

Difficulties and Research Students' Attitude: A Multifaceted Analysis

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ABSTRACT

This study had been designed to explore the research difficulties faced by MS/M.Phil students in conducting research and its effect on their research attitude. A sample of 165 research students enrolled in MS/ M.Phil program in University of Sindh. Sample was drawn through simple random sampling technique. Two data collection tools were employed; first scale was developed to explore research difficulties faced by student-researchers and second tool was adopted from Elena C. Papanastasiou (2005) "Attitude Towards Research" (ATR) to study the student-researchers' research attitude. The results showed that MS/M.Phil students face a range of difficulties when conducting research. They face more administrative difficulties (M= 5.20) than personal difficulties (M= 4.98). The results also showed that students had positive attitudes in two factors; research usefulness (M= 5.61) and general attitude towards research (M= 5.45) and they had negative attitude on other factors; research anxiety (M= 4.98) and research difficulty (M= 4.54) factors. Likewise a moderate positive correlation was found between the research difficulties and the each factors of research attitude. Regression was also used to estimate the impact of research difficulties on research attitude of students; personal difficulties had a weak impact on student's research attitude ($\beta = .233$, $P < .002$) whereas administrative difficulties had higher impact ($\beta = .348$, $P < .00001$) on student's research attitude. Thus, it can be concluded that research difficulties faced by students cause to change their research attitude.

Keywords: Research, Attitude, Impact, personal and administrative factors

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INTRODUCTION

Research exists because of problems. In the current scenario, research is an effective mean to discover practicable solutions through improving and inventing new techniques and technologies. We are living in the rapidly changing world where everything is rapidly evolving. For the human beings research has become an important but complex intellectual tool for change. In this context importance of research has increased further. Researchers face many difficulties while they conduct research such as; institutional difficulties, administrative difficulties, personal difficulties and technology related difficulties. Jonbekova (2020) studied the research difficulties at transnational level and found that challenges and difficulties are context oriented; it varies person to person and country to country. Among other difficulties, ethical challenges are also very important Kaplana , Kuhntb and Steinertc (2020) have also pointed out many ethical challenges faced by researchers during field research. Among them most important are; threats to physical and emotional wellbeing of both respondents and researchers. Similarly, Aedh & Elfaki (2019) argued that shortage of funds, lack of motivation, training, guidance and supervision, institutional barriers and obstacles in data collection are the main challenges faced by researchers in conducting research.

Every country needs good scholars and researchers for the solution of problems faced by the society. In research production system University faculties are the primary actors (Saleem, Butt & Farooqi, 2014). According to Shehzadi et al, (2004) it is often found that research difficulties are based on the difficulties the people face in conducting research. Logan, Parás & Robbins (2020) studied the quality of face to face research, they discussed a range of difficulties and concluded that time and resources affect the most the quality of any survey research. According to Qasem (2019), various difficulties are being faced by students' in research proposal writing and projects in a second language in English, difficulty in determining research topics, lack of methodological knowledge, inability to find modern and relevant references, lack of understanding of topics, lack of interest in research, time management and lack of supervision. Ezebilo (2002) in his study revealed that the success of postgraduate students depends to a large extent on their good relationship with supervisors. According to Phillips and Pugh (2000, p. 193) supervisors are held responsible for providing students with all the help they need in terms of subject content, research topic, methodology development and inculcation of professional standards and providing personal support. Several research studies have been published and identified many barriers and difficulties in postgraduate (MS/M.Phil)studies. Al-arifi (2019) pointed out that positive attitude towards research activities of pharmacy students leads to more research publications. Furthermore, solving problems will increase their interest in academic research and they will participate more in research activities. Grant andGraham (1999) argued that lack of appointments, inability to access and provision of poor feedback revealed that the supervision is not

satisfactory. According to Wadesango and Machingambi (2011), only a small number of students were satisfied with their supervisors. The difficulties they faced include lack of support of supervisors and another workload of supervisors, as well as inadequate feedback related to their research work. Chandramohan & Ramesh (2019) presented practicable guidelines in their study. They argued that institutions that provide doctoral degree programs can training for students to successfully complete their research. Providing appropriate training can help the students to overcome research difficulties. Research has opened up new areas in all fields, such as Education, engineering, medicine, business, and science. Pakistan's research enrollment is lower than the other developing and developed countries. Only a very small number of young students enrolled in research projects, perhaps due to the lack of aptitude towards research, no awareness about research etc. Young student researchers are gradually increasing now and they are the part of society. According to Taskeen., et al (2014) researcher faced many problems and difficulties during their research work such as; lack of appropriate literature, supervisors lack basic knowledge of research methodology, no access to paid journals, the attitude of librarian and selection of new topic. Lack of researcher motivation, provision of poor feedback, lack of research skills and limited time (Memarpour et al, 2015) are also main problems the researcher faced in conducting research. Some of the postgraduate (MS/M.Phil) students are interested in research but most of them stay away as research is found a complex subject to grasp it. Maqsood & Jabeen (2019) found that the male students are more active than female students. As predicted, people with a high degree show a high positive attitude towards research. It is therefore essential that quality of research should be given utmost priority (Siddique & Ahmad, 2015). Furthermore, capacity building courses and networking opportunities are needed urgently. Reward system and creating more transparency in research are the two key ways to encourage strong research as well as to increase research funding for the researches' costs. More consideration is needed for equipping future researchers with necessary research skills. Whereas according to the study of Yal & Yal (2017), academicians had foreign language problems, data analysis difficulties, problems with publishing research, time issue in research, cooperation with colleagues, and problems in obtaining international resources. Attitude is prepared to act certain issues in a certain way. What constitutes these could be emotions, feelings, fear, anxiety, and prejudices. According to some researchers, attitude is not a natural tendency, but it can be learned. Attitudes are organized through experience. Attitude is a combination of person's feelings, emotions or thoughts, and the tendency to respond to objects. Some researchers such as Idu (1988), Omirin (1999), Adebule (2002) and Aborisade (2008) showed many but similar patterns of attitude formation. The main sources of these attitudes include emotional effects of experiences, environmental assimilation, and direct intellectual processes. According to Mehdipour & Balaramulu(2013), Attitude is the expression of

inner feelings and beliefs, reflecting whether a person has advantage or disadvantage of a pre-processing phenomenon. (Swindoll, Abraham (2012; 2003) argue that attitudes are more important than academic preparation and experience. Webb (1972) opined that attitude is one of the bigger predictors of achievement in Science subjects and Mathematics. A person's attitude towards any task is essential to the successful execution of such tasks. The project may fail if a person's attitude is not good, but success might achieve if the attitude is positive.

Osakinle (2001) argues that the development of a positive or negative feeling of a person towards an object implies that an attitude has been formed which is inconsistent. Furthermore, with the submission of Bandele (2004) stated that attitude is an abstraction formed from the emotions and feelings of people. Research can be loosely explained as hyphenated compound words re-search connoting a new search or a repeated search for something (Bande, 2004). Environmental factors of the institution help in developing a positive attitude of research among researchers. Trimmer (1992) argued unexpected difficulties might affect students' attitude towards research. Sabzwari, Kauserand Khuwaja, (2009) found that most students thought that research was daunting task but they had a positive research attitudes. Panastasiou (2005) defined research attitudes as multidimensional domains including what students consider research to be useful for their profession, they think research is related to their general life, they show positive research attitudes, and they experience anxiety about research, and find difficulty at research methodology.

Many studies have been conducted to explore the research knowledge (Siddique, 2015), research attitude (Saleem, 2014) and research difficulties (Taskeen., et al 2014) separately. Very little Efforts have been taken to explore the impact of research difficulties faced by postgraduate students on their research attitude. This study was designed to examine the difficulties faced by student researchers (MS/M.Phil) in conducting research and what was the impact of difficulties on students' research attitude. Here are some questions arises; what difficulties MS/M.Phil students' face in conducting Research work? What is the MS/M.Phil student's research attitude and what is the relationship between research difficulties and research attitude?

This study has following main objectives;

1. To identify difficulties faced by MS/M.Phil students in conducting research.
2. To explore the MS/M.Phil students' attitude towards research.
3. To measure the correlation between research difficulties and research attitude.

We set the following Hypothesis for this study.

Ho₁ There is no significant difference in the mean scores of research difficulties on two factors: Administrative and personal difficulties.

