Attitude of ELTL Graduates towards Research at Institute of Education and Reseach, University of the Punjab

[1]Muhammad Irshad-Ul-Haq
Institute of Liberal Arts, University of Management & Technology, Lahore, Pakistan
[2]Zainab Fayyaz
Institute of Education and Research, University of the Punjab, Lahore, Pakistan
[3]Shaista Umar Hayat
Institute of Education and Research, University of the Punjab, Lahore, Pakistan
[4]Amsa Liaqat
Institute of Education and Research, University of the Punjab, Lahore, Pakistan
[5]Nimrah Afzal
Institute of Education and Research, University of the Punjab Lahore, Pakistan

Abstract

'Attitude' is like well-read capacity for reaction of continuiously beneficial or un-beneficial way about a known activity. Students' attitudes' are shape-able through a shortest upshot about situations that exist in the educational context. Evaluating learners' attitudes for research methods module is significant with the aim of enabling instructors for developing teaching techniques by provision of more optimistic attitudes toward the subject matter. The development of research attitude gains importance. Research is supposed as the significant aspect regarding technological innovation, social growth and instructional framework. The Research study was an endeavour for assessing the attitudes of 100 chosen ELTL graduates towards Research studying in the M.A ELTL (English Language Teaching and Linguistics) Program of the Institute of Education and Research (IER) in the University of the Punjab, Lahore (Pakistan). The Graduates studied the courses Research Methods optimistically and they found such courses difficult but with the gradual struggle they overcame over their fears about Research. Data was collected from purposive sampling from respondents with the Research tool of an opinionnaire. Results signified that most of the Graduates hold an optimistic attitude towards Research. The study hunted for calculating the University of the Punjab M.A ELTL Graduates'

attitudes regarding the learning of the Research Methods module, since attitudes affect Graduates' performance at a discipline. The Research findings inferred that a few number of graduates had optimistic Attitudes towards attaining the education of Research Methods and appeared rather interested for studying the discipline. The teaching methods employed appeared as influencing the Attitudes of the Graduates. Researchers ought to tackle whether they faced many difficulties. Researchers are not born with basic research expertise but they are taught such expertise from others typically from their supervisors or senior mates who have experienced the same processes as they got through their own research journey. The study proposes that the instructional procedure must be administered within apposite techniques, like which incite critical thinking among Graduates, thus for generating optimistic Attitudes towards the Quantitative Research module for instructing them the Research writing moreover Research publications for future prospects.

Key Words: M.A ELTL Graduates, Research Attitude, Technological Innovation, Research Methods, Research Expertise

Introduction

Research is the systematic procedure of gathering and probing information to intensify our perception about the process beneath study. In the contemporary advanced world, Research has developed into significant coherent gear for the human beings to transform their way of life in accordance with the wants and requirements of the society. Research unlocks innovative circumferences into each discipline of life like family, medicine, education, health, agriculture, business, industry, space and also in the field of language like English Language Teaching and Linguistics.

Research is primarily a mode to respond to the inquiries stimulated through probing. Within a few graduates' as well as undergraduate' modules, Research Methodology is a study module; graduates are still unaware of the importance of Research and the intentions of its inclusion like a module into their study curriculum at college or university level. Research is also taught as a regular module in the University of the Punjab, Quaid-e-Azam Campus, Lahore (Pakistan), amongst many of the other Degree Programs specifically administered at the Department of IER (Institute of Education and Research) like M.Ed, B.S. Ed. Honours, M.B.E., M.T.E,

M.A Education Elementary, M.A Education Secondary, Islamic Education, M.Phil and Ph.D. in Education and in the Masters Degree Program (M.A ELTL) English The university graduates face much anxiety issues concerning Research-relevant courses at the moment inclusive of Mathematical and Statistical techniques used in the Research process in order to accomplish the Research-concerned syllabus or other required estimation, hence, they mostly avoid from studying the module of Research with their enthusiastically focused-intention due to several reasons. Language Teaching and Linguistics as well as many students are passionate to carry out Research work but most of them are liable to escape from it since Research Methodology has been examined to be a complex module in order to have its full command.

Many other issues that influence the standard of Research accomplished by the graduates at university level are accessible amenities, counselors, activities of the department, attitudes of both the staff and learners towards Research, self-reliance etc. Attitude towards Research of the staff develops passion and reliability among the graduates. The attitude of an individual manipulates emotionally how the research-relevant work is experienced by a person cognitively and the individual's exchanges linked with that research. An 'optimistic attitude' facilitates an individual to address the issues rapidly, whereas, a 'pessimistic attitude' obstructs the attempts made within Research both into technical talent and interpersonal associations which the Research involves.

The main intention and very motive of conducting this Research study was to investigate the 'Attitude of M.A ELTL (English Language Teaching and Linguistics) Graduates' Attitude towards Research at PU (University of the Punjab, Lahore) in the Department of IER (Institute of Education and Research). In accordance with Papanastasiou (2005), recognizing about the 'Attitudes towards Research' (ATR) is significant in order that a constructive or an 'optimistic attitude' may be enhanced among graduates and thus their learning is liable to be endorsed as a result. They are unable to capture the Research concepts as well as its worth within their occupational life. Papanastasiou (2005) experienced pessimistic attitude towards Research into learners. Siemens, Punnen, Wongand Kanji (2010) examined that interest into

Research had been notably improved within the fourth year university students with respect to the second year university students. The difference between both fourth year and second year students regarding research learning is dependent upon their conceptual and inspirational learning as well as inclination towards Research-relevant courses is concerned.

Hence, the Research Method Module, being taught at the Department of IER (Institute of Education and Research) of University of the Punjab (Lahore), contains many complications with regards to its graduates in general and M.A ELTL graduates in particular. In this Research work the target of the study is to investigate the 'Attitude of ELTL Graduates of PU towards Research Methods Module along with the study of various other complications faced by the ELTL Graduates in relation to learning of Research course at the University of the Punjab. The division of the current Thesis is that first chapter consists of the Introduction to the topic, the second chapter is about 'literature review' to the Research Module, in the third chapter the method of execution of Research will be discussed in detail, fourth chapter will be about the data collection and analysis of data and the fifth and the final chapter will discuss the results, conclusion, discussions, interpretations and recommendations as well.

Objectives of the Study

The current Research study contains the following objectives;

- To measure M.A ELTL Graduates' attitude towards Research at IER in University of the Punjab, Lahore.
- To explore the difference in interest level of male and female M.A ELTL Graduates towards Research in University of the Punjab, Lahore.
- To explore the difference in interest level of rural and urban M.A ELTL Graduates towards Research in University of the Punjab, Lahore.

Research Questions

Main Research Question

What is the attitude of M.A ELTL Graduates towards Research at IER in University of the Punjab, Lahore?

Research Sub-questions

> ➢ Is there any difference in attitudes of male and female of M.A ELTL Graduates towards Research at IER in University of the Punjab, Lahore?
>
> ➢ Is there any difference in attitudes of rural and urban M.A ELTL Graduates towards Research at IER in University of the Punjab, Lahore?

Significance of the Study

Numerous studies recommend the interests, fondness, optimistic or pessimistic beliefs, aversion, inclination and students' varying attitudes towards Research including the gender's variant attitudes about Research Methