

The Influence of An Orientation Program on International Nursing Students' Academic Adjustment

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ABSTRACT

Background: Onshore international students often face a variety of challenges in adjusting to their new surroundings. As a result, as part of a systematic approach to improving educational outcomes, nursing faculty must incorporate innovative orientation programs as part of their mentoring processes to address these issues for improving the educational outcomes.

Aim: To assess the impact of an orientation program on the international nursing students' adjustment to their academic life.

Methods: A quasi-experimental (one group pre-posttest) design was utilized to achieve the aim of the present study.

The study was conducted at Cairo University's Faculty of Nursing's Education Development Center. The research invited a convenient sample of (70) international nursing students at the first academic level to participate in the study. Three tools for data collection were used as follows; Personal data, student's knowledge test & adjustment with college.

Results: Pre- orientation program implementation, immediately after, and three months later, a statistically significant differences in the international nursing students' adjustment and knowledge improvement mean scores were observed.

Conclusion: Introducing the orientation program improved the adjustment of international nursing students.

Keywords: International Nursing Students, Orientation Program, Knowledge, Adjustment, College Life.

INTRODUCTION

Growing the number of international students and attracting them has become a top corporate priority, with a focus on ways to enhance the services offered (Hoffmeyer-Zlotnik, & Grote, 2019). This is because the international nursing student's adjustment process presents numerous challenges, including academic, economical, health, social, and personal challenges, as well as unique challenges related to international nursing clinical practices such as communicating with patients, staff nurses and physician. In addition, they experience homesickness followed by inability to learn new behaviors to adapt to the new culture (Eden, Fleet & Cominos, 2021).

In recognition of the importance of international students' adjustment, their institutions have established a variety of structured orientation programs to help and facilitate the adjustment processes (Mohamed, 2020). Orientation programs have demonstrated success in helping the international nursing students' adjustment in many ways such: better understand the transition into college; become familiar with their institution; feel comfortable with interacting with faculty staff and administration, and learn more about one's self. (Hill, Posey, Gómez & Shapiro, 2018).

A well- organized orientation can also help international nursing students become aware of aspects of university life and then make better adjustment. An understanding of the experiences of international students and how they differ from their national counterparts provides an important first step in developing approaches to facilitate adjustment to academic and social life (Alsahafi, & Shin, 2019).

Significance of the Study: The first year of the international students in the academic life has been identified as a critical period of adjustment and those students who complete the first year of college are more likely to persist to graduation. In Egypt in the context of nursing, the International students are faced with different challenges related to clinical practices, homesickness and inability to adapt to the new culture thus the implementation of the orientation program as a part of the international nursing student admission schedule is important to adjust to their academic life (Narouz 2018).

Student's orientation program should provide information that would assist them in learning about the institution. (Webster, 2018). Where, the literature reviews have been found many benefits that students experience as a result of participating in orientation programs include a sense of belonging at the institution, increased perceived social support, increased academic success, a positive effect on social skills, greater adjustment to college life, improved self-confidence and increased appreciation of outdoor activities (Posey et al., 2018).

This study aimed to assess the impact of an orientation program on the international nursing students' adjustment to their academic life.

Research hypothesis:

H1: After implementing the orientation program, the international nursing students' adjustment scores will be higher than pre-intervention.

H2: After implementing the orientation program, the international nursing students' knowledge posttest scores will be higher than the pretest scores.

MATERIALS AND METHODS

Research Design: A quasi-experimental (one group pre-post test) design was utilized.

Sample: A convenient sample of (70) international nursing students at the first academic level were accepted to participate in the study out of 131 Newcomer (newly admitted) international nursing students

Setting: This study was conducted at the education development center at Faculty of Nursing - Cairo University. It was available for two days weekly, two hours in each day. Which contains some of educational media as data show, white board and flip chart. The center accommodates for 40 students/session.

Data Collection Tools: Tools were divided into 3 main parts: **Part I**, Personal data characteristics of the international nursing students, it includes, age, gender, marital status, nationality, first language and second language); **Part II**, Students Adjustment with College Questionnaire (SACQ): This tool was modified by the researcher guided by Baker and Siryk (1989). The scale consists of 58 items. The items were grouped in to four categories under the following heading: academic adjustment, social adjustment, personal-emotional adjustment and institutional attachment. All items are answered using a 5-point Likert scale format. This tool's reliability is obtained at (0.95) compared by acceptable range of Cronbach's alpha (0.7) which means it is highly acceptable; and **Part III:** International Nursing Student's knowledge Test: This tool was developed by the researcher based on related literature review which concerned with the assessment of the participants' knowledge about Nursing faculty educational and social services and Adjustment's strategies. The test consists of 22 questions, each question was assigned a score of "1" for correct answer and "0" for incorrect answer.

Procedure: The study was conducted on the following five phases: preparatory, assessment, planning, implementation, and evaluation phase.

Preparatory phase: The initial approval obtained from the research and ethical committee then official permission from the education and student affairs and director of the international student's office at the faculty of nursing - Cairo university. The orientation program developed and the study tools based on the national and international related literature concerning the topic of the study, tools and the orientation program validation, and reliability done. Also, a list of the international nursing students at the first academic level prepared.

A meeting was conducted by the investigator with the participants to explain the objectives of the study as well as to obtain a written consent to participate in the study and a registration form to get acquainted with students.

Assessment phase: The investigator met the participants and distributed the student's adjustment with college questionnaire (SACQ). The (SACQ) was assessed pre-program to assess the participants' adjustment before the program implementation; immediate & after three months of the program implementation to assess participants' adjustment changes.

To assess the participants' knowledge, the knowledge test was distributed pre- program to assess the participants' knowledge before the program implementation; and

immediate & after three months of the program implementation to assess participants' knowledge changes stability.

Planning phase: Based on the data collected from the participants' adjustment questionnaire and knowledge test. Accordingly, the program's general and specific objectives, content, methods of coordination, place of the orientation program, the way of grouping the trainee, methods of teaching, teaching aids, and the appropriate time for scheduling the program session's hours were specified.

Implementation phase: The program was implemented in the study setting (The faculty of nursing - Cairo university). The program content was covered in forty-two hours conducted in seven sessions/group, offered in one session weekly/group, each session lasted to two hours .The program content covered the following topics: introduction for the program, historical back ground regarding Cairo-university and faculty of nursing, credit hours system, emergency hotlines, international students' office, international students' advising staff, health insurance, nursing code of ethics, social and cultural diversity, students time management, culture shock, stress management, academic teamwork.

The first session was attended by the investigator advisor and all participants. During this session the investigator clarified how the orientation program assisted the participants to be familiar, oriented and adjusted to their academic life. After that the investigator explained the program plan, objectives, schedule and content. At the beginning of each session an orientation to the session objective took place.

Daily feedback was given at the end of each session. Teaching methods used during the program implementation were: - lectures, Interactive discussions, brain storming, and simulation scenarios. Also, educational media used during the program was data show, white board and flip chart. Supportive material for each session such as power point slides, minute papers, videos, pictures and games were used.

5-Evaluation phase: The program outcome was evaluated through the same relevant selected tools immediately after the program implementation and at three months follow up.

Ethical and legal considerations: An official written approval letter to conduct the study was obtained from the scientific research ethical committee of the faculty of nursing Cairo University to carry out the study. Participation in the study was voluntary based on the participants' acceptance to give informed consent; and the faculty policy relating to the protection of research participants' privacy and confidentiality was described.

Data Analysis: A Statistical Package for the Social Sciences (SPSS), version 21 is used for statistical analysis of data, Parametric inferential statistics as descriptive (mean &SD). The significant level of all statistical analyses was at 0.05 (p value). Cronbach's Alpha was used and the literature has indicated 0.7 to be an acceptable reliability coefficient (Barbera, Naibert, Komperda & Pentecost, 2020).

RESULTS

Table 1: Distribution of the international nursing students according to personal data.