Ho₂ There is no significant differences in the mean scores of Students' attitude towards research on the selected four factors

Ho3 There is no impact of research difficulties on research attitude.

Current study aims to determine the impact of research difficulties on students' research attitudes. This study can be beneficial for universities and other researchers; they may come to know the difficulties faced by postgraduate students in the field of research and its impact on students' research attitude. The result of this study may also inspire the hearts of other researchers. The results of this study can be helpful for faculty members to develop educational strategies for the research students. Other researchers in this field may use this research to support their findings and this study may serve as a future reference for researchers. Finally, the results will serve as a basis for recommendations and improving research strategies of MS/M.Phil students of Universities. Therefore, this study has a high demand and importance.

A quantitative method was used in this research study, which would help to explain the methodological pathways used in this study. Study is explanatory in nature and a survey method was used to collect data from participants. Population was consisting about of 1653 postgraduate (MS/M.Phil) students who were enrolled in MS/M.Phil since 2011 to 2014. The basic information about respondents' population was taken from the Dean Graduate and Research Studies Office, University of Sindh, Jamshoro. Simple random sampling was used for drawing a sample. The sample size for this study was 165 respondents. At data collection stage six questionnaires were rejected on technical grounds and eight respondents did not returned the questionnaires. Hence, the data from 151 respondents, which is 10% of the population, was used in this study.

Data collection tool development is always challenging in every research study. In order to find answers to the research questions in this study, the researcher need to provide multi faced information under two main headings; student's research difficulties in conducting research and research attitude. For that purpose, two Likert scales were used as a tool to meet the need of required data. One scale was designed to record research difficulties faced by postgraduate (MS/ M.Phil) students in conducting research and second Papanastasiou's (2005) Research Attitude (ATR) scale was used to measure research attitude of postgraduate (MS/ M.Phil) students.

The Data was collected from the postgraduate (MS/ M.Phil) students of University of Sindh. The researcher collected data through face to face interactions. One Likert scale was used to explore research difficulties of student researchers while other Likert scale of Papanastasiou's (2005) "Students Attitude Research Scale" was used because it is a reliable tool and many international researchers have used this attitude tool for their research studies.

Ethical standards and considerations are at the core of any study. While collecting the data from the respondents the researcher followed the ethical rules of research and collected the data truthfully. Prior permission was taken from the concerned department and from the respondents to collect data. The respondents had been well informed, in

advance, about the objectives and utility of the study. The identity of the respondents was kept confidential throughout the study.

After the collection of quantitative data, both descriptive statistics and inferential statistics were applied to obtain results. Each of the questions in the Research Difficulties Likert scale was analyzed separately. A difficulty in research variable had been divided into two main components; administrative difficulties and personal difficulties. Research Difficulties were measured through fourteen questions. These questions were scaled on the 7- point Likert scale from "1-Strongly Disagree to 7-Strongly Agree". The results are found as under;

Table 1

Difficulties faced by research students in conducting research

Factors	N	Mean	Std. Deviation
Administrative Difficulties	151	5.20	.91
Personal Difficulties	151	4.98	1.06
Overall Difficulties	151	5.09	.79

The Table represents the mean score of two components Administrative difficulties, Personal difficulties and overall difficulties. The component 'administrative difficulties' explored the students opinion about the research environment, free access of research journals, duration of degree program, full access to literature through HEC portal etc. The mean for this factor was (M= 5.20) & standard deviation was (SD=.91) which shows students face more administrative difficulties in conducting research. The second component 'Personal difficulties' explored students view about the selection of topic, financial problems, family problems, writing quality English etc. The mean for this factor was (M= 4.98) & standard deviation was (SD=1.06) which shows students face less personal difficulties than administrative difficulties during research. The overall mean score (M=5.09) & standard deviation (SD=.79) indicated that the students face lot of administrative and personal difficulties during research work. It leads to the rejection of our hypothesis, H_01 and we accept alternative hypothesis that there is a significant difference in the mean scores of research difficulties on two factors: Administrative and personal difficulties.

