Parameters Influencing Attitude of Doctoral Students towards Research

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ABSTRACT

Researcher's attitude towards research is important while undertaking research for positive outcomes. So, this study was conducted to determine the level of attitude of doctoral students by exploring its determinants and comparing them with attitude. College of Agriculture, Vellayani, Kerala was selected for the study where 50 doctoral students were selected randomly and administered with validated questionnaires. Statistical tools like frequency, percentage, mean, standard deviation and Pearson correlation coefficient were used. It was found that almost 90 per cent of students had favourable attitude towards research. There was significant relationship between independent variables like information seeking skill, methodology skill, problem solving skill, literature availability, research material availability, research work environment, non-advisory committee members support and attitude of students towards their research.

INTRODUCTION

Research forms an integral part in higher education. It is a necessary requirement that a graduate scholar must complete his or her research topic as approved by the Faculty of Research Committee (FRC) after several deliberations at department level, college level and university level in order to be awarded with the degree. Recent increase in trend of Ph.D. students' enrolment and provision of grants by government or other institutes for research purpose that helps in human development and welfare proves the importance given to research and research scholars in Indian universities. Researcher's ability is not only to equip with necessary knowledge, skills and other proficiencies but also require an affective component which is equally important in undertaking research (Kakupa and Xue, 2019). Individual feelings like anxiety, fear, discomfort and negativity in conducting research may prejudice the whole process that can lead to negative attitude towards research.

Attitude is an individual's disposition to react to certain object, behaviour, person,

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institution, event or other discriminable aspect of the individual's world (Ajzen, 1993). Attitude is of prime importance in any research. Based on the research conducted by Jalihal (1970) on the concept and role of agricultural universities in India, reported that students showed positive attitude about the new educational framework. According to Papanastasiou (2005), it is critical to determine students' attitudes toward research in order to foster a favourable attitude among them, and as a result, improve their learning.

In their study, Siamian et al. (2015) found that students had good opinions toward the usefulness of employment and career search, anxiety, relationship with everyday life, and research challenge. The data revealed that there was no substantial variation in students' attitudes about research based on their age, gender, or educational level. Students who were exposed to more scientific research had a more favourable opinion toward it (Seher, 2018). With regard to it when comparing the attitudes of Master's and Doctoral students toward research, it was found that Doctoral students have a more positive attitude toward research than Master's students (Abun et al. 2019). Finding the truth requires a meticulous and well-organized search. Any investigation's primary goal is to create conducive conditions for the generation of knowledge in order to address an issue (Roul, 2016).

Findings of Boppana (2019) concluded that 58.00 per cent of students have a positive attitude toward research, while the rest (42.00 %) have the most favourable attitude. Attitudes toward research constitute the positive and negative internalized beliefs or feelings about research (Kakupa and Xue, 2019). This acts as a driving force for conducting research. Hence, it was important to identify the parameters that contribute positive attitude towards research that helps students in learning with the following objectives.

1. To study the level of attitude of students towards research

2. To determine relationship between attitude of doctoral students and their personal and social characteristics

METHODOLOGY

The current study was conducted at College of Agriculture, Vellayani under Kerala Agricultural University. Altogether, 50 respondents were selected randomly who were Ph.D. students from second and third year of their study as of 2020-21. Research design followed was an *ex post facto* design. All the responses were collected using a pre-tested interview schedule and the data generated was transferred to master table. The personal and social characteristics of the students were selected based on judges' rating. To study the level of attitude a set of 'twenty'

statements were given to students for rating them on a 5-point continuum using Likert scale *viz.* strongly agree, agree, undecided, disagree and strongly disagree with a score of five, four, three, two and one respectively. The total score was computed by adding the scores for each respondent from all statements. The maximum and minimum score that could be obtained for a statement was 'two hundred and fifty' and 'fifty' for the respondents respectively. The computed overall range of scores were categorised into low, medium, high indicating poor good and very good attitude respectively based on mean score and standard deviation as check and expressed in terms of frequency and percentage. Karl Pearson correlation coefficient (p) was used for inferring the data that determines relationship between attitude of students and selected parameters.

Hypothesis of The Study

There exists no difference between attitudes of students towards research and there exists no relationship between attitude of students and selected independent variables.

FINDINGS AND DISCUSSION

Attitude of Students towards Research

Attitude is the positive or negative effect of an individual towards a psychological construct. From Table 1, it can be reported that majority (74.00 %) of students possessed good attitude towards research followed by 16.00 per cent with very good attitude and only 10.00 per cent showed poor attitude towards research as calculated based on mean score and standard deviation as check. This indicated that almost 90.00 per cent of students had favourable attitude towards research.

The possible reason for this favourable attitude could be due to their familiarity with the research procedures and techniques as experienced during post graduate studies. According to Williams & Coles (2003), research experience influences views toward research, with individuals who have done research before forming a more positive influence. Other reasons may include student's interest in the research area or in improving career prospects for or outside of an academic/research career, sufficient resources availability, opportunity to improve their research skills etc. The findings were in line with Parmar et al. (2016), Muthuswamy et al. (2017), Seher et al. (2018) and Boppana (2019).

Table 1. Distribution of Ph.D. Students' Attitude towards Research

N=50

Category	Class limit	Frequency (f)	Percentage (%)
Poor (M-SD)	<67	9	10.00
Good (M±SD)	67-83	29	74.00
Very good (M+SD)	>83	12	16.00
	Total	50	100
Mean score=75.12, SD=8.75, Min.-Max. score = 20-100 M- Mean			

Relationship between Attitude of the Doctoral Students towards Research and their Selected Personal and Social Characteristics

The relationship between the attitude of doctoral students towards research and the selected independent variables *viz.* age, information seeking skill, methodology skills, problem solving skills, statistical skills, communication skills, universal outcomes, literature availability, research material availability, raw material availability, funds and other privileges availability, research work environment, acquaintance support, advisory committee members support and non-advisory committee members support were measured by computing "Karl Pearson correlation coefficient (p)" and the data are presented in Table 2.

