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Leading Future Nurses: Do Mentors Facilitate Learning, Enhance Professional Development, and Provide Psychosocial Support for Prelicensure Nursing Students during Integrative Practicum?



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Abstract:

Background: Clinical training is an essential aspect of the integrative practicum course. The mentors play a multifaceted role in the clinical experience of the pre-licensure nursing students and foster their readiness to work independently in a complex healthcare environment.

Aim: This study aimed to evaluate the perception of mentorship of the mentee as a means of facilitating learning, enhancing professional development, and providing psychosocial support for prelicensure nursing students.

Methods: A cross-sectional survey study was carried out at the College of Health and Sport Sciences at the University of Bahrain. A convenient sample of 201 students enrolled in the final year of the BSc in Nursing program completed the behavior questionnaire of the mentors.

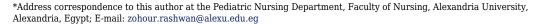
Results: The findings indicated that students reported that mentors had a clear plan for their learning (4.16 ± 0.86) , helped them to achieve learning objectives, and linked theory to practice (4.04 ± 0.84) . Regarding professional development, the mentors encouraged in-depth learning (4.14 ± 0.95) , displayed clinical competence (4.09 ± 0.93) , encouraged the use of evidence-based practice (4.01 ± 1.03) , and gave the students constructive feedback (3.98 ± 1.08) . Most nursing students reported that the mentors supported them psychologically, instilled confidence in them (4.12 ± 0.89) , and had a warm and friendly attitude (4.12 ± 0.83) . Female participants reported higher scores across the three aspects. The overall mean scores were (4.00 ± 0.54) in facilitating learning, (4.01 ± 0.63) in professional development, and (4.10 ± 0.57) in psychosocial support.

Conclusion: Mentors took responsibility for the learning of the students, provided a supportive practice environment, had a clear plan for the learning, and helped them achieve learning objectives and goals. There was a slight disparity in perception among the three need aspects; nonetheless, participants felt that their psychosocial support was better.

Keywords: Clinical practice, Facilitating learning, Integrative practicum, Support, Mentor, Prelicensure nursing students, Professional development, Psychosocial support.

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1. INTRODUCTION

The journey of nursing education is multifaceted and demanding and requires students to connect theoretical knowledge with practical application in clinical settings. Nursing competencies are a blend of knowledge, skills, and attitudes essential for effective practice and education [1]. In structured classroom environments, nursing students engage with thoughtfully developed educational materials. However, as they transition to clinical practice, they encounter diverse and unfamiliar scenarios that involve working closely with clients, families, and healthcare teams. This essential integration of classroom learning and clinical experience is key to developing proficient and versatile nursing professionals equipped to navigate the complexities of healthcare [2].

Clinical placements are imperative for nursing students to develop the clinical skills necessary for achieving both academic excellence and practical competence as robust nursing professionals [3]. However, nursing students confront numerous challenges during their clinical training that hinder the overall development of clinical competencies. Clinical learning environments have become more complex and challenging in recent years, which poses a considerable burden on nurse educators to train them [4]. Therefore, nurse educators should foresee and understand the challenges and plan an effective system or active measures to successfully support the clinical learning experience [5].

The nursing mentorship concept is a proven and beneficial strategy for the nursing student community. It enhances their professional communication skills, increases self-awareness and self-confidence, engages the environment, and smoothens the transition to practice, which steadily occurs in the field [6]. These factors impact quality, teamwork, and safety, improving patient outcomes [7].

Mentors support a nurturing relationship that includes knowledge sharing and experience, offering emotional support, guidance, constructive feedback, camaraderie, and advice that support the students promptly [4, 7].

Mentees also proclaimed that the characteristics and behaviors of mentors directly impact their academic achievement, professional and social interaction, personal growth, and psychological health benefits to achieve the goal of intended learning outcomes [8].

Mentors empower the students with the knowledge and practical skills required to deal with patients autonomously. The skills include emotional intelligence, effective communication, time management, and social skills [9]. Students are socialized in a workplace environment; thus, they can attend to patients professionally and minimize the risk and injuries.

Therefore, a mentorship program is vital in clinical training and aids the students in synthesizing the theoretical knowledge acquired during the course work and practice. Studies show that students face challenges shifting from students to newly registered nurses in complex and dynamic health facilities [10, 11]. The

program is organized to support the students. It can be done in various forms, which include training modules, clinical placements in health centers, small group seminars, and group discussions. Mentorship is a relationship whereby a more experienced person with vast knowledge and experience in a profession nurtures and offers professional growth to a mentee [6]. Besides, the mentor should provide feedback to the learner in an honest way, be non-judgemental, and be available to offer support to the student always [12]. According to the research, apart from benefiting the mentee, the mentorship program benefits the mentor in that the mentor experiences job satisfaction while teaching young professionals in the nursing field. Additionally, it boosts their self-esteem, and they can learn new information from the mentee during their work relationship [13].

