

# The Effect of Research Project Course on Nursing Students' Attitudes toward Research Process

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## Abstract

**Objective:** Investigate the effect of research project course on nursing students' attitude toward research at a college of nursing in Kerbala University and identify the relationship between nursing student' attitude and demographic variables. A pre-experimental design (One-group Pretest-Posttest design) was utilized to determine the effect of research project course on nursing students' attitude toward research at a college of nursing in Kerbala University. All participants were exposed to assess of attitudes regarding research before and after the implementation of the research project course in order to detect the effect of the course. The current study results revealed that; the majority (74.2%) of nursing students were within age groups (20-22) years old the mean age of the all students was (22.27) years. 82.3% of total students were female the majority (82.3%) of subjects were single, most of sample (80.6%) were urban resident, the mean of score of the positive attitude of respondents in posttest of the research project course was significantly higher than the pretest of the research project course in all aspects of attitude regarding research project course, and no significant difference between the nursing students' demographic variables and attitude responses in the posttest of research project course.

**Keywords:** *Nursing students, Attitudes, research project course, research.*

## Introduction

Nursing research is characterized as the integrating, and dispersing procedure to have effect on the current nursing practice by utilizing research produced information. Additionally, nursing research application has been connected with enhance nature of nursing practice<sup>1</sup>. According to Chien, et., al. (2013) and Nieswiadomy (2011), Applying research prove amid day by day clinical practice help to upgrade the; nature of nursing care, medical attendants' close to home and expert execution and additionally to enhance the responsibility for training, and documentation of the cost-

adequacy of nursing care<sup>2,3</sup>. So, the nursing research acts to give a base to confirm base practice by approve and refine existing information (science) and growing new learning that is connected to nursing practice<sup>4,5</sup>. What's more, when you are connected the nursing research finding in nursing practice prompt abatement expenses of medicinal services, expands individual profitability, long more advantageous lives for patients, and lessening torment and enduring of patients<sup>6</sup>. The act of nursing care needs particular information and clinical aptitudes to take care of real or potential issues that influence wellbeing of people<sup>7</sup>. Therefore, the enthusiasm for nursing research is considered as a need for medical attendants instructors and school of nursing, in light of the fact that the utilization of research is of extraordinary significance to the up and coming age of nursing staff in aptitudes, for example, leading examination, settling on free clinical choices perusing logical articles, and critical thinking approaches<sup>8</sup>. Baccalaureate programs get ready understudies for section level nursing positions.

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The center is to nurture all people through the human life expectancy. Information is procured from course books, classroom and Web-based direction, recreation, and clinical encounters. The objective of all projects is for understudies to graduate as protected, section level experts, have gotten a balanced introduction to the nursing field. Understudies are presented to prove based nursing practice all through their educational programs; nonetheless, the apportioned time for nursing research is frequently constrained. Nursing research is significance of its incorporation amid undergrad guideline can't be overemphasized. Just with introduction and experience students would be able to start to comprehend the idea and significance of nursing research<sup>9</sup>. Hence, a basic research course wound up obligatory in most baccalaureate nursing programs the world over to build understudies' interest in research and usage of research discoveries practically speaking<sup>10</sup>. Working on nursing understudies, is tested to stay up with the latest via searching for recovering and scrutinizing research articles that apply to hone issues that are encountered in their clinical setting<sup>11</sup>. Also, it is essential to outfit understudies with a solid establishment in research to enable them to assess inquire about judge explore discoveries for conceivable application to clinical settings and to take an interest in investigate ponders<sup>12</sup>. Undergraduate research project program aims to facilitate quality undergraduate research between students and mentors and to bring students into a community of scholars within their field. They urge medical caretakers to use and be effectively engaged with investigate<sup>8</sup>. Undergraduate education positively affects understudies to gain an essential perspective about research and encourage them to undertake research<sup>13</sup>. The initial step into compelling use of research, which makes incredible commitments to change of nursing, is preparing for look into amid undergrad training. The exploration course ought to be joined into all undergrad training projects and educational program<sup>14</sup>. With the goal that undergrad medical attendants can turn into a compelling exploration peruser and set research discoveries in motion, they ought to have the capacity to comprehend look into reports, reprimand them and comprehend phases of research<sup>15</sup>. Among investigate exercises anticipated from nursing understudies are; perusing research articles fundamentally, gathering and announcing solid and legitimate information, going to nursing meetings, utilizing library assets, and plan theoretical or paper introduction<sup>16</sup>. A nursing research course is viable in expanding learning about strides of research and getting the capacity to assess after effects

of research and in addition having a positive attitude towards research<sup>17</sup>. Students' attitudes are connected with their inclusion in inquire about as future nurses<sup>8</sup>. Positive students' attitudes toward research encourages students to contribute in research, and increases effective application of research findings as well as, improving healthcare outcomes<sup>18</sup>.

