

Roleplay Simulation of Therapeutic Communication for Nursing Students in a Psychiatric Nursing Course

Jacqueline M. Arnone¹, Richard P. Conti², and Joseph H. Preckajlo³

Abstract

A core competency for psychiatric nurses is the ability to effectively communicate with patients and construct a therapeutic relationship to render optimal nursing care. Opportunities to provide rich and rewarding psychiatric clinical experiences to undergraduate nursing students are encumbered by competition for specialized clinical experiences, lack of clinical sites, faculty to oversee clinical rotations, and acuity of patients. The use of simulation in nursing is common in most areas but lacking in mental health nursing. We conducted a pre-test, post-test quasi-experimental descriptive, cross-sectional design that explored whether previous research findings regarding the perceptions of Saudi Arabian baccalaureate nursing students use of roleplay as a teaching strategy in psychiatric nursing was generalizable to American baccalaureate nursing students. Data were collected using a six-item demographic questionnaire and the *Psychiatric Nursing Students' Preference Survey*. Data were analyzed using univariate analysis (frequencies, means, and standard deviation) and bi-variate analysis (independent *t*-tests and correlation). Significant differences were found for items indicating that students enjoyed roleplaying exercises, felt they were helpful in clinical and theory subjects, and enhanced critical thinking skills. No significant differences were found for GPA and any items on the *Psychiatric Nursing Students' Preference Survey*. The results of the present study suggest that roleplaying exercises can be a valuable teaching tool for psychiatric nursing students in both clinical and theory subjects. While the present study was conducted before the COVID-19 pandemic, implications for nursing practice related to the pandemic are discussed.

Keywords: therapeutic communication, mental health nursing education, simulation

Nursing education is not preparing nurses to practice today; it is preparing nurses to practice tomorrow (Institute of Medicine [IOM], 2011; National Advisory Council on Nurse Education and Practice [NACNEP], 2010). As health care continues to shift from hospitals to community-based centers, the "new nurse for the 21st century" will need the advanced critical thinking skills to address the multiple, complex health needs of older patients and aging populations across a variety of settings (IOM, 2011; NACNEP, 2010).

Jansen and Venter (2015) state there is widespread concern regarding nursing shortages in psychiatry. Numerous investigations report a concerning trend (Kaas, 2020). The looming shortage of psychiatric nurses is due to undergraduates not choosing psychiatric nursing as a career path; perceiving the specialty area as less than popular, unfavorable, or even dangerous (Haddad et al., 2020; Ong et al., 2017; Happell, 2001; Holmes, 2006; Puskar & Bernardo, 2003). To change the current perceptions surrounding psychiatric nursing, Jansen and Venter (2015) recommend introducing innovative teaching strategies into the curriculum to improve the experiential learning of potential psychiatric nursing students. The ways nurses were educated and practiced in the 20th century are not adequate to meet the population's health needs in the 21st century. Indeed, a transformation of educational curriculum and practice standards is warranted to meet the future health requirements of the population (Hubbard, 2014; IOM, 2011; Kaas, 2020; NACNEP, 2010).

A core competency for psychiatric nurses is the ability to effectively communicate with patients in order to construct a therapeutic relationship and render optimal nursing care (Hubbard, 2014; Webster, 2014). Opportunities to provide rich and rewarding psychiatric clinical experiences to nursing students are encumbered by competition for specialized clinical experiences, lack of clinical sites with faculty to oversee the clinical rotations, and acuity of patients (Webster, 2014).

¹ School of Health Sciences, Nursing Program, Stockton University. Email: Jacqueline.Arnone@stockton.edu

² School of Psychology, Kean University

³ School of Psychology, Kean University

All of these factors severely impede students with the prospect of rendering nursing care to a cross-section of patients with conventional psychiatric diagnoses (Webster, 2014; Webster et al., 2012). Additionally, nursing students may be challenged when communicating with psychiatric patients, as each patient is unique and can potentially be a source of student anxiety (Thompson-Martin & Chanda, 2016).