Table 2

Attitude towards Research (Factor wise)

Factors	N	Mean	SD
Positive Attitude towards research	151	5.45	1.07
Research Anxiety	151	4.98	1.08
Research Usefulness	151	5.61	.79
Research Difficulty	151	4.54	1.29
Over all Attitude	151	5.22	.67

Above table represents the mean scores for each of the four factors. Data was collected through questionnaire. The factor 'positive attitude towards research' explored students' opinion about likeness, love, enjoyment and interest etc in research. The mean of this factor was (M= 5.45) & standard deviation was (SD=1.07) indicating that students have positive research attitude. The second factor research anxiety explored students' view about fear, tension, stress etc. The mean for this factor was (M= 4.98) & standard deviation was (SD=1.08) which shows that the students feel research anxiety. The third factor research usefulness explored the students view about the value of their research career, its benefit to the students, career development and so on. The mean for this factor was (M= 5.61) & standard deviation was (SD=.79) indicating that students have highly positive attitude towards 'research usefulness' and that they accepted the usefulness of this course in their professions. The fourth and final factor explored students' perceptions of 'research difficulty'. The mean for this factor was (M= 4.54) & standard deviation was (SD=1.29) which shows that the students have negative attitude is the difficulty of research because they face problem in research methodology and find research difficult. The overall mean score (M=5.22) & standard deviation (SD=.67) indicated that the high mean scores in research attitude. Students have positive attitudes in research usefulness and positive attitude towards research factors and negative attitudes in research anxiety and research difficulty factors. It also leads to the rejection of our hypothesis, Ho2 and we are justified to accept alternative hypothesis that there is a significant differences in the mean scores of Students' attitude towards research on the selected four factors

Table 3**Correlation between research difficulties and research attitude**

			DIFF	ATTIT
Spearman's rho	Research Difficulties	Correlation	1.000	.408**
		Sig. (2-tailed)	.	.000
		N	151	151
	Research Attitude	Correlation	.408**	1.000
		Sig. (2-tailed)	.000	.
		N	151	151

** Correlation is significant at the 0.01 level (2-tailed).

The above table shows that there is a moderate correlation of (rho = .408**) between difficulties faced in conducting research and research attitude of students at MS/ M.Phil level. This test statistic is significant at (p=0.01) which means that the differences are highly significant. Below mention table shows that, 22% of the variance in research

attitude can be predicted through independent variables (administrative and personal difficulties) with the p -value $<.00001$.

Table 4
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.470 ^a	.220	.210	18.50191

a. Predictors: (Constant), Personal difficulties, Administrative difficulties

Table 5 explains the standardized Beta coefficients for each independent variable, indicating their contribution to *research attitude*.

Table 5
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	97.936	9.977		.000
	Admn: Diff:	1.131	.246	.348	.000
	Personal Diff:	.649	.211	.233	.002

a. Dependent Variable: Attitude towards Research

As can be seen in the above table, administrative difficulties have a greater coefficient (.348) and $p < .00001$ and the result is significant at $p < .01$. Personal difficulties have smaller coefficient (.233) than administrative difficulties and $p < .002$ and result is significant at $p < .01$. This suggests that both the independent variables are significant and administrative difficulties leave the more impact on student's attitude towards research than personal difficulties. Therefore we reject third null hypothesis as well to support of our alternative hypothesis. So there is a significant impact of research difficulties on research attitude of student-researchers.

The purpose of this study was to measure the impact of research difficulties on student's research attitude. The researcher investigates two types of difficulties administrative difficulties and personal difficulties. The factor "administrative difficulties" explored the student's opinion about the free access to journals, time period of degree program, system's procedure, supervisor's lack of time and assistance etc. From the mean score ($M=5.20$) it was found that students face more administrative difficulties in conducting research. The research finding is consistent with the Taskeen, Khan, Shehzadi & Saleem (2014) who mentioned that there is no appropriate access to literature and there is no chance of success without consulting the literature. The finding is also related with the Agha (2015) who said completing M.Phil/MS and a doctorate degree at the time is a major issue, as the system doesn't implement appropriate timetable. Pakistan doubled its time to comply with the timetable than other countries. The final submission occurs only

if the supervisor is 'satisfied' with the scholar; otherwise, the students have to keep waiting. Wakeford (2004, 2006) said that many research students find their original supervisors unavailable or too busy, because of illness, study leave, personal problems, promotion or retirement.