## Methodology

A pre-experimental design (One-group Pretest-Posttest design) was conducted on nursing students' attitudes toward research in nursing college. During the period from October 25<sup>th</sup> 2017 to April 15<sup>th</sup>, 2018 a non-probability (purposive) sample of (62) nursing students in nursing college was participated in the research project course which are selected after taking their consent. All of the students in the fourth undergraduate academic year 2017-2018, were invited to participate in this study. The aims of the study was clarified before achievement the participants' consents. Only 62 students were participated and returned the questionnaires. All subjects participated in the research project course at the same time, place, and environment; All participants nursing students exposed to posttest assessment of attitudes regarding research after the implementation of the research project in order to detect the effect of the research project. The tool of this study was adapted from a study by Larson (1989), Halabi and Hamdan (2010) and Halabi, (2016). Several statements of this questionnaire were modified and developed to increase the validity of this instrument and to be more appropriate for achieving the aims of the present study. After reviewing the related literatures and relevant studies, and prior to implementation of the research project, the researchers constructed the attitudes test questionnaire to assess the nursing students attitudes respondents pre and post the implementation of the research project, in order to identify the difference in attitudes of the respondents toward research. The study instrument consisted of (2) parts as the following: Demographic data (which include nursing students' gender, age, marital status, and residence) and nursing students' attitudes which is comprised of (22 items): section one is related to usefulness of research (4 items), section two is related personal interest in research (4 items), section three is related to research abilities (7 items), and section four is related to using research in clinical practice (7 items). Likert Scale was used to assess the level of student's attitude towards research pre/post research project. It was adopted from Likert Scale (2006) and modified

by the researchers according to the aims of the study. The overall number of the items included in the nursing students' attitudes were measured in a three levels scale; Agree, uncertain and disagree, and rated as 3, 2, and 1, respectively with a cut-off point = 2. Assessment of nursing students' attitudes was based on: Mean score for attitudes items equal to 2 or more is considered as a positive. While Mean score for attitudes items below (2) is considered as an negative. The researchers calculated the score percentages of attitudes response for each nursing student in the two related period of the course, and then calculated the difference between the posttest and pretest for each study sample to achieve the attitudes improvement effect for each nursing student.

**Data Analysis:** SPSS version 20 was used to analyze of the data. Statistical analysis was made using Chi-square and paired T-test, have been used to identify the significant change in attitudes before and after research project. The level of significance was set at  $P \leq 0.05$ .

**Ethical Considerations:** The study was approved by the research department of the participating college of nursing. Students were assured anonymity and confidentiality as well as the right to refuse participation and to withdraw from the study without penalty.

## Results and Discussion

Table 1 reveals that the majority ((n=46) 74.2%) of nursing students participant in study sample were (20-22) years old with mean age of the all students was 22.27 (20-41) years. 82.3% (51) of total students were female and 17.7% (n=11) were male. Regarding to the nursing students marital status, the majority ((n=51) 82.3%) of the subjects were single. Also, this table shows most of sample ((n=50) 80.6%) of the residents were urban. Results related to attitude respondents regarding to research project, were presented in this table, indicate that the mean of score of the attitude respondents in posttest of the research project course was higher than the pretest of the research project course in all aspects of attitude regarding research project course (positive attitude respondents in comparison between pretest and posttest of the research project course). This table also indicates that a significant difference between pretest and posttest of the attitude of respondents at p-value