One means to address this challenge is to add roleplay simulations to the mental health nursing curriculum. Simulation in nursing is common in most areas but sorely lacking in mental health nursing (Thompson-Martin & Chanda, 2016). Furthermore, there is a paucity of studies that have examined the utilization of therapeutic communication simulations in mental health education. Jackson and Back (2011) state that roleplay use in small cohorts is an essential technique to facilitate a learner's development of the competencies necessary to take part in conversations with seriously ill patients. They contend that setting clear goals, providing timely and well-positioned feedback to students, and utilizing debriefing after the roleplay encourages a greater depth of proficiencies and fosters self-awareness in the students.

In a study of Saudi Arabian baccalaureate nursing students, Dawood (2013) explored perceptions surrounding the roleplay of therapeutic communication as a teaching strategy in a psychiatric nursing environment. The findings demonstrated that roleplay was an effective teaching strategy in psychiatric nursing. Furthermore, the author maintains the importance of acquiring well-honed interpersonal skills and therapeutic communication when caring for a population reliant on therapeutic outcomes. Other areas demonstrating a positive effect on the students included: enhanced communication skills, fuller integration between theory and practice, and increased adaptive coping skills for anxiety, fear, and doubts before facing actual patients in the clinical milieu (Dawood, 2013). Finally, in addressing the students' affective domain, the study reported the students highly valued collaborative teamwork with classmates, the active participation of the simulation, and the innovation of the simulation.

This study was a pre-test, post-test quasi-experimental descriptive, cross-sectional design that employed survey methods to explore nursing students' perspectives about roleplay of therapeutic communication as a teaching strategy in a psychiatric nursing course. This study investigated whether the research findings reported by Dawood (2013) regarding the perceptions of Saudi Arabian baccalaureate nursing students use of roleplaying as a teaching strategy in psychiatric nursing are generalizable to American baccalaureate nursing students. The main research question is: will nursing students at a suburban liberal arts state university in New Jersey perceive roleplay as an effective teaching strategy in a psychiatric nursing course? A demographic survey and the *Psychiatric Nursing Students' Preference Survey* (Dawood, 2013) will be utilized to explore this question. The interest in doing this proposed study was stimulated by:

1. The limited research into the effectiveness of standardized patient experiences (SPEs) through roleplay in teaching therapeutic communication to baccalaureate nursing students (Webster, 2014)
2. The looming shortage of psychiatric nurses (Jansen & Venter, 2015); and
3. Baccalaureate nursing students' perception of the specialty as unfavorable and unpopular as a future career choice (Jansen & Venter, 2015).

Roleplay, when added to the didactic portion of the mental health nursing curriculum, will instill students with the ability to gain the knowledge, skills, and attitudes needed to meet the varying needs of psychiatric patients in a safe, controlled, and non-threatening environment while promoting teamwork and collaboration (Felton & Wright, 2017; Quality Safety and Education of Nurses [QSEN] Institute, 2014). In addition, the use of therapeutic communication and the use of self as a therapeutic tool sits at the nexus of psychiatric nursing (Townsend & Morgan, 2018). Therefore, through the students' roleplaying as patient, nurse, and observer, feedback and subsequent debriefing after the simulation exercise will help foster self-reflection and bridge theory to practice for when the students are in their clinical rotations rendering care for actual patients.

Goals of the present study

The goals of this study were to determine:

1. Nursing students' preference of teaching strategies in psychiatric nursing (Dawood, 2013).
2. Nursing students' perspectives about roleplay of therapeutic communication as a teaching strategy in psychiatric nursing (Dawood, 2013).
3. If a relationship exists between enrolled students' academic program and their perspective about roleplay of therapeutic communication as a teaching strategy in psychiatric nursing (Dawood, 2013).
4. If a relationship exists between accelerated and pre-licensure nursing students' Grade Point Averages (GPAs) and their perspective about roleplay of therapeutic communication as a teaching strategy in psychiatric nursing (Dawood, 2013).

5. If a relationship exists between the portrayed roles of patient, nurse, and observer, and the students' perceived level of meaningfulness in each role, to the students' learning experience.

Method & Research Design

A quasi-experimental descriptive cross-sectional research design was utilized to conduct this study.

Setting

The roleplay simulation was conducted at a large Northeastern University. The study site with informed consent and surveys was uploaded to *Qualtrics Research Suite*. Participants then completed the self-administered demographic questionnaire and the *Psychiatric Nursing Students' Preference Survey* (Dawood, 2013).

