (SDLRS) and the Emotional Intelligence Scale (EIS) were used to gather data. The KMU Ethical Board, ASRB, and Graduates Committee all gave their approval for the study. Permission to gather data was obtained from the relevant nursing institutes. Additionally, the students gave their consent.

Results:

In this study, 95% of the participants were between the ages of 22 and 30, with just 5% being older than 30. Just 23% of research participants were men, making up the majority of participants (87%). In this study, only 0.8% of individuals were married, while the majority of participants—92%—were single. In this study, the Pathan family made up more than half (78%), while 14% of the participants were from India. Merely 15% of the participants were enrolled in Post RN BScN degree programs from the four nursing colleges, while the remaining 85% were in generic BSN programs. Findings are displayed in Table 01.

Table 01: Socio-Demographic profile of the participants, n=271

Demographic variables	Categories	Frequency	Percentages
Religion	Islam	246	92.90%
	Others	25	9.2%
Age	22-30 years	243	89%
	31-39years	28	11%
Ethnicity	Pathan	211	77.9%
	Chitrali	38	14.0%
	Others	22	8%
Marital status	Married	26	9.6%
	Un married	245	90.4%
Gender	Female	208	76.8%
	Male	63	23.2%
Name of program	BSN	230	84.9%
	Post RN	41	15.1%
Semesters	Semester 3	52	19.2%
	Semester 4	18	6.6%
	Semester 5	85	31.4%
	Semester 6	11	4.1%
	Semester 7	78	28.8%
	Semester 8	27	10.0%

Emotional intelligence and Self-Directed Learning:

The average number of participants has a high level of SDLRS, as indicated by the mean SDLRS score of 161.6043, which is greater than 150, which is considered a high degree of SDLRS. Similarly, in the case of emotional intelligence, the typical participant has a high level of emotional intelligence, as indicated by the mean emotional intelligence score of 92.05532. High EI is defined as an EI score more than 80 (Figure 01).

