

Undergraduates and Interest in Doing Research: Study Based on Bachelor of Commerce Undergraduates

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Abstract Scholarly components are more essential to the modern tertiary education, especially concern on management studies. Research competence is very important in relating to apply obtained knowledge in creative ways and create new knowledge. Current market requirements require at least minimum research competencies in order to endure the changes in technological and human resource. In recent times it has been identified that undergraduates' interest towards engaging with a research is getting declined. The main intention of the study is to investigate the effect of beliefs, self-efficacy, attitudes, and motivation on undergraduates' interests in doing research. The present study is of exploratory and descriptive in nature. One hundred and eighty undergraduates from Department of Commerce who had already completed research methodology course unit were participated in the study. All students were invited to voluntary participation to answer the structured questions. Undergraduates' responses were analyzed through mean comparison using SPSS version 21. Undergraduates believe research as stressful, complicated and difficult task, and generally they have negative attitudes towards research. Since they have knowledge and skill required to do research, language barrier and lack of academic support need to be conquered.

Keywords: attitudes, beliefs, mean comparison, motivation, self-efficacy, undergraduate research

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1. Introduction

Scholarly components are more essential to the modern tertiary education [1], especially concern on management studies. Hence, research becomes one of the most important intellectual possessions for every human being [2]; thus research is a very significant field in the university academic process. Research is an organized, systematic, data-based, critical, objective, scientific inquiry or investigation into a specific problem, undertaken with the purpose of finding answers or solutions to it [3].

Current market requirements, which derive through technological and human resource changes, require at least minimum research competencies [4]. University education system is interrelated with research activity and it has to prepare the undergraduates for professional activities and knowledge application. Hence, undergraduates have to be open for changes, creative, and critically thinking.

Conducting research is not an entertainment activity. It requires a lot of self-independence and ability to bear responsibility [4]. Research component is very important in relating to apply obtained knowledge in creative ways and create new knowledge. Therefore, during bachelor studies, research study obtains the highest value. As research demand increase, undergraduates require to come up with a research activity focusing on problems relative to their interest. However, recently it has been identified that undergraduates' interest towards conducting a research is getting declined.

The current study concerned on undergraduates of Bachelor of Commerce (B.Com) degree program, Department of Commerce, University of Sri Jayewardenepura (USJP) and identified that students who selected independent study (research) for their degree program gradually declined. Table 1 illustrates the number of students selected research as a course of their degree program in final year.

Table 1. Students select research study

Academic Year	2003/04	04/05	05/06	07/08	09/10	11/12	12/13	13/14	14/15
Students per Batch	75	75	75	75	125	125	125	125	125
No. of students select research	04	02	01	02	02	02	01	01	00

Source: Department of Commerce, USJP, 2016.

Department of Commerce offers theoretical background of conducting research under the course unit of research methodology for third year students with the intention of pursuing undergraduates to conduct a research. Table 1

provides evidence that undergraduates' interest towards research was gradually decreased. Further, it is necessary to notice that, department of commerce has already decided to offer independent study as a compulsory course

unit at upcoming curriculum review. Earlier, independent study was offered as an elective course unit for final year students. This may lead to cause a severe issue to the department, if students are not willing to follow research course unit with their own interest. The question of whether a research should be comprised as a major component in management undergraduate programs has been debated and it is still contentious. Hence, more and more attention has to be paid to undergraduates' interest in doing research.

Russell [5] indicated that students were losing their interest in doing research because of a lack of engagement with genuine research. Lamanuskas [4] revealed that research activity is not attractive for students due to big time expenditure, efforts, stress, delay in feedback, and lack of academic support. As Oguan [2] mentioned, undergraduates usually tend to view research course unit negatively and there are negative attitudes of undergraduates towards research such as difficulty of conducting research and poor grades in the course. Oguan [2] revealed that the students have a positive attitude towards research though most of them display a negative attitude on difficulty of research. The students show anxiousness to research by confessing that research is stressful. Further, male students are more positive compared to female students. Pacific and Thomson [6] examined the factors influence to do research and expectations of research between premed and non-premed students. The study emphasized four influencing factors on conducting research namely; beliefs, attitudes, accessibility and self-efficacy, and motivations and social factors.

Having said so, this research signifies the first step towards to identify the affective factors on undergraduates' interest in doing research among B.Com undergraduates. Further studies need to be conducted to broadly analyze the influencing factors on undergraduates' interest in doing research. Acknowledging the studies of Butt [7]; Oguan [2]; Pacific and Thomson [6], the goal of this study is established to gain an understanding the effect of beliefs, self-efficacy, attitudes, and motivation on undergraduates' interests in doing research. Beside, the study employs gender comparison with the desired factors. The reason for doing gender comparison is that B.Com degree program offer same course unit for third and final year students.