Participants

Participants ($N = 51$) were nursing students enrolled in a Psychosocial Nursing course in both an accelerated and pre-licensure nursing program. See Table 1 for participant demographics.

Students were given a therapeutic communication roleplay to enact how to introduce themselves as the psychiatric nurse to the psychiatric patient and begin to create a nurse-patient therapeutic relationship. The students were divided into triads where one student played the psychiatric nurse, one student played the patient, and the third student acted as the observer. The roles were then reversed, so all students had a chance at serving in all three positions.

Data Collection Tools

Data were collected using a six-item demographic questionnaire that the principal investigator developed. Information gathered included: students' age, sex, students' nursing program, preference of teaching method, Grade Point Average (GPA), and A 4-point Likert scale about statements regarding the students' role play in the parts of the patient, the nurse, and the observer. In addition, students were asked to describe, in their own words, their roleplay experience in a psychiatric nursing course. They were also asked to list the best aspects of the roleplay and any challenges they faced during the roleplay simulation.

The second survey, *Psychiatric Nursing Students' Preference Survey* (Dawood, 2013), is a 20-item 5-point Likert scale ranging from (5) *strongly agree* to (1) *strongly disagree*. The maximum possible total score is 100, with the minimum possible total score equaling twenty (Dawood, 2013). Testing content validity of the questionnaire was achieved through revision by several experts in psychiatric nursing and education (Dawood, 2013). The tool's reliability was tested by administering the questionnaire to 15 nursing students with subsequent administration of the initial questionnaire to the original 15 students that had been excluded from the study (Dawood, 2013). Results of the data utilized test-retest analysis and reported robust test reliability of 0.89 where $p < 0.05$ (Dawood, 2013). A pilot study comprised of 15 students was performed by Dawood (2013) to test the questionnaire for feasibility, clarity of questions, and to estimate the time to complete the questionnaire. Subjects of the pilot study reported requiring 15 - 20 minutes to complete the questionnaire.

Data were collected (pre-test: prior to the roleplay simulation) using the demographic questionnaire and the *Psychiatric Nursing Students' Preference Survey* (Dawood, 2013). The pre-test study site had its own assigned QR code and web link and was delineated on the recruitment ad. Once the participants complete the roleplay simulation, they will complete the two surveys again (post-test) by either scanning the QR code or clicking on the web link for the post-test study site. The post-test study site had its own assigned QR code and web link and was delineated on the recruitment ad. Additionally, for the post-test, the participants were also asked to provide feedback regarding their experience by answering two prompted questions that were added to the Qualtrics post-test study site.

Ethical Issues

All participants were treated in accordance with the *Ethical Principles of Psychologists and Code of Conduct* (American Psychological Association, 2016) and in accordance with Institutional Review Board guidelines. No deception was used in the study, and participants were fully informed of the nature of the experiment and their rights as a participant in a research study through an Informed Consent form, which they were asked to sign and date. Participants were provided a copy of their Informed Consent. All participation was voluntary.

Data Analysis

Data were coded for entry and analyzed using Statistical Software Package for Social Sciences (SPSS version 22.0). Data were analyzed using univariate analysis (frequencies, means and standard deviation) and bivariate analysis (independent *t*-tests and correlation).

Results

A total of 51 nursing students completed both the pre- and post-test surveys. Repeated measures t-tests were conducted on the item and total scores to assess if there was a significant increase in the scores after participation in the role play.

Overall, significant differences were found for items indicating that students enjoyed roleplaying exercises, felt they were helpful in clinical and theory subjects, and they enhanced critical thinking skills. No significant differences were found for GPA and any items on the *Psychiatric Nursing Students' Preference Survey*. Table 2 provides descriptive statistics, the results of the *t*-tests, and effect sizes for each item.

Discussion

With both the number of faculty available to educate new nurses and the number and availability of clinical sites is diminishing (American Association of Colleges of Nursing, 2020), there will be an increasing demand for simulation-based learning strategies such as roleplaying in nursing education. The results of the present study suggest that roleplaying exercises can be a valuable teaching tool for psychiatric nursing students in both clinical and theory subjects. Previous research has demonstrated that roleplaying exercises enhance critical thinking skills and student self-confidence (Dawood, 2013; Presti, 2019; Rashid & Qaisar, 2017), and it is a preferred method of instruction among students (Powers et al., 2019; Zaidi et al., 2017). Students in the present study endorsed these findings. However, students also felt that roleplaying did not help them remember information more than traditional methods. With these considerations in mind, simulation-based learning strategies such as roleplay can serve as a valuable adjunct to traditional teaching methods in nursing education.