The second factor 'Personal difficulties' explored students view about the research anxiety due to family problems, difficulties in selecting topic, lack of research knowledge and skills, research is time taking, financial problems in research, difficulties in data collection, time management in research and difficulty in writing quality English. The mean score for this factor (M=4.98) shows students face more administrative difficulties than personal difficulties during research. This research finding is consistent with Locke (2005) who found that interpersonal difficulties are often associated with other people's difficulties. He further mentioned that interpersonal problems might be associated to anticipate for how others will react. This might be sensitive or insensitive to people's reaction to others. Bocar (2013) revealed in his study that collaboration among subjects outside the academic institution was a critical issue for researchers. Because of personal difficulties, such as stress management and time interference sixty-six percent of the subjects find it difficult and end their research study. Fard P.A (2015) found that limited access to internet makes research difficult. Foley. O (2010) revealed that English language proficiency troubles in research.

Second finding of this study is Research Attitude which consists of 4 factors; positive attitude towards research, research anxiety, research usefulness and research difficulty. The data was collected by using a seven-point Likert scale. The factor 'positive attitude towards research' explored student's opinion about likeness, love, enjoyment and interest etc in research. The mean for this factor was (M= 5.45) which shows that students have positive attitude towards research. The second factor 'research anxiety', explored student's opinion about fear, stress, tension and difficulty during research. The mean for this factor was (M= 4.98) which shows that the students feel research anxiety when they start research work. The third factor 'research usefulness' explored student's view of research on the career value, its benefit to the students, career advancement and so on. The mean for this factor was (M= 5.61) which shows students have high attitudes towards 'research usefulness' and they accepted the usefulness of this course in their professions. The fourth and last factor explored student's opinions about the 'research difficulty'. The mean for this factor was (M= 4.54) which shows that the students have negative attitude is the difficulty of research because of problems they faced in research concepts and Research methodology and find it difficult. The overall mean score (M=5.21) indicated that the students have positive attitudes in research usefulness and positive attitude towards research factors and negative attitudes in research anxiety and research difficulty factors. The findings of this study is consistent the Bhangare (2014) who said that most of the students' attitude towards research was positive. Positive

research attitude has been a repeatedly finding in almost all studies from within and outside the country, and gives hope that given further amendments in the right direction the education program will see high-quality research work being taken up by doctors. The another finding of research anxiety is consistent with Bandele & Adebule (2013) study who argued that students are being nervous, scared, bored and anxious and that if given the opportunity they would not enrolled for the course.

Relationship between factor difficulties faced in research and sub factors of research attitude was found through spearman rank correlation. Moderate correlation was found between the difficulties faced in research factor and research anxiety ($r_s = .359^{**s}$), research usefulness ($r_s = .256^{**s}$) and research difficulty factors ($r_s = .477^{**s}$). No significance correlation was found between difficulties faced in research and positive attitude towards research factor ($r_s = .014^{ns}$).

Another finding of this study is to find out multiple regression analysis to estimate the impact of research difficulties on the research attitude of post graduate students. According to the results there is an impact of administrative and personal difficulties on student's research attitude ($R^2 = .22$). Administrative difficulties had more impact ($\beta = .348$, $P < .00001$) on student's attitude towards research than personal difficulties ($\beta = .233$, $P < .002$). The findings of this portion is consistent with the Memarpour (2015) who said in his research study that students demonstrate good research knowledge but their research attitudes were not enough. Impact of research barriers and difficulties factors suggests that more information is needed to solve the problems and change the research strategies.

Conclusions

Research students face a range of difficulties at all stages of their degree program. They face more administrative difficulties than personal difficulties. Barriers and difficulties negatively affect their concentration and focus on their research that ultimately results in anxiety, low research efficiency and delays in work. As far as research usefulness is concerned a significant number of students showed positive attitude towards research in component of research usefulness and positive attitude towards research. Thus, there is negative impact of research difficulties on student's research attitude and efficiency. There is a great need to address issues and problems related to research so that student-researchers could focus more on research work rather than wasting time and energies to overcome difficulties which are product of existing system.

Recommendations

The University should improve its administrative system and procedure in order to facilitate researchers. Better access to research journals facilities should be provided to the all faculties. Professional development programs such as research writing skills, use

of SPSS, knowledge about plagiarism, reviewing the researchers should be made available for research scholars.

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