2. Materials and Methods

2.1. Participants

The study took place at department of Commerce, USJP. At the time of study, there were two batches existing at the university who completed research methodology course unit. Then, third year and final year students of B.Com degree program were eligible to participate in the study to assess the factors influencing undergraduates' interest towards doing research. There was no student registered for research from final year and majority of third year students did not keep to select research in their final year.

The time line of the study was a cross-sectional because current B.Com undergraduates were respondents for the

study. There were 110 and 118 undergraduates in third and fourth year respectively. All students were invited to voluntary participation and the participants were assured that their responses were anonymous because their names did not appear in the questionnaire.

The present study is of exploratory and descriptive in nature. Initially the study identified affective factors on undergraduates' interest in doing research from literature review. Based on the identified factors, primary data was collected through questionnaire. Acknowledging the prior studies of Butt [7]; Oguan [2]; Pacific and Thomson [6], the study employed four influencing factors of undergraduates' interest in doing research such as beliefs about scientific research, attitudes about scientific research, self-efficacy, and motivation.

The quantitative data were collected through a structured questionnaire. First part of the questionnaire gathered data regarding gender, academic year, willingness to conduct research, and willingness to follow master degree. Second part consisted with scaled questions of identified constructs. The study administered scaled questions which were devised by Pacifici [6]. The scale values range from 1 indicates a response of 'strongly disagree', to value of 5 corresponds to 'strongly agree' with neutral point. The belief on research scale consists of six items, attitude towards research consists of five items, self-efficacy includes six items, and motivation consists of five items. The questionnaire was peer-reviewed by two senior lectures in the university and pilot tested on five students in order to ensure the understanding of responses.

Mean comparison between male and female undergraduates were compared with four constructs extracted from prior studies. Independent sample t-test, using the statistical package for social sciences (SPSS) version 21, was employed to compare mean value of desired constructs between male and female students.

3. Results and Discussion

In total of 228 questionnaires, 197 were received. However, 17 questionnaires were not completed properly and they were removed from the further analysis. Finally, 180 useful questionnaires were taken into final consideration, making 79 percent of response rate.

Questionnaire items were tested for reliability using Cronbach's alpha analysis. Cronbach's alpha measures the internal consistency reliability coefficient and a moderate cutoff for exploratory research is a value of .60 [8]. Items on beliefs, attitudes, self-efficacy, and motivation were found to be reliable above the .60 level.

The gender of undergraduates and year wise breakup illustrates in Table 2. Hence, the total number of female and male respondents was almost equal, and hence there was less inequality and bias.

Table 2. Gender and Year of Student

		Year of Student		Total
		Year III	Year IV	
Gender	Male	42	43	85
	Female	47	48	95
Total		89	91	180

Enhancing students' interest towards research in bachelor studies will enable students to better prepare for master studies. There is a great value for master studies in present labor market. Respondents were asked whether they like to follow post graduate degree after completing bachelors. Table 3 shows the cross-tabulation of undergraduates' willingness of post graduate studies in year basis.

Table 3. Post graduate study willingness

Year of Student		Do you like to follow Masters?		Total	
		Yes	No		
Year III	Gender	Male	36	6	42
		Female	29	18	47
	Total	65	24	89	
Year IV	Gender	Male	39	4	43
		Female	21	27	48
	Total	60	31	91	

In both academic years, male students are more willing to follow post graduate studies compared to their female counterparts. This indicates that male students identify the great value of master studies in present labor market than female students.

Undergraduate research experiences provide precious grounding for students following excellence in their future professional careers and post graduate studies. Hence, the study explored from third year undergraduates whether they like to conduct research as a subject in their final year. The responses from students depict in Table 4.

Table 4. Conducting research in final year

		Do you like to conduct research?		Total
		Yes	No	
Gender	Male	4	38	42
	Female	4	43	47
Total		8	81	89

Table 4 moreover provides evidence that undergraduates' interest towards research was gradually decreased. In total of 89 undergraduates, 81 of them are not intended to conduct research, giving percentage of more than 91. There is no gender difference appeared with the research interest of undergraduates.

3.1. Mean Comparison

Independent sample t-test was employed to determine the gender difference regarding influencing factors of research interest. In order to examine the undergraduates' beliefs about scientific research, the mean values of beliefs items present in Table 5.