Limitations

The current study had some limitations. The study had a small sample size, and only nursing students enrolled in the mental health nursing course were asked to participate in the study. This factor limits the generalizability of the results. Interestingly, there were more female than male participants in the study, which could have impacted responses to the pre-test and post-test surveys.

Implications to professional nursing practice

While this study was completed prior to the COVID-19 pandemic, the findings of this study and their implication to professional nursing practice could not be more critical. Since the pandemic began, social and economic changes have affected all aspects of health, including mental health (Xiong et al., 2020). The authors report those with pre-existing mental health conditions have had their conditions aggravated, and many with no mental health history have developed new substance use disorders, anxiety, depression, or post-traumatic stress disorder (PTSD). Anxiety, PTSD, and depression all had prevalence rates of about 50% in the general population. Those under 40 years of age also experienced more distress, possibly because these are the persons most likely to be students, financial supporters of the family, and caregivers (Xiong et al., 2020). The Center for Disease Control and Prevention's (CDC) online survey conducted between June 24-30 of over 5000 participants in the United States found that 41% reported battling mental health problems arising from the pandemic (Czeisler et al., 2020). The authors state that self-reported causal factors included the pandemic itself and the interventions (physical distancing and shelter in place mandates) to mitigate further transmission of the virus. Alarming, racial/ethnic minorities, unpaid adult caregivers, younger adults (18-25 years old), and essential workers (healthcare workers and food industry) reported experiencing disproportionately graver mental health outcomes (anxiety and depression), elevated substance use, and increased suicidal ideation (Czeisler et al., 2020). The findings strongly suggest that mental health needs to be a priority, and more mental health nurses are necessary to care for this growing population.

Panchal et al. (2021) portend dire implications for individuals with new or pre-pandemic mental health and substance use disorders, noting both novel and existing barriers to accessing services. Reduced access to substance use and mental health treatment is partly due to an existing dearth of mental health professionals, which has significantly worsened since the pandemic. Kimley (2021) echoes the exigency for additional behavioral and psychiatric nurses to meet the burgeoning influx of individuals with new mental health and substance use disorders.

Baccalaureate nursing students must be able to create therapeutic relationships by using effective and evidenced-based therapeutic communication techniques. Integration of therapeutic communication simulations is needed in undergraduate nursing education, for utilizing this strategy as an adjuvant teaching modality to theory could help foster a less negative perception of choosing this specialty as a career for future clinical practice and assist in meeting the needs of the growing population with mental health issues.

Conclusion

One of the many challenges in educating nursing students in the nuances of healthcare is preparing them

for the unexpected. As the number of individuals with mental health disorders increases, the need for more proactive and realistic training is paramount. While roleplaying is not a substitute for clinical contact, it can provide practical and pragmatic opportunities for students and instructors alike to explore novel methods of instruction, particularly in psychiatry, where navigating the unexpected is common.

Based on the results of this project, the use of roleplaying during simulation can provide ample opportunities not just for nursing students but all future health care providers. In addition, it stimulates communication and motivation among the participants while increasing their knowledge and confidence in their performance, which will ultimately benefit the patient.