Variables	Values	n	%age
Gender	Male	22	31.4
	Female	48	68.6
Age	From 17-19	43	61.4
	From 20-22	27	38.6
		Mean=18.98	SD=1.41
Marital status	Single	69	98.6
	Married	1	1.4
Nationality	African countries	60	85.7
	Asian countries	10	14.3
First language	Arabic	46	65.7
	Other	24	34.3
Second language	English	70	100.0

Table 1 shows that (68.6%) of the study participants were females and the rest were males. (61.4%) of the study participants were between the ages of 17 and 19 year, while the rest (38.6%) were between the ages of 20 and 22 year. 98.6% of them were single and the rest were married. African countries accounted for (85.7 %) of the total, followed by Asian countries (14.3 %). The table also shows that Arabic was the first language of less than two-thirds of the study participants (65.7%), whereas English was their second language.

Table 2 compares the overall knowledge levels of international nursing students throughout the program. It is clear that there was a statistically significant difference in total knowledge score during different periods of assessment ($X^2 = 196.8, P = .0001^*$). As shown, the majority (81.4%) of the study participants scored low level (<11 correct items) preprogram, none of them scored low level post program, while only (14.3%) of them had low level score three months post program. Also, is clear that (15.7%) of students scored moderate level (from 11 to 16 correct items) preprogram, with (22.9%) post program and (74.3%) three months later. Data in the same table also marked improvement in students' total knowledge level as (77.1%) of them had high level (17 to 22 correct items) post

Table 2: Percentage distribution of the international nursing students' knowledge levels throughout the program (pre, immediate post and follow-up).

Students' knowledge levels	Pre -program	Post-program(Immediate)	Follow program(3months) -up
Low (<11 correct questions)	57(81.4%)	0	10(14.3%)
Moderate (from 11 to 16 correct questions)	11(15.7%)	16(22.9%)	52(74.3%)
High (17 to 22 correct questions)	2(2.9%)	54(77.1%)	8(11.4%)

$X^2 196.8$ P vale .0001*

Table 3: Percentage distribution of the international nursing students' adjustment levels throughout the program (pre, immediate post and follow-up).

Students' knowledge levels	Pre -program	Post- program(Immediate)	Follow program(3months) -up
Low adjustment (<145 out of 290)	11(15.7%)	0	0
Moderate adjustment (between 145 and 217)	54(77.1%)	37(52.9%)	19(27.1%)
High adjustment (217 to 290)	5(7.1%)	33(47.1%)	51(72.9%)

$X^2 74.9$ P vale .0001*

program, and (11.4%) three months post program implementation compared to only (2.9%) preprogram.

Table 3 compares the adjustment levels of international nursing students throughout the program. It is clear that there was a statistically difference between the international nursing students' adjustment during different periods of assessment ($X^2 = 74.9, P = .0001^*$). As shown, (15.7%) of students scored low adjustment level (<145 out of 290) preprogram. Also, is clear that (77.1%) of students scored moderate adjustment level (between 145 and 217) pre-program, with (52.9%) post program and (27.1%) three months later. Data in the same table showed an improvement in students' overall adjustment level, with 47.1 % having a high adjustment level (217 to 290) immediately after the program and 72.9% having a high adjustment level (3 months after the program) compared to just (7.1%) pre- Intervention.

Table 4 shows a statistically significant difference ($x^2 = 39.5, P = 0.0001$) between the overall knowledge levels and adjustment levels of international nursing students in the program (pre, immediate post, and follow-up), despite no statistically significant difference ($p > .05$) between participants' knowledge levels and degree of adjustment in pre, immediate post, and 3 months post program implementation period.

Table 5 shows a statistically significant difference ($p < .05$) among study participants' nationality and their adjustment level throughout the program (pre, immediate post and follow-up) ($F = 2.22, P = .01$). In addition, data in the same table exhibited an insignificant difference ($p > .05$) among study participants' nationality and their correct knowledge score throughout the program (pre, immediate post and follow-up) ($X^2 = 0.04, P = 0.84$). Furthermore, marked improvement in students' adjustment level and correct knowledge scores post program, and 3 months post program implementation compared to preprogram was shown

Table 4: The relationship between the international nursing students' knowledge levels and their adjustment levels throughout the program (pre, immediate post and follow-up).