Table 5. Undergraduates' Beliefs about Scientific Research

Beliefs about research	Male		Female	
	Mean	SD	Mean	SD
Research is essential to undergraduates	2.19	.774	2.26	.686
Research must be a compulsory course unit for undergraduates	2.49	.943	2.38	.767
Research is stressful	3.38	.968	3.28	.852
Research is complicated	3.97	.890	3.86	.661
Research is difficult	3.59	1.205	3.46	.905
Doing research is boring work	3.94	.886	3.99	.730

It can be observed from the Table 5 that undergraduates believe that research is stressful, complicated, and boring

task and there is no significance difference between male and female student beliefs. Respondents also responded negatively to the relevance of research to academic life. This result is in consonance with the study of Lamanuskas [4] which revealed students identify research as stressful and time wasting effort.

To determine the undergraduates' attitudes towards scientific research, mean values of attitude items are shown in Table 6.

Table 6. Undergraduates' Attitudes towards Doing Research

Attitudes towards research	Male		Female	
	Mean	SD	Mean	SD
I have no interest at all in research	2.87	1.309	3.04	1.131
Undergraduates can do research	2.67	1.002	2.38	.767
Undergraduates should experience research	2.97	.890	2.99	.730
Doing research is interesting	2.57	.975	2.28	.852
Research is time consuming	3.46	1.268	3.17	1.095

Looking at the attitudes of the male and the female students on research interest, it can be viewed from Table 6 that the male students are more positive regarding interest in research and ability to do research. Indeed, the study of Oguan [2] indicated that male students have a positive attitude towards research than female. However, male students have negative attitude towards research as time consuming.

Table 7 shows the mean values of undergraduates' self-efficacy on scientific research.

Table 7. Undergraduates' Self-efficacy on Doing Research

Self-efficacy towards research	Male		Female	
	Mean	SD	Mean	SD
I am capable of conducting a research	3.28	.852	3.88	.968
I am confidence in my ability to do research	2.58	.767	2.67	.857
I am well prepared to do research	2.91	.921	3.23	.840
I have knowledge and skill required to do research	3.32	.828	3.53	.755
Research makes me scare	3.46	.921	3.24	.842
Language becomes a barrier to do research	3.97	.890	3.31	.571

According to Table 7, female students' self-efficacy for doing research is greater than their male counterparts. Male students feel uncertainty with respect to their capability and preparation of conducting a research. Further, they concern language as a main barrier than female. Similar findings highlighted in the study of Oguan [2], students reported being challenged, confused, and frustrated with the research process.

Since undergraduates are new to the research, motivation is required to learn about research and to satisfy their curiosity research. Table 8 represents the mean values of undergraduates' motivation items.

Table 8. Undergraduates' Motivation on Doing Research

Motivation on research	Male		Female	
	Mean	SD	Mean	SD
First degree with research makes a value addition to find a good job	2.84	.946	2.93	.964
Lecturers encourage undergraduates to do research	2.76	.881	2.85	.935
I am aware of importance of research	2.66	.891	2.75	.733
My friends do research	2.84	1.130	2.85	1.112
Lecturers influence undergraduates to do research	2.31	1.057	2.25	1.002

Regardless of whether student is male or female, undergraduates did lack motivation with respect to doing research. They did not consider research as a value addition component in the competitive labor market and they did not have significance encouragement or influence from academics as well as their colleagues.

4. Conclusion

Research experience allows undergraduates learn to balance collaborative and individual work, determine an area of interest, and bound to start their future careers [9]. However, recently it has been identified that undergraduates' interest towards engaging with a research is getting declined. The main intention of this study is to gain an understanding of the research interest of undergraduates of B.Com degree programme and identify the factors that encompass undergraduates' research interest. Acknowledging the prior studies, the study identified that undergraduates' beliefs, attitudes, self-efficacy, and motivation about research could influence their interest in doing research. There is no difference between male and female undergraduates regarding beliefs about research relevance and its complication. However, male undergraduates demonstrate comparatively positive attitudes towards research. Self-efficacy of conducting research is higher in female undergraduates though they compose negative attitude towards a research. Finally, lack of motivation dispirits the undergraduates' research interest and thus, academicians stand a significant role to play. With that understanding, academics may reinforce their discussion about the importance of conducting research and its relevance on making academic and professional career choices. Identifying factors that encompass undergraduates' interest towards conducting research assist academics to strengthen their discussion

about important of research activity while modifying students' interest. It is required to the department to tailor its academic process to address the issues related with undergraduates' interest in doing research.

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