Table 2. Relationship between Attitude of the Doctoral Students towards Research and Selected Independent Variables

Sl.No.	Independent variable	p value
1	Age	0.178
2	Information seeking skill	0.451**
3	Methodology skill	0.434**
4	Problem solving skill	0.471***
5	Statistical/analytical skills	0.203
6	Communication skills	0.428**
7	Universal outcomes	0.097
8	Literature availability	0.385**
9	Research material availability	0.403**
10	Raw material availability	0.158
11	Funds and other privileges availability	-0.132
12	Research work environment	0.36*
13	Advisory committee members support	-0.017
14	Non- advisory committee members support	-0.294*

* Correlation is significant at 0.05 level (two tailed)

** Correlation is significant at 0.10 level (tow tailed)

*** Correlation is significant at 0.01 level (two tailed)

It can be inferred from Table 2 that out of 14 parameters selected as independent variables eight variables *viz.*, information seeking skill, methodology skill, problem solving skill, communication skill, literature availability and research material availability research work environment and non-advisory committee members support showed significant relationship with students' attitude towards research. Among these variables only 'non-advisory member's support' was observed to have negative significant relationship at 5 per cent significance level. The rest of the independent variables *viz.* research work environment at 5 per cent significance level; problem solving skill at 1 per cent; information seeking skill, methodology skill, communication skill, literature availability and research material availability at 10 per cent significance level were significantly and positively correlated with attitude of students towards research.

Information Seeking Skill and Attitude

It can be seen from Table 2 that students' information seeking skill has positive and highly significant relationship (p=0.451**) with their attitude towards research. This positive relationship can be because of students having access to electronic media where they can browse for any relevant information databases, search for alternatives options to find solutions. Availability of library resources with internet access makes it easier for scholars to seek information necessary for research.

Methodology Skill and Attitude

It was evident from Table 2 that methodology skill of students has positive and significant relationship (p=0.434**) with their attitude towards research. This significant relationship can be because students possessing sufficient knowledge and skill in terms of preparing manuscript, abstract with ability to write a comprehensive review of literature. They also possess required capabilities in searching, planning and developing research question which further also includes collection of data *via* surveying.

Communication Skill and Attitude

Table 2 clearly stated that there was a positive and significant relationship (p=428**) between scholars' communication skills and their attitude. It can be inferred that scholars' communication skills and knowledge level in gathering information, tailoring the needs of audiences by questioning, answering and explaining the purpose, objectives and outcomes of research with confidence may have helped in forming a favourable attitude towards research.

Availability of Literature and Attitude

It is apparent from Table 2 that there exists a significant and positive relationship (p=385**) in terms of availability of literature and attitude towards research. It means that there is ample literature resource available in the college library in

the form of journals, magazines, theses, e- resources like *Krishikosh*, Online Public Access Catalogue (OPAC), Consortium of e-Resources in Agriculture (CeRA), Science Direct *etc.*, Services which help students in accessing necessary literature for research that leads to a positive attitude of students towards research.

Research Material Availability and Attitude

A look into Table 2 makes it evident that research material availability had positive and significant correlation (p=403**) with attitude. It means there is adequate availability of lab equipment, farm equipment and other instruments necessary to conduct experiments that gives a positive influence on their attitude towards research. Availability of online resources, accessibility of online resources in plenty and provisions of internet-user group subject wise might have helped the students to develop a favourable attitude towards research.

Problem Solving Skill and Attitude

Findings from Table 2 show that that there exists a positive and significant correlation with problem solving skills of students and their attitude (P=0.471***). It can be said that students' ability to draw conclusions, take feedback, weighing one solution with other along with proper reasoning skills can reflect desirable research outcomes which is also an indicator of their problem solving skills that helps to reduces their anxiety and discomfort while doing research and in turn helping students with a positive attitude towards research.

Research Work Environment and Attitude

From Table 2, it is observed that a positive and significant correlation (p=0.360*) existed between research work environment and student's attitude towards research. It is inferred that if research work environment was not workable, it not only affects the behaviour of an individual researcher but also how the officialdoms themselves interact (Gilmer, 1966). It influences researcher's performance thereby affecting his attitude towards research.

Non-Advisory Committee Members Support and Attitude

In case of non-advisory committee support and students' attitude towards research there exists a negative and significant correlation (p=294*) as shown in Table 2. It indicates that students are seeking help from non-advisory members for their research work which may be because of the similarities present with those members specialisation that may help the students in their research work.

CONCLUSION

Overall conclusion from findings showed that majority of the students possessed a 'good' attitude' towards research. There exists a significant relationship between students' attitude towards research and selected independent variables. Research work environment showed positive relationship whereas non-advisory support showed negative relationship with attitude of students towards research at 5 per cent significance level. Other variables like problem solving skill showed positive relationship with attitude of students towards research at 1 per cent significance level while information seeking skill, methodology skill, communication skill, literature availability, research material availability showed significance difference at 10 per cent significance level. The study rejects the null hypotheses which now can be deduced that there exists difference between attitudes of students towards research and there exists relationship between attitude of students and selected independent variables. It can be inferred that providing doctoral students with a workable research environment, adequate resources for conducting research and opportunities to develop their research skills can form a positive influence towards successful research outcomes.

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