References

- American Association of Colleges of Nursing. (2020). *Fact sheet: Nursing shortage*.
- American Psychological Association. (2016). *Ethical principles of psychologists and code of conduct*. Author.
- Czeisler, M.É., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Weaver, M. D., Robbins, R. Facer-Childs, E. R. Barger, L. K., Czeisler, C. A., Howard, M. E., Shantha M. W., & Rajaratnam, S. M. W. (2020). Mental health, substance use, and suicidal ideation during the COVID-19 pandemic — United States, June 24–30, 2020. *Morbidity and Mortality Weekly Report*, 69(32), 1049-1057. <https://doi.org/10.15585/mmwr.mm6932a1>
- Dawood, E. (2013). Nursing students' perspective about roleplay as a teaching strategy in psychiatric nursing. *Journal of Education and Practice*, 4(4), 38-48.
- Felton, A., & Wright, N. (2017). Simulation in mental health nurse education: The development, implementation, and evaluation of an educational intervention. *Nurse Education in Practice*, 26, 46-52. <https://doi.org/10.1016/j.nepr.2017.06.005>
- Haddad, L.M., Annamaraju, P., & Toney-Butler, T. J. (2020). *Nursing shortage*. StatPearls. [Internet]. <https://www.ncbi.nlm.nih.gov/books/NBK493175/>
- Happell, B. (2001). Who wants to be a psychiatric nurse? Novice student nurses' interest in psychiatric nursing. *Journal of Psychiatric and Mental Health Nursing*, 6, 479-484. <https://doi.org/10.1046/j.1365-2850.1999.00249.x>
- Holmes, C. A. (2006). The slow death of psychiatric nursing: What next? *Journal of Psychiatric and Mental Health Nursing*, 13, 402-404. <https://doi.org/10.1111/j.1365-2850.2006.00998.x>
- Hubbard, G. B. (2014). Customized role play: Strategy for development of psychiatric mental health nurse practitioner competencies. *Perspectives in Psychiatric Care*, 50, 132-138. <https://doi.org/10.1111/ppc.12031>
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. National Academies Press. <https://doi.org/10.17226/12956>
- Jackson, V. A., & Back, A. L. (2011). Teaching communication skills using roleplay: An experienced-based guide for educators. *Journal of Palliative Medicine*, 14(6), 775-780. <https://doi.org/10.1089/jpm.2010.0493>
- Jansen, R., & Venter, I. (2015). Psychiatric nursing: An unpopular choice. *Journal of Psychiatric and Mental Health Nursing*, 22, 142-148. <https://doi.org/10.1111/jpm.12138>
- Kaas, M. J. (2020). Will we be ready? Preparing psychiatric-mental health nurses for future practice. *Journal of the American Psychiatric Nurses Association*, 26(1), 112-119. <https://doi.org/10.1177/1078390319878767>
- Kimrey, J. (2021, April 11). Demand for behavioral, psychiatric nurses on the rise due to Pandemic. [MSN News]. <https://www.msn.com/en-us/news/us/demand-for-behavioral-psychiatric-nurses-on-the-rise-due-to-pandemic/ar-BB1fwuBH>
- Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). The implications of COVID-19 for mental health and substance abuse. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
- National Advisory Council on Nurse Education and Practice. (2010). Addressing new challenges facing nursing education: Solutions for transforming the healthcare environment. www.hrsa.gov/advisorycommittees/bhpradvisory/nacnep/Reports/eighthreport.
- Ong, H. L., Seow, E., Chua, B. Y., Xie, H., Wang, J., Lau, Y. W., Chong, S. A., & Subramaniam, M. (2017). Why is psychiatric nursing not the preferred option for nursing students: A cross-sectional study examining pre-nursing and nursing school factors. *Nurse Education Today*, 52, 95-102. <https://doi.org/10.1016/j.nedt.2017.02.014>

- Powers, S. C., Morris, M. H., Flynn, H., & Perry, J. (2019). Faculty-led roleplay simulation: Going live to teach patient-centered care to nursing students. *Journal of Nursing Education, 58*(11), 665-668. <https://doi.org/10.3928/01484834-20191021-10>.
- Presti, C. R. (2019). Peer learning and roleplay to enhance critical thinking. *Nurse Educator, 44*(1), 33. <https://doi.org/10.1097/NNE.0000000000000537>
- Puskar, K. R., & Bernardo, L. (2003). Psychiatric nursing in crisis strategies for recruitment. *Journal of the American Psychiatric Nurses Association, 9*, 29-32. <https://doi.org/10.1067/mpn.2003.3>
- QSEN Institute. (2014). Quality and safety education for nurses. <http://www.qsen.org>
- Qualtrics. (2016). Provo, Utah. <http://www.qualtrics.com>
- Rashid, S., & Qaisar, S. (2017). Role play: A productive teaching strategy to promote critical thinking. *Bulletin of Education and Research, 39*(2), 197-213.
- Thompson-Martin, C., & Chanda, N. (2016). Mental health clinical simulation: Therapeutic communication. *Clinical Simulation in Nursing, 12*, 209-214. <http://dx.doi.org/10.1016/j.ecns.2016.02.007>
- Townsend, M. C., & Morgan, K. I. (2018). *Psychiatric mental health nursing concepts of care in evidence-based practice* (9th ed.). F. A. Davis.
- Webster, D. E. (2014). Using standardized patients to teach therapeutic communication in psychiatric nursing. *Clinical Simulation in Nursing, 10*, e81- e86. <https://doi.org/10.1016/j.ecns.2013.08.005>
- Webster, D. E., Seldomridge, L., & Rockelli, L. (2012). Making it real: Using standardized patients to bring case studies to life. *Journal of Psychosocial Nursing, 50*(5), 37-41. <https://doi.org/10.3928/02793695-20120410-06>
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders, 277*, 55-64. <https://doi.org/10.1016/j.jad.2020.08.001>
- Zaidi, N. N. A., Rani, M. S. A., & Rahman, Z. I. A. (2017). Challenges in performing roleplays an assessment: Students' views. *International Journal of Academic Research in Business and Social Sciences, 7*(12), 186-202. <https://doi.org/10.6007/IJARBS/v7-i12/3604>