A highly knowledgeable nurse assists the students in acquiring technical skills and communication skills and developing emotional maturity and independence in nursing practice. The mentee develops the right attitude toward work and self-confidence, enabling one to shift from being a student to a nurse [14].

A successful academic program should promote students' confidence in mastering educational and clinical requirements. Higher educational institutions need to enhance the student's confidence level and capabilities to master theoretical and clinical components before they graduate from nursing schools [3]. This study would be unique since limited research studies address the quality of clinical nursing training during the consolidated practicum courses in the Kingdom of Bahrain. By assessing the mentors' behavior during a clinical training experience, this study has the potential to shed light on the strengths and weaknesses of the performance of the mentors and provide valuable data for the policymaker and program developer to enhance the quality of the provided mentorship program and therefore boost the clinical training experience of the integrative practicum course during this critical transitional period.

1.1. Aim

This research study aimed to evaluate the mentee's perception of mentorship to facilitate learning, enhance professional development, and provide psychosocial support for prelicensure nursing students.

2. METHODS

2.1. Research Design

The method of inquiry was a quantitative, non-experimental, cross-sectional descriptive survey design. This design was chosen as it was appropriate to elaborate on mentees' perceptions of mentors in facilitating learning, enhancing professional development, and providing psychosocial support for prelicensure nursing students through the survey method.

2.2. Settings

The study was conducted at King Hamad University Hospital (KHUH), Bahrain Defence Force Hospital (BDF), and Salmaniya Medical Complex (SMC).

2.3. Sample

A sample of 201 nursing students enrolled in an internship program at the fourth-year level was used in this study.

2.4. Sample Size Estimation

The Epi info software version 10 was utilized to calculate the needed sample size using the following parameters: Confidence coefficient of 95%, expected frequency of 50%, and acceptable error of 5%. The minimum sample size required was 195.

2.5. Inclusion and Exclusion Criteria

Students who were enrolled in the internship program and willing to participate in the study were included. On the other hand, students who were absent during the data collection and participated in a similar study were excluded.

2.6. **Tools**

After a thorough review of the literature, the researcher developed the tool, which consisted of two parts.

2.6.1. Part 1

Demographic data, including age, gender, marital status, GPA score, source of sponsorship, and the number of years spent in the nursing program.

2.6.2. Part 2

The Mentor's Behavior Assessment tool, developed by Chen *et al.* (2018), was used to gather mentorship data from Svellingen. This tool was designed to evaluate the behavior of the mentors across three dimensions: professional development, psychosocial support, and facilitating learning. The structured questionnaire consists of 37 questions rated on a five-point Likert scale. Study participants were asked to respond to each question using a Likert scale ranging from "Not important at all" to "Quite important," assigning five points to indicate their level of importance. The questionnaire content validity index was 0.89 for relevancy and 0.90 for clarity, and the Item-Content Validity indexes ranged from 0.80 to 1. The internal consistency of the tool was (Cronbach's alpha = 0.89) [13].

2.7. Data Collection Procedure

The study was carried out among fourth-year nursing students posted during the internship period. Furthermore, the data were collected using self-report questionnaires distributed to internship nursing students. A faculty member who was not one of the research team distributed the questionnaire and invited the students to fill it out anonymously.

2.8. Ethical Consideration

The study was approved by the scientific research committee of the College of Health Sciences University of Bahrain (15-2018/19). The participants were required to sign the consent forms to indicate voluntary participation

in the study and as an agreement to provide filled-out questionnaires. Personal data were not collected during the data collection process to maintain the participants' anonymity.

2.9. Pilot Study

A pilot study was conducted in the clinical settings one week before the main study. The sample size chosen was about 20 participants, as calculated by 10% of the total sample size. The obtained data were analyzed, and the findings were used to ensure the feasibility of conducting the main study and improving the inquiry process.

2.10. Data Analysis

Data analyses were performed by using SPSS version 20. The students' demographic characteristics were described by using descriptive statistics, including numbers, percentages, mean, and standard deviation. The normality of the data was assessed using the Kolmogorov-Smirnov test. Further, inferential statistics were used to identify the correlation between the variables. All the statistical analyses were considered significant at *the* $P \le 0.05$ level.