(0.001). The study results reveal that there is a high significant difference between the nursing students' attitude responses in the two tests (pretest and posttest) of research project course. Table 4 shows that there is no significant difference between the nursing students' demographic variables and attitude responses in the posttest of research project course. Nursing research is fundamental to the practice of nursing staff, and the significance of its incorporation during undergraduate direction can't be overemphasized. Just with presentation what's more experience nursing students can be able to start to comprehend the concept and significance of nursing research. After the analysis of demographic characteristics as shown in table (Table 1) it was revealed that the majority of subjects (74.2 %) were at age 20-22 years old with mean age of the all students was 22.27. Regarding to the nursing students gender the findings indicate that slightly more than three quarters of the students (82.3%) were females and the other (17.7%) were males. According to marital status of nursing students, the study results reveal that more than half (51%) of samples were single and 49% were married. Concerning resident place, the study findings indicate that more than three quarters (80.6%) of the sample were urban. This finding is consistent with Erkin et al. (2017) who revealed that the mean age of the nursing students was 20.72 years. 86.3 % of nursing students were females and 13.7% were males (17). While, other study which was done by Hasan (2016), to assess students' attitudes towards research at mazandaran university of medical sciences shows that approximately half (61%) of students were females and (39%) were males, this result was inconsistent with the findings of the present study. After participating the nursing students in the graduation research project course the results of analysis indicate a significant improvement in nursing students' positive attitudes regarding research in comparison with the two periods (pretest and posttest), when the results of current study revealed that the nursing students' attitudes about research; Usefulness of research in pretest 11.145 while in posttest 11.467 ; Personal interest in research is pretest 10.129 while in posttest 10.612; Research abilities in pretest 14.919 while in posttest 16.871; and Using research in clinical practice in pretest 13.919 while in posttest 17.112.

**Table 1: Distribution of nursing students that participant in research project course with their socio-demographic characteristics (N.62).**

Socio-demographic data	Scale	Frequency	Percent
Age	20-22	46	74.2
	23-25	13	21
	26 and More	3	4.8
	Mean ± SD (Range)	22.27± (20-41)	
Gender	Male	11	17.7
	Female	51	82.3
	<b>Total</b>	<b>62</b>	<b>100</b>
Marital status	Single	51	82.3
	Married	11	17.7
	<b>Total</b>	<b>62</b>	<b>100</b>
Resident	Rural	12	19.4
	Urban	50	80.6
	<b>Total</b>	<b>68</b>	<b>100</b>

**Table (2): Summary statistics for the students’ Attitude Towards Research respondents in the two periods (pretest and posttest) Research Project Course with comparisons significant (N=62).**

No.	Domains	Pretest		Posttest		P(*). value	Assessment
		M.S	S.D	M.S	S.D		
1	Usefulness of Research (4 items)	11.145	1.303	11.467	.881	0.141	Pos.
2	Personal Interest in Research (4 items)	10.129	1.722	10.612	1.395	0.075	Pos.
3	Research Abilities (7 items)	14.919	2.234	16.871	2.191	0.000	Pos.
4	Using Research in Clinical Practice (7 items)	13.919	2.650	17.112	2.104	0.000	Pos.
5.	Overall Domain	50.112	4.835	56.064	3.806	0.000	Pos.

**Table (3): Paired T-test of Difference of the Nursing Students’ Attitude Responses Relative to Pretest and Posttest (N.62).**

Pairs (Paired T-test)	T-value	D.F	P-value
Pretest/Posttest	-9.200-	61	0.000 HS

**Table (4): The NOVA Test to Study the Differences Between the nursing students’ attitude responses in the posttest of research project course and Demographic Characteristics (N.62).**

Demographic data	Posttest			
	Comparative patterns	Df.	F	Sig.
Age/Years	Between Groups	14	1.090	.391
	Within Groups	47		N.S
Gender	Between Groups	14	.867	.597
	Within Groups	47		N.S
Marital status	Between Groups	14	1.084	.396
	Within Groups	47		N.S
Residents	Between Groups	14	.241	.997
	Within Groups	47		N.S

## Conclusion

According to the findings of this study, the nursing students' attitudes toward research were increasing significantly after exposing to the research project course and the demographic variables (gender, age, marital status and resident) of the nursing students had no significant effect on their attitudes toward research.

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**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved under the Community Health Nursing Department/College of Nursing/University of Kerbala, Iraq and all experiments were carried out in accordance with approved guidelines.

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