Table 1 Participant demographics (N = 51)

Sex	n (%)
Female	42 (82.4)
Male	9 (17.6)
Age in years	
Range	20-57
20-25 years	24 (48.0)
26-30 years	2 (4.0)
31-40 years	9 (18.0)
41-50 years	7 (14.0)
51-57 years	8 (16.0)
Mean age (SD)	33.04 (12.41)
GPA	
Range	2.7-3.9
2.7-3.0	6 (12.24)
3.1-3.4	21 (42.86)
3.5-3.9	22 (44.90)
Mean GPA (SD)	3.43 (.31)

note. 1 participant failed to report age; 2 participants failed to report GPA.

Table 2							
Paired samples t-test results of psychiatric nursing students' perspectives of role play (N = 51)							
#	Statement	Pre-test		Post-test		t	d
		Mean	SD	Mean	SD		
1.	I enjoy roleplaying projects	3.27	.96	3.93	.88	3.16**	-.82
2.	If given a choice, I would prefer to do projects that include a roleplaying activity	2.93	.97	3.67	.62	-2.32*	-.60
3.	Roleplaying helps me remember information more than traditional methods	3.73	.88	3.60	.83	.41	.11
4.	I enjoy working with others during roleplaying projects	3.87	.74	4.07	.46	-1.00	-.26
5.	I prefer hands on activities compared to lecture note learning	3.33	.82	4.05	.88	-2.23**	-.57
6.	Roleplays improved my knowledge about nursing	3.40	.51	4.00	.76	-2.20*	-.56
7.	Conduction of roleplays in this psychiatric nursing will help my future clinical practice	4.00	.93	3.93	.70	.19	.05
8.	Roleplay is an interesting mode of information transfer	3.27	1.22	3.91	.71	-2.12*	-.57
9.	I would recommend integrating roleplays in the curriculum	3.40	.91	4.07	.59	-2.47*	-.64
10.	Roleplays helped me to gather academic information	3.00	1.13	4.27	.59	14.46**	-1.15
11.	Roleplays helped in improving my communication skills	3.60	.78	4.20	.56	-2.55*	-.70
12.	Roleplays helped in removing barrier of communication with the instructor	3.73	.59	3.87	.64	-.62	-.16
13.	Roleplays led to critical thinking	3.60	.74	4.27	.70	-2.47*	-.64
14.	Roleplays generated better attention span than lectures	3.80	.75	4.07	.46	-1.10	-.28
15.	Roleplays should be incorporated in clinical subjects only	2.60	.74	2.80	.56	-.82	-.21
16.	Roleplays should be incorporated in theory subjects only	3.13	.99	3.80	.67	-.51	-.06
17.	Roleplays should be incorporated in both clinical and theory subjects	3.40	.77	4.19	.55	-2.87*	-.74
18.	Roleplays helped me in developing my self confidence	3.72	1.16	3.67	.49	.193	.04
19.	Roleplay is very useful method of teaching	3.27	1.03	4.00	.54	-2.44*	-.63
20.	Roleplays enabled me to cope with anxiety and fear before facing future real-life care situations	3.80	1.27	3.40	.83	.90	.23
	* $p < .05$ ** $p < .01$						