3. RESULTS

Table 1 illustrates that the ages of more than half of the students (52.2%) ranged from 21 to 23 years. Most students were females (83.6%), and 88.1% were married during the integrative practicum period. Those with a CGPA of more than 3.0 to 4.0 constituted 65.7%.

Regarding the mentors' demographic characteristics, the Table displays that the majority of them were females (95.0%). Mentors aged 30 to less than 35 years old constituted 46.3%, and 47.3% had more than 15 years of working experience. In relation to the duration of mentoring nursing students, it was noticed that 61.7% of mentors had less than five years of experience.

Table 2 demonstrates that mentors facilitated nursing students' learning. Students reported that mentors had a clear plan for their learning (4.16±0.86), provided a supportive practice environment (4.11±0.88), helped them to achieve learning objectives, and linked theory to practice $(4.10\pm0.74 \text{ and } 4.04\pm0.84)$, and encouraged them to reflect on their learning (3.96±0.95). Regarding professional development, the mentors encouraged indepth learning about clinical practice (4.14±0.95) and guided the students to become registered nurses. About (4.12 ± 0.92) displayed clinical competence (4.09 ± 0.93) , transmitted a positive image of the nursing profession (4.05 ± 1.05) , motivated them to give the best possible care (3.99±0.99), encouraged the use of evidence-based practice (4.01±1.03), and gave the students an objective comprehensive assessment (3.92 ± 1.12) constructive feedback (3.98±1.08). Most of the nursing students reported that their mentors supported them psychologically. The mentors worked the same shifts (4.39 ± 0.77) , supported and encouraged them (4.29 ± 0.77) , instilled confidence in them (4.12±0.89), showed respect for them (4.12±0.89), and had a warm and friendly attitude (4.12 ± 0.83) .

Table 1. Characteristics of nursing students and mentors (n=201).

Characteristics		No. (%)
a. Students' Characteristics		
Age	<21 21-<23	84 (41.8) 105(52.2) 12(6.0)
Gender	Male Female	33 (16.4) 168 (83.6)
CGPA	2- 2.5- 3.0- 3.5-4	1 (0.5) 7(3.5) 61(30.3) 132(65.7)
Marital status	Married Single	24(11.9) 177(88.1)
b. Mentors' Characteristics	·	·
Gender	Male Female	10(5.0) 168 (83.6)
Age/ years	<30 30-<35 35-<40 40& more	16(8.0) 93(46.3) 74(36.8) 18(9.0)
Level of education	Diploma Bachelor Master	55 (27.4) 142(70.6) 4(2.0)
Working experience (years)	<5 5-<10 10-<15 15& more	8(4.0) 52(25.9) 46(22.9) 95(47.3)
Duration of mentoring nursing students (years)	<5 5- 10- 15& more	124(61.7) 34(16.9) 39(19.4) 4(2.0)

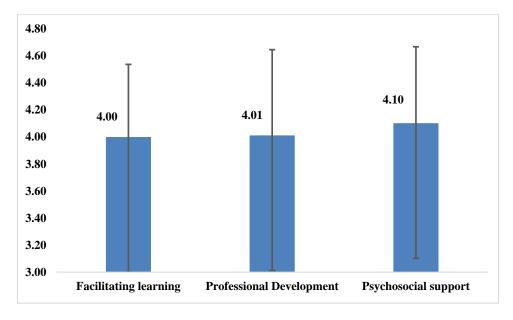


Fig. (1). Mean scores of dimensions of the mentors' behaviors during nursing integrative practicum. (A higher resolution / colour version of this figure is available in the electronic copy of the article).

Table 2. Mentors' behaviors related to facilitating learning, professional development, and psychosocial support for nursing students during integrative practicum.