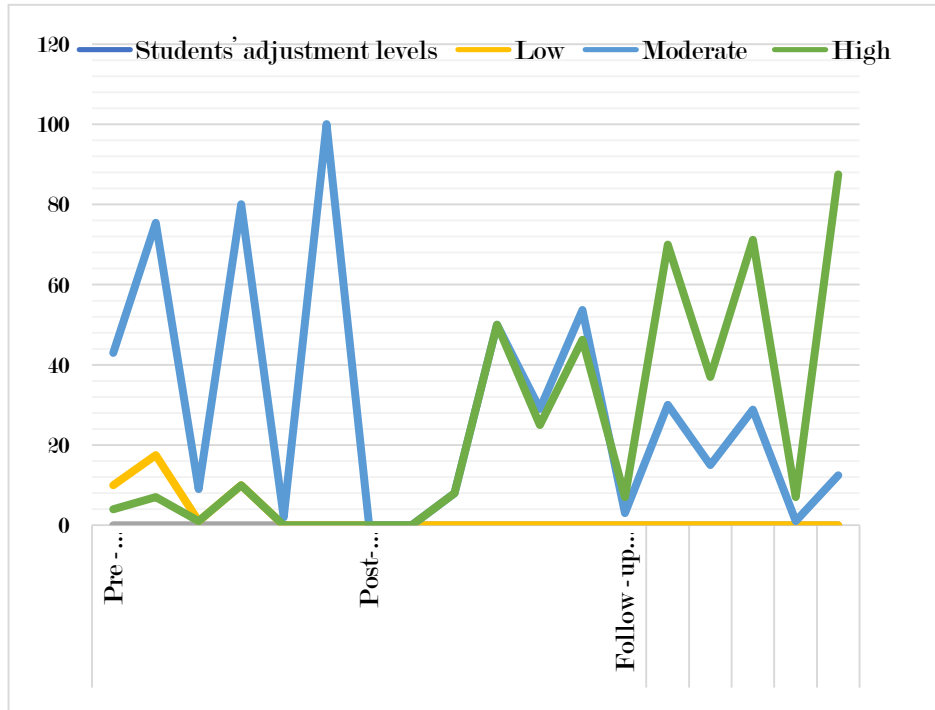


Table 5: Relations between the international nursing students' correct knowledge score and adjustment as regards their(nationality)throughout the program (pre, immediate post and follow-up).

Personal Data		Pre -program				Post- program(Immediate)				Follow -up program				F- value	p- value	
		X	SD	T- value	p- value	X	SD	T- value	p- value	X	SD	T- value	p- value			
Adjustment	African	3.1	0.42	.1	.9	3.7	0.22	0.08	0.37	.8	0.24	0.09	.34	2.22	.01*	
	Asian	3	0.29			3.6	0.7			.9	0.57					
Knowledge		Correct knowledge		X ²	0.808	Correct knowledge		X ²	0.866	Correct knowledge		X ²	0.04	0.847	0.04	.84
	African	9				18				14						
	Asian	8				17				13						

DISCUSSION

Regarding the personal data of the study participants, the result of the current study revealed that the majority was from Africa This finding could be related to Egypt considers an educational hub for international students; it ranks as one of the top attractive countries for international students, due to its position as a center for providing educational services in the Middle East and Africa so African countries grant their students many scholarships to Egypt another reason for the quality of nursing education at a lower cost at faculty of nursing Cairo university. Furthermore, the majority of sample age ranged between 17 to 19 years old. This finding could be related to most of international students enroll into university education after completing

secondary education at the age of 17 to 18 years of age. (table 1).

Moreover, the result of the current study revealed that the majority of the study sample first language was Arabic and all of them second language was English. These results could be due to the largest number of students are from Arab countries like (Sudan, Saudi Arabia, Kuwait ...ect); as their native language is Arabic and the second language is English. (table 1).

Regarding levels of the international nursing students' knowledge, results of the current study revealed that there was a statistically significant difference in total knowledge score during different periods of assessment as the majority of them had low knowledge level preprogram

while, more than three quarters had higher knowledge level immediately post program. Also, less than three quarters of them had moderate knowledge level three months post program implementation. (Table 2).