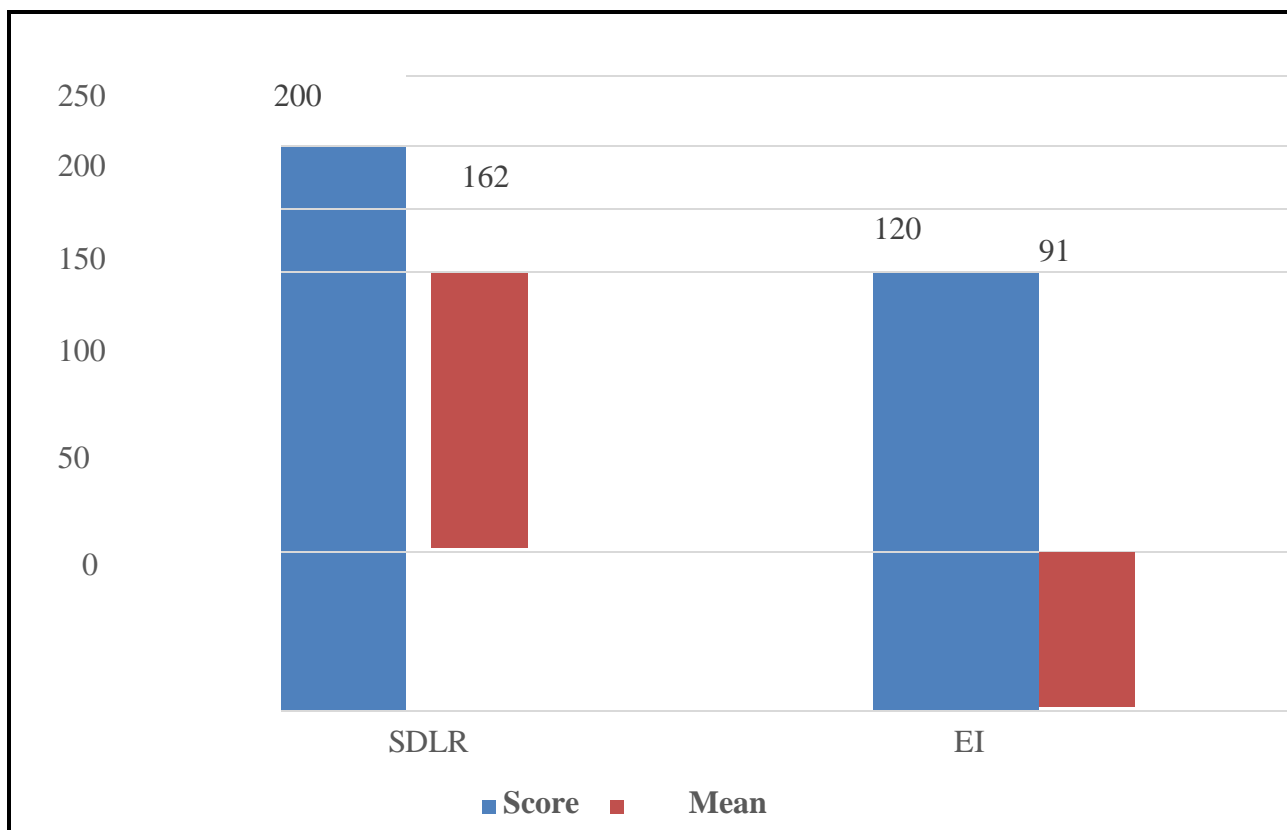


Figure 01: Mean score of SDLR and EI

In this study, the total score for self-management was 51.7 out of 65, and the motivation to self-learn the SDLR portion was 48 out of 60. In this study, the overall accepted scores for self-control for learning are 60 out of 75. Since SDLRS >150 is considered to be a high level of SDLRS, the computed average mean score of all three SDLRS components is 161.6043, indicating that 80% of participants have high levels of SDLRS. Similar results were found for the first three components of emotional intelligence (attention, 32, and reparation, respectively, totaling 40), and the final component (reparation), which received 30 out of 40 points in this study, was evaluated accordingly. As we know, the cutoff threshold for greater intelligence is an average score of >80. The results of this study showed that the mean EI score was 92.05532, indicating that an average number of participants had a high degree of emotional intelligence (Table 02).

Table 02: Mean Scores of Emotional Intelligent and Self-Directed Learning Readiness Students.

Total scores of self-directed learning =200		Mean	± SD
Self-Directed Learning Readiness	Self-management =65	51.7	0.44±1 0.42
	<i>Desire for learning gain total scores=60</i>	48.5	±1
	<i>Self-control = total score 75</i>	60	0.52±1
Total Mean Score of Self-Directed Learning		162	1.2±1
Mean scores of E-I =120		Mean	± SD
<i>Attention= total score 40</i>		30	0.26±
Three components of	<i>Clarity = total score 40</i>	32	0.28 ±1
	<i>Reparation= total score 40 E-I</i>	30.6	0.27±1
Total mean score of E-I =		92	1.3±1

Three aspects of emotional intelligence (EI) and self-management were shown to have a strong statistically significant connection (P=0.001): attention (886(0.001), clarity (814(0.001), and reparation (803(0.12), respectively. In this study, there is a substantial (P=0.000) correlation between EI and SDLR. The association between the two desire-related components of SDLR, attention (835.57), clarity (717.708 (0.22), and reparation (1534.165 (0.04), and the three components of EI is not very significant. Students' EI is substantially impacted by the final SDLR component, control over their own performance, which is measured as follows: attention: 791 (0.5), clarity: 878 (0.22), and reparation: 940 (0.001). The impact of control and the first two EI components on self-performance is not statistically significant. However, this study shows a high correlation between restitution and control over self-performance. Table 03 shows that emotional intelligence was shown to be a significant predictor of SDLR success (P. 0.02). (See table 3)

Table 03: Relationship between Dependent and Independent Variables (EI /SDLR)

EI	SDLR	chi-square	Sig
<i>Attention</i> Clarity Reparation Overall EI	Self-management	.866 814.817	0.001 0.001
	Desire for learning gain	803.488	.128
		1940.45 8	.000
		844	.128
.835		0.571	
<i>Attention</i> Clarity Reparation Overall EI	717.708	0.225	
	1534.16 5	0.042	
	Self-control on own performance	.884	.000
		791.190 ^a	.561
.878		0.208	
940		.001	
Overall EI	Overall SDLR	964	0.02

Discussion:

The current era's health care facilities are always evolving due to new developments in medical technology, emerging trends, and problems facing the nursing profession. In order to produce trained nurses with the ability to engage in Self-Directed Learning (SDL), extra attention must be paid to the training of student nurses. These skills are seen to be necessary for nurses and nursing students to be proactive in addressing the difficult societal concerns. In public and private nursing institutes in District Peshawar, Khyber Pukhtankhwa, the purpose of this study was to evaluate undergraduate nursing students' levels of emotional intelligence and the three components of self-directed learning. In addition, this study looks at the relationship between emotional intelligence level and SDLR.