Items		Mean ± SD
Facilita	ating learning	
1	Takes responsibility for my learning	4.14±0.87
2	Orientates me to the clinical environment.	4.07±0.91
3	Provides a supportive practice environment	4.11±0.88
4	Has a clear plan for my learning	4.16±0.86
5	Discusses learning objectives with me	3.89±1.01
ŝ	Helps me achieve learning objectives and goals	4.10±0.74
7	Asks me questions to facilitate and assess learning	3.80±1.00
3	Actively instructs me	3.90±0.88
)	Encourages me to reflect on my learning	3.96±0.95
10	Helps me to link theory to practice	4.04±0.84
11	Arranges interdisciplinary learning activities	3.71±1.08
Profess	sional Development	
12	Assesses my achievements continuously	3.95±0.91
13	Gives me an objective and comprehensive assessment	3.92±1.12
4	Gives me constructive feedback	3.98±1.08
.5	Facilitates good communication skills with staff and patients	3.93±0.97
6	Shows me how to make decisions about patient care	3.98±0.94
7	Shows me how to prioritize tasks	3.99±1.01
.8	Guides me to become a registered nurse.	4.12±0.92
9	Displays clinical competence	4.09±0.93
20	Demonstrates professional integrity	4.04±0.91
1	Transmits a positive image of the nursing profession	4.05±1.05
22	Fosters critical thinking in me	4.00±0.89
23	Makes me feel part of the team	4.02±1.06
24	Makes me aware of the legal implications of nursing care	3.98±0.99
:5	Encourages the use of evidence-based practice	4.01±1.03
26	Motivates me to give the best possible care	3.99±0.99
27	Encourages in-depth learning about clinical practice	4.14±0.95
sycho	social support	
28	Always makes time to teach me	4.00±1.05
29	Works the same shifts as me	4.39±0.77
30	Works with me while on the same shift	4.13±0.83
31	Supports and encourages me	4.29±0.77
32	Instills confidence in me	4.17±0.91
3	Shows respect for me	4.12±0.89
34	Has a warm and friendly attitude	4.12±0.83
35	Listens to my ideas and suggestions	3.96±0.84
36	Treats me as a learner, not a pair of hands	3.85±0.88
37	Guides my personal development	3.99±0.86

Table 3. Correlational matrix between the three dimensions of the mentors' behaviors (facilitating learning, professional development, psychosocial support) during the nursing integrative practicum.

	Mean ± SD		Facilitating Learning	Professional Development	Psychosocial Support
Facilitating learning	4.00±0.54r	r	1		
		p			
Professional development	4.01±0.63	r	0.782*	1	
		p	P< 0.001		
Psychosocial support	4.10±0.57	r	0.564*	0.634**	1
		P	P< 0.001	P< 0.001	

Note: r = Pearson correlation *Significant at *P< 0.001.

Table 4. Relation between mentors' behaviors in facilitating learning, professional development, psychosocial support, and their demographic characteristics and working experience.

*-	Facilitating Learning	Professional Development	Psychosocial Support Mean ± SD	
Items	Mean ± SD	Mean ± SD		
Mentors' Demographi	c Characteristics			
Gender				
Male	3.73±0.36	3.95±0.58	4.01±0.52	
Female	4.00±0.54	4.02±0.64	4.11±0.57	
Significance	Z= -1.428, p=0.05*,df =1	Z= -0.405, p=0.69, df =1	Z= -0.590, p=0.55, df =1	
Age/ years				
<30	3.90±0.61	3.87±0.84	3.94±0.71	
30-<35	3.94±0.53	3.99±0.65	4.05±0.58	
35-<40	4.02±0.53	4.04±0.57	4.17±0.52	
40& more	4.19±0.52	4.15±0.66	4.26±0.52	
Significance	$\chi^2 = 5.399$, p=0.15, df =3	$\chi^2 = 1.179,$ p=0.76, df =3	$\chi^2 = 3.507$,p=0.32,df =3	
Level of education	·			
Diploma	3.93±0.54	4.06±0.56	4.15±0.51	
Bachelor	4.01±0.54	3.99±0.67	4.09±0.59	
Master	4.14±0.24	4.06±0.20	4.03±0.25	
Significance	$\chi^2 = 1.15,$ p=0.55, df =2	$\chi^2 = 0.116,$ p=0 .94, df =2	$\chi^2 = 0.423$, p=0.81, df =2	
Working Experience (years)			
<5	3.79±0.70	3.77±0.86	3.94±0.73	
5-<10	3.92±0.57	3.92±0.66	3.97±0.62	
10-<15	4.01±0.48	4.10±0.62	4.16±0.55	
15& more	4.03±0.53	4.04±0.60	4.16±0.52	
Significance $\chi^2 = 3.520$, p=0.32, df =3		$\chi^2 = 1.746$, p=0.63, df =3	$\chi^2 = 4.057$, p=0.26, df =3	
Duration of Mentoring	g Nursing Students (years)			
<5	3.89±0.58	3.89±0.70	4.05±0.58	
5-	4.12±0.47	4.21±0.49	.13±0.60	
10-	4.15±0.38	4.19±0.43	4.24±0.48	
15& more	4.27±0.22	4.25±0.52	4.23±0.53	
Significance	$\chi^2 = 9.510$, p=0.023*,df =3	$\chi^2 = 8.248$, p=0.041*,df =3	$\chi^2 = 3.558,$ p=0.313, df = 3	

Note: Z=Mann-Whitney U tests χ^2 = Kruskal-Wallis tests *Significant at *P \leq 0.05.

Table 3 and Fig. (1) show the mean facilitating learning (4.00 ± 0.54) , professional development (4.01 ± 0.63) , and psychosocial support (4.10 ± 0.57) . Table 3 shows significant positive correlations between facilitating learning and professional development (0.571, P<0.001), facilitating learning and psychosocial support (0.515, P<0.001), as well as between professional development and psychosocial support (0.625, P<0.001).

Table 4 demonstrates that a significant gender difference was observed, with females reporting higher scores for facilitating the nursing students' learning during the integrative practicum (Z= -1.428, df = 1, p=0.05). The duration of mentoring the nursing students' practicum experience was also significant in facilitating learning and professional development (χ^2 =9.510, df = 3, p=0.023 & χ^2 =8.248, df = 3, p=0.041, respectively).

4. DISCUSSION

4.1. Facilitating Learning

Integrative Practicum is a crucial phase of clinical training. It may warrant the prelicensure of nursing students to apply their cumulative theoretical knowledge to real-life clinical situations, where mentors play a substantial role in facilitating clinical learning. Mentors play a multifaceted role in mentorship, including supervisor, supporter, and advisor [8]. The mentor provides crucial information for the mentee that is vital in work performance, including emotional support and guidance, and acts as a role model to the mentee [5]. In this context, the current study findings revealed that the mentors took responsibility for orienting and supporting the students in the clinical environment. These findings are congruent with Froehlich and Gegenfurtner (2019), who emphasized the immense need for detailed orientation of novice professionals to the clinical environment [15]. Such orientation would enable them to provide competent and comprehensive nursing care with minimal errors, improve their self-confidence, and develop a positive attitude toward their future careers.

Effective mentorship is not only providing information but also augmenting the technical competencies of the students, their critical thinking, and clinical decisionmaking skills with the ultimate goal of integrating theory into practice [16]. These facts are evident in the present study findings, as most students asserted that mentors helped them to achieve their goals and objectives during their clinical posting. Our findings also showed that the preceptors helped the students to link theory to practice. Harvey and Uren (2019) and Tuomikoski et al. (2020) also supported the idea that mentors should brace the students with vital clinical knowledge through teaching and giving the students hands-on experience [4, 17]. Evidence shows that a highly skilled and knowledgeable mentor offers crucial support to the mentee. This is achieved by empowering the student with the clinical skills and knowhow to perform the required interventions in actual practice [9, 18, 19]. Bhurtun et al. (2019) reported that the mentorship program allows the students to practice the

clinical skills they can employ in the future while decreasing nurses' workloads [10]. On the contrary, some published research studies do not support mentorship as mentoring the students is time-consuming and may place the mentor under much pressure if understaffed. The nurses may be torn between training the mentee and attending to patients, resulting in the program's ineffectiveness (Lavoie-Tremblay et al., 2020). Additionally, some mentors might not have adequate nursing knowledge and skills due to inadequate education and teaching on handling students [20]. This may lead to errors, such as giving patients the wrong medication and increased death rates among patients because of receiving improper care from students [21].

It is imperative to note that mentors play a vital role in the mentee's work performance and should offer professional guidance and nurturing to the student (Kachaturoff *et al.*, 2020). A good mentor should be attentive to the mentee by being a good listener and knowledgeable and providing the mentee with adequate resources required to facilitate their learning and provide value to the student [22]. The competence levels of the mentors influence the quality of the clinical practice acquired by the student [8].

4.2. Professional Development

Mentorship is crucial during the transitional stage from academic nursing education to a registered practical nurse because it helps future nurses grow their basic skills and develop their confidence to reach the desired level of competence [18, 23]. Professional development indicates that the role of mentorship among the students was felt, and contributions were noted in various aspects of student learning. In this regard, nursing students in the current study declared that their mentors provided them with hands-on training and supervised practice, shared their expertise, and encouraged critical thinking. Further, they serve as role models, demonstrating professionalism, ethical conduct, and practical communication skills. Mentors provide opportunities for students to observe and participate in various aspects of nursing practice, such as patient assessments, care planning, and collaboration within the healthcare team. In agreement with our findings, Kachaturoff et al. (2020) reported that mentors play a crucial role in the mentee's work performance and should offer both professional guidance and nurturing to the student to gain better skills and expertise through the lived experiences of the mentors [22]. Mentees need to obtain the necessary knowledge and skills for increased competency, making them committed to the learning process. Students' passions and ambitions influence their learning to grow in a career in the field of nursing [5]. Hence, our research findings reinforce the existing literature that mentorship contributes significantly to the professional development of mentees, especially among integrative practicum students, since it is crucial in transitioning them from trainees to professional nurses.

The current study findings highlighted that through constructive feedback and regular evaluations, mentors

helped prelicensure nursing students identify their strengths and areas for improvement, setting goals that can contribute to their professional growth. Mentors foster lifelong learning and a commitment to continuous professional development by encouraging reflection and self-assessment. Similar findings are reported by Creta and Gross et al. (2020), who confirmed that the mentorship program contributes to students' work readiness, enabling them to work independently and facilitating their professional growth [23]. Besides, a study by Natesan et al. (2023) highlighted the critical influence of structured feedback mechanisms on clinical performance and student learning outcomes [24]. In contrast, Mikkonen et al. (2020) revealed that students reported unsatisfactory experiences with mentors who needed more clinical knowledge and thus offered poor mentorship to learners [4].

An open communication channel is a cornerstone for building a successful professional relationship between the mentor and the mentee. This enables the learner to get closer to the mentor and get comfortable asking questions without fear of judgment, explain their workrelated concerns, and develop a strong team spirit where both the mentor and mentee brainstorm during the mentorship program [19]. Similarly, our study results revealed that most students agreed that their mentors facilitated good communication skills with staff and patients. In this context, Kwame and Petrucka Brown (2021) emphasized the vital role of communication skills in enhancing the interactions between novice nurses, their mentors, and patients [25]. The results above bolster the necessity of focusing on the designated domains in nursing education programs to guarantee the comprehensive growth of upcoming nursing experts.

4.3. Psychosocial Support

The integrative practicum can be emotionally challenging for prelicensure nursing students as they encounter complex patient situations, witness suffering, and face ethical dilemmas (Moscaritolo LM.2009). Mentors can stabilize the learning environment, provide emotional support to fulfill their requirements, and provide a safe, relaxed, and supportive environment to reduce stress and anxiety levels among nursing students [26]. Our study findings reflect that mentors promoted teamwork and collaboration and encouraged students to seek support from their peers and the healthcare team. Mikkonen et al. (2022) argued that mentors offer a listening ear, empathy, and understanding, acknowledging the emotional impact of patient care [27]. Mentors help students develop resilience and coping strategies, ensuring their well-being and preventing burnout. By creating a supportive and nurturing environment, mentors contribute to the students' psychosocial growth and resilience [21].

The most significant result of the present study is an association between professional development and psychosocial support, as mentors need to foster better workplace relationships during training as they advance

the competency of the mentees. However, the participants felt that their psychosocial support was better addressed than the facilitating learning and professional development aspects. This aligns with existing research by Pedregosa *et al.* (2020), who allege that effective mentorship is characterized by close interactive relationships between mentors and mentees to create an environment for openness and effective communication [28]. The psychological aspects of the findings indicate that the participants' psychological needs were met by their mentors in the clinical environment, who developed a healthy relationship to make them feel like part of the team, provided valuable contributions, and were able to move the nursing profession forward.

The functions and qualities of a mentor play an essential role in a clinical setting, and they strongly influence the student's learning process, professional development, and psychosocial support during the training [2, 27]. The present study finding displayed that the duration of mentoring the nursing students' practicum experience was also significant in facilitating learning and professional development. This implies that it is imperative for mentors to pay more attention to the qualities and responsibilities that are perceived as necessary by students for effective mentorship, resulting in competent nurses [9, 22].

4.4. Limitation

The study has limitations related to the small sample size. Hence, replicating the study on a more representative sample using probability sampling would obtain more generalizable findings for the broader population. Although the current study provides insights regarding the influence of mentors on nursing students' clinical training experience, using convenient sampling techniques may be another limitation.

CONCLUSION

Based on the study findings, it can be concluded that mentors facilitated learning, enhanced professional development, and provided psychosocial support for prelicensure nursing students during integrative practicum. Mentors significantly influence the desire of nursing students to learn and increase their capacity to make necessary adjustments in new environments. Therefore, nursing schools and hospitals should have training courses on mentorship, emphasizing communication skills and qualities.

AUTHORS' CONTRIBUTIONS

G.N.: Contributed to the conceptualization, data curation, methodology, investigation, writing of the original draft, and supervision; T.J.B.: Contributed to the conceptualization, data curation, writing, review, and editing; A.S.S.: Contributed to the data curation and writing of the original draft; M.S.A.: Contributed to the conceptualization, methodology, and writing of the original draft; S.I.A.: Contributed to the conceptualization, data curation, methodology, and writing of the original draft; Z.I.R.: Contributed to the conceptualization,

methodology, data curation, formal analysis, writing of the original draft, review, and editing.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study was approved by the scientific research committee of the College of Health Sciences University of Bahrain, Bahrain (15-2018/19).

HUMAN AND ANIMAL RIGHTS

All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from the participants.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

All the data and supporting information are provided within the article.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

FUNDING

None.

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Declared none.

REFERENCES

- [1] Rashwan ZI, Busebaia TJ, AL-Sabbagh AS, Eweida RS. Effect of guided reciprocal peer questioning strategy on pediatric nursing students' self-esteem and metacognitive awareness: Current approach and future directions. Nurse Educ Today 2021; 107: 105153.
 - $http://dx.doi.org/10.1016/j.nedt.2021.105153\ PMID:\ 34562682$
- [2] Peiser G, Ambrose J, Burke B, Davenport J. The role of the mentor in professional knowledge development across four professions. Int J Mentor Coach Educ 2018; 7(1): 2-18. http://dx.doi.org/10.1108/IJMCE-07-2017-0052
- [3] Rashwan ZI. Motivation inspiring confidence: Effect of scenario-based learning on self-confidence among prelicensure nursing students. Teach Learn Nurs 2023; 18(3): e1-8. http://dx.doi.org/10.1016/j.teln.2023.01.008
- [4] Tuomikoski AM, Ruotsalainen H, Mikkonen K, Kääriäinen M. Nurses' experiences of their competence at mentoring nursing students during clinical practice: A systematic review of qualitative studies. Nurse Educ Today 2020; 85: 104258. http://dx.doi.org/10.1016/j.nedt.2019.104258 PMID: 31830638
- [5] Wang AH, Lee CT, Pina VR. A virtual peer mentoring intervention for baccalaureate nursing students: A mixed-methods study. J Prof Nurs 2022; 41: 33-42.
- http://dx.doi.org/10.1016/j.profnurs.2022.04.006 PMID: 35803657
 [6] Thomson R, Docherty A, Duffy R. Nursing students' experiences of mentorship in their final placement. Br J Nurs 2017; 26(9): 514-21.
 - http://dx.doi.org/10.12968/bjon.2017.26.9.514
- $\label{eq:continuous} \mbox{[7] Gularte-Rinaldo} \mbox{ J, Baumgardner } \mbox{ R, Tilton } \mbox{ T, Brailoff } \mbox{ V.}$

- Mentorship respect study: A nurse mentorship program's impact on transition to practice and decision to remain in nursing for newly graduated nurses. Nurse Lead 2023; 21(2): 262-7. http://dx.doi.org/10.1016/j.mnl.2022.07.003 PMID: 35990373
- [8] Lorenzetti DL, Nowell L, Jacobsen M, et al. The role of peer mentors in promoting knowledge and skills development in graduate education. Educ Res Int 2020; 2020: 1-9. http://dx.doi.org/10.1155/2020/8822289
- [9] Lim S, Xin Min L, Chan CJW, Dong Y, Mikkonen K, Zhou W. Peer mentoring programs for nursing students: A mixed methods systematic review. Nurse Educ Today 2022; 119: 105577. http://dx.doi.org/10.1016/j.nedt.2022.105577 PMID: 36179425
- [10] Bhurtun HD, Azimirad M, Saaranen T, Turunen H. Stress and coping among nursing students during clinical training: An integrative review. J Nurs Educ 2019; 58(5): 266-72. http://dx.doi.org/10.3928/01484834-20190422-04 PMID: 31039260
- [11] Tiew LH, Koh CSL, Creedy DK, Tam WSW. Graduate nurses' evaluation of mentorship: Development of a new tool. Nurse Educ Today 2017; 54: 77-82. http://dx.doi.org/10.1016/j.nedt.2017.04.016 PMID: 28494331
- [12] Mubuuke AG, Munabi IG, Mbalinda SN, et al. Development of a feedback framework within a mentorship alliance using activity theory. Afr J Health Prof Educ 2021; 13(4): 246-51. http://dx.doi.org/10.7196/AJHPE.2021.v13i4.1291 PMID: 35991467
- [13] Chen Y, Watson R, Hilton A. The structure of mentors' behaviour in clinical nursing education: Confirmatory factor analysis. Nurse Educ Today 2018; 68: 192-7. http://dx.doi.org/10.1016/j.nedt.2018.06.018 PMID: 29958145
- [14] Lovrić R. Nursing students' expectations and evaluations of mentors' competences and mentors' self-evaluations as indicators of mentoring process quality. Am J Nurs Sci 2017; 6(5): 382. http://dx.doi.org/10.11648/j.ajns.20170605.12
- [15] Froehlich D, Gegenfurtner A. Social support in transitioning from training to the workplace: A social network perspective. Relationships in educational work fields and their transitions across the life stages. Klinkhardt 2019; pp. 208-22.
- [16] Wieman C, Gilbert S. The teaching practices inventory: A new tool for characterizing college and university teaching in mathematics and science. CBE Life Sci Educ 2014; 13(3): 552-69. http://dx.doi.org/10.1187/cbe.14-02-0023 PMID: 25185237
- [17] Harvey S, Uren CD. Collaborative learning: Application of the mentorship model for adult nursing students in the acute placement setting. Nurse Educ Today 2019; 74: 38-40. http://dx.doi.org/10.1016/j.nedt.2018.11.022 PMID: 30578971
- [18] Nowell L. Mentorship in nursing academia: A qualitative study and call to action. J Nurs Educ Pract 2018; 9(3): 85. http://dx.doi.org/10.5430/jnep.v9n3p85
- [19] Nowell L, Norris JM, Mrklas K, White DE. A literature review of mentorship programs in academic nursing. J Prof Nurs 2017; 33(5): 334-44. http://dx.doi.org/10.1016/j.profnurs.2017.02.007 PMID: 28931480
- [20] Lavoie-Tremblay M, Sanzone L, Aubé T, Bigras C, Cyr G, Primeau G. A university/healthcare institution mentorship programme: Improving transition to practice for students. J Nurs Manag 2020; 28(3): 586-94.
 - http://dx.doi.org/10.1111/jonm.12960 PMID: 31958196
- [21] Arbabi H, Johnson J, Forgrave D. The effect of preceptorship on nurses' training and preparation with implications for Qatar: A literature review. J Nurs Educ Pract 2018; 8(7): 44. http://dx.doi.org/10.5430/jnep.v8n7p44
- [22] Kachaturoff M, Caboral-Stevens M, Gee M, Lan VM. Effects of peer-mentoring on stress and anxiety levels of undergraduate nursing students: An integrative review. J Prof Nurs 2020; 36(4): 223-8.
- http://dx.doi.org/10.1016/j.profnurs.2019.12.007 PMID: 32819548 [23] Creta AM, Gross AH. Components of an effective professional
- [23] Creta AM, Gross AH. Components of an effective professional development strategy: The professional practice model, peer feedback, mentorship, sponsorship, and succession planning.

- Semin Oncol Nurs 2020; 36(3): 151024. http://dx.doi.org/10.1016/j.soncn.2020.151024 PMID: 32402725
- [24] Natesan S, Jordan J, Sheng A, et al. Feedback in medical education: An evidence-based guide to best practices from the council of residency directors in emergency medicine. West J Emerg Med 2023; 24(3): 479-94. http://dx.doi.org/10.5811/WESTJEM.56544 PMID: 37278777
- [25] Kwame A, Petrucka PM. A literature-based study of patientcentered care and communication in nurse-patient interactions: Barriers, facilitators, and the way forward. BMC Nurs 2021; 20(1): 158. http://dx.doi.org/10.1186/s12912-021-00684-2 PMID: 34479560
- [26] Moscaritolo LM. Interventional strategies to decrease nursing

- student anxiety in the clinical learning environment. J Nurs Educ 2009; 48(1): 17-23.
- http://dx.doi.org/10.3928/01484834-20090101-08PMID: 19227751
- [27] Mikkonen K, Tomietto M, Tuomikoski AM, et al. Mentors' competence in mentoring nursing students in clinical practice: Detecting profiles to enhance mentoring practices. Nurs Open 2022; 9(1): 593-603. http://dx.doi.org/10.1002/nop2.1103 PMID: 34726336
- [28] Pedregosa S, Fabrellas N, Risco E, et al. Effective academicpractice partnership models in nursing students' clinical placement: A systematic literature review. Nurse Educ Today 2020; 95: 104582. http://dx.doi.org/10.1016/j.nedt.2020.104582 PMID: 33049559