This marked improvement could be related to they did not attend any similar or related programs; they were interested with the topics during the orientation program and were initiative to learn how making the transition and adjustment to academic life; they feel welcomed at the university community, understand more about university life, and developed confidence in themselves and their abilities, so they gain knowledge easily (Table 2).

These results were supported with the findings of the study conducted by Benavides and Keyes (2016), who found that the difference in pre- and post-test is considered to be extremely statistically significant ($p < 0.0001$) and orientation program was effective. Additional agreement with the study conducted by Zhang and Garcia-Murillo (2018) who mentioned that the international students suggested that it would be very helpful if their college provides orientation programs for them addressing academic and cultural differences.

Regarding levels of the international nursing students' adjustment, results of the current study revealed that there was a statistically significant difference in total adjustment level during different periods of assessment as more than three quarters of them had moderate adjustment level preprogram. Also, the majority of them ranked between moderate and high adjustment level immediately post program and three months post program implementation. (Table 3).

This marked improvement could be contributed to many factors as: firstly, they acquiring a lot of information, making a tour inside the college and meeting the director of the international student office and academic advising during the orientation program implementation which helped them to adapt and integrate with the university academic life. Secondly, could be due to the result of their interaction with Egyptian students, professors, and workers inside the college, and their contact with the Egyptian people in transportation, housing, etc. for a period within three months. (table 3).

In the same issue, this explanation was consistent with the study conducted by Alipio (2020) who mentioned that the respondents perceived a moderate level of overall adjustment (academic adjustment, social adjustment, personal-emotional adjustment and institutional attachment) to college. Furthermore, this result was supported by Dorsett (2017) who stated that the course tended to best support and facilitated substantial student learning, which could lead to adaptation over time.

The findings of the current study indicated a statistically significant relation between the international nursing students' total knowledge levels and their adjustment levels throughout preprogram implementation, immediately post program and after three months relative to program implementation. (Table 4).

This result demonstrating that the orientation program and knowledge acquisition were effective and very essential pre requisite in increasing and improving the international nursing students' adjustment through helping students to feel excited about starting college, smooth's the transition to academic life and provided the new international nursing students with concise and accurate information to adapt faster and make successful transition from this point was congruent with the study conducted by Dindany, Vasudevan, Prasanna (2014) personal adjustment (Table 4). Statistical analysis resulted in positive findings that showed the overall positive impact of the academic orientation program on students' adjustment.

Additionally, this result was consistent with the study conducted by Mishal (2016) who found that the training program was effective on improving self-esteem, self-efficacy and adjustment include self-awareness, effective communication skills, interpersonal relationships, time management, coping with stress, managing emotions, creative and critical thinking.

The results of the current study revealed that there was a statistically significant difference among study participants' adjustment level; insignificant difference among study participants' correct knowledge scores and their nationality throughout preprogram, immediately post program and after three months relative to program implementation. This finding could be due to the international nursing students' adjustment depended on the compatibility between countries' culture and the Egyptian culture. (table 5).

In the same issue, the results of the study conducted by Ahmadi (2016) reported that there was a statistically significant relationship between international student's region, marital status, and TOEFL score with adjustment sub-scales and overall adjustment to college. Furthermore, this result was supported by the report of Shankar, Dwivedi, Balasubramaniam and Dakubo (2015) which proved that there was no significant difference in scores according to the nationality of the respondents.

CONCLUSION

The study concluded that, the implementation of an orientation program improved the adjustment of international nursing students. The current findings supported the study hypotheses. Moreover, the study exhibited a statistically significant relation between the international nursing students' total knowledge levels and their adjustment levels throughout preprogram implementation, immediately post program and after three months relative to program implementation.

Recommendations: In the light of the current study findings, the following recommendations are suggested:

- Providing a training program for the national students and colleges' staff to develop intercultural competence to interact properly with international nursing students.

- Providing a well-organized orientation program for international nursing students can be very beneficial in familiarizing them to their new environment.

Source of Support: Self

Conflict of Interest: None

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