The bulk of the participants, according to the demographic characteristics, were under 30 years old. In this study, only 23% of participants were men and over 87% of participants were women. The results of our study show that demographic factors such as gender and age distributions differ mostly from those found in other studies.¹⁵ While the years of training in our study were three years and higher, an Australian study reveals comparable results for age and gender distribution. Male nursing students participating in master's programs made up the majority of participants in the study conducted in the United States. Participants in the USA study were in their final two years of study.¹⁶

According to the study results, 80% of the undergraduate nursing students in the study had a level of 51.7 for the competence of self-management of learning, which is the first component of self-directed learning. This outcome is in line with research done in Taiwan to gauge undergraduate nursing students' SDLR proficiency. As evidenced by the results, 70% of participants with scores greater than 160 in this study were prepared for SDL.¹⁷

The second SDLR component, willingness to learn, did not have a particularly high overall score among the study participants (48 out of 60). In this study, there is just a minor correlation found between EI and the desire to learn. The results align with a study carried out in the United States of America, which found no correlation between emotional intelligence and the desire to learn. 0.02 Additionally, the Self-Directed Learning Relationship on Nursing Students noted that learners with SDLR typically like learning, are goal-oriented, and view setbacks as opportunities for growth. High SDL ability learners are self-motivated and capable of using learning resources to overcome challenges in their learning activities; EI plays a smaller role in their desire to study.¹⁸

Second, the results of the study demonstrated a positive relationship between the three emotional intelligence components and students' capacity for self-directed learning, specifically their capacity for self-control and self-management (p. 0.002). displayed the average scores and the noteworthy correlation between SDLR and EI. Out of 200 possible points, the average mean scores for the three SDLRS dimensions were 162. This finding is consistent with another study carried out in Thailand, where the average mean SDLR score was 172 out of 200 total SDLR values.¹⁹

Emotional self-regulation is the primary component of self-directed learning. Since self-directed learners are goal-oriented, it is critical that they practice self-discipline in order to achieve their own set of learning objectives. Achieving the learning objectives for resisting different temptations and transient attractions—which can cause distraction and compromise in goal-directed behavior—requires emotional self-regulation. As was previously noted, the self-directed learning process is difficult for students, who often feel negative, confused, frustrated, and unsatisfied with their education after beginning a new course. EI and college students' degree of self-directed learning are positively correlated, according to our research.²⁰

Aside from that, all SDLRS dimensions have high mean ratings that point in the direction of SDL ready. In this study, there was a significant correlation (P. 0.002) between all elements of EI and students' capacity for self-management. The study's findings are consistent with an Australian study that found a favorable relationship between emotional intelligence and the capacity for self-directed learning and self-management.²¹ These findings contradict those of a different study where the degree of EI was unrelated to the SDLR level.²² Therefore, maintaining study effort and achieving

study goals depend on having the ability to control unpleasant emotions. This is a crucial stage in the assessment of one's own emotions because it encourages introspection, which is essential for learning that is done on one's own.²³ Emotions are recognized as signals that teach people about important and significant occurrences; therefore, people who are aware of their emotions can use this emotional data to inform their decisions and behaviors.²⁴ The role of EI has been shown to indicate that students who are aware of it are better prepared for SDL.²⁵

Conclusion

In the current era of nursing, self-directed learning is the most rigorous component of the curriculum since it encourages students to become self-motivated to investigate new ideas and apply critical thinking to the evaluation of phenomena. Teachers help students learn by encouraging self-reflection, peer exchange of ideas, and teacher assistance. According to our research, emotional intelligence is a key factor in students' self-directed learning, and more motivated than average students pursued self-directed learning. According to the study, those who demonstrated a sufficient degree of preparation for self-directed learning also exhibited high levels of emotional intelligence. The association between a student's EI status and SDLR proficiency is also seen in this study. The importance of emotional intelligence (EI) on self-directed learning and the role that SDL plays in higher education were the study's conclusions. The study provides sufficient evidence to suggest that the emotionally intelligent students were self-directed.

References:

1. Zhoc KCH, Li JCH, Webster BJ. New Reliability and Validity Evidence of the Emotional Intelligence Scale. *Journal of Psychoeducational Assessment*. 2017 Sep;35(6):599–614.
2. Ardel M. Empirical Assessment of a Three-Dimensional Wisdom Scale. *Res Aging*. 2003 May;25(3):275–324.
3. Leach L. Self-Directed Learning: Theory and Practice. 2000 July;12(6):75-92
4. Williams B, Boyle M, Winship C, Brightwell R, Devenish S, Munro G. Examination of self-directed learning readiness of paramedic undergraduates: A multi-institutional study. *Journal of Nursing Education and Practice*. 2012;3(2):102–11.
5. Haukedal TA, Reiersen IÅ, Hedeman H, Bjørk IT. The Impact of a New Pedagogical Intervention on Nursing Students' Knowledge Acquisition in Simulation-Based Learning: A Quasi-Experimental Study. *Nursing Research and Practice*. 2018 Oct 1 ;35 (6):1–10.
6. Gyawali S, Jauhari AC, Ravi Shankar P, Saha A, Ahmad M. Readiness for self directed learning among first semester students of a medical school in Nepal. *Journal of Clinical and Diagnostic Research*. 2011 April12;5(1):20–3.
7. Jennings SF. Personal development plans and self-directed learning for healthcare professionals: are they evidence based? *Postgraduate Medical Journal* . 2007 Aug 1; 16(8):518–24.
8. Arkan B, Avdal EÜ, Sari HY. Locus of Control and Self Directed Learning Relation on Nursing Students. 2011 April 12;21(8): 54-6.
9. Beauvais AM, Brady N, O'Shea ER, Griffin MTQ. Emotional intelligence and nursing performance among nursing students. *Nurse Education Today*. 2011 May;31(4):396–401.
10. Stefanidis D, Anton NE, Howley LD, Bean E, Yurco A, Pimentel ME, et al. Effectiveness of a comprehensive mental skills curriculum in enhancing surgical performance: Results of a randomized controlled trial. *The American Journal of Surgery*. 2017 Feb 16;213(2):318–24.
11. Cadorin L, Bressan V, Palese A. Instruments evaluating the self-directed learning abilities among nursing students and nurses: a systematic review of psychometric properties. *BMC Med Education*. 2017 Dec 26;17(1):229.
12. Cassano F, Tamburrano A, Mellucci C, Galletti C, Damiani G, Laurenti P. Evaluation of Emotional Intelligence among Master's Degree Students in Nursing and Midwifery: A Cross-Sectional Survey. *IJERPH*. 2020 Aug 31;17(17):6347.

13. Perera HN, DiGiacomo M. The relationship of trait emotional intelligence with academic performance: A meta-analytic review. *Learning and Individual Differences*. 2013 Dec;28:20–33.
14. Aghamolaei T, Shirazi M, Dadgaran I, Shahsavari H, Ghanbarnejad A. Health students' expectations of the ideal educational environment: a qualitative research. 2012. 2(4):7.
15. Di Fabio A, Kenny ME. Promoting Emotional Intelligence and Career Decision Making Among Italian High School Students. *Journal of Career Assessment*. 2011 Feb [cited 2021 May 13];19(1):21–34.
16. Di Fabio A, Palazzeschi L, Bar-On R. The role of personality traits, core self-evaluation, and emotional intelligence in career decision-making difficulties. *Journal of Employment Counseling*. 2012 Sep;49(3):118–29.
17. Parker JDA, Summerfeldt LJ, Hogan MJ, Majeski SA. Emotional intelligence and academic success: examining the transition from high school to university. *Personality and Individual Differences*. 2004 Jan;36(1):163–72.
18. Lindsay DS, Read JD, Sharma K. Accuracy and Confidence in Person Identification: The Relationship Is Strong When Witnessing Conditions Vary Widely. *Psychological Science*. 1998 May;9(3):215–8.
19. Nunes R. Fair Equality of Opportunity in Healthcare. *Conatus journal of education*. 2018 Dec 31;3(2):83.
20. Kutluk FA, Gulmez M. A Research about Distance Education Students' Satisfaction with Education Quality at an Accounting Program. *Procedia - Social and Behavioral Sciences*. 2012 Aug 16;46(6):2733–7.
21. Dehkordi AH, Heydarnejad MS. The impact of problem-based learning and lecturing on the behavior and attitudes of Iranian nursing students. 2008;55(4):3.
22. Tessema M. Effect of Gender on College Students' Satisfaction and Achievement: The Case of a Midsized Midwestern Public University. 2011 July 14;3(10):12.
23. Chen C-M, Lee T-H. Emotion recognition and communication for reducing second-language speaking anxiety in a web-based one-to-one synchronous learning environment: Emotion recognition for reducing second-language anxiety. *British Journal of Educational Technology* 2011 May;42(3):417–40.
24. Premkumar K, Pahwa P, Banerjee A, Baptiste K, Bhatt H, Lim HJ. Does Medical Training Promote or Deter Self-Directed Learning? A Longitudinal Mixed-Methods Study: *Academic Medicine*. 2013 Nov;88(11):1754–64.
25. Denovan A, Macaskill A. An interpretative phenomenological analysis of stress and coping in first year undergraduates. *Br Educ Res J [Internet]*. 2013 Dec [cited 2021 May 13];39(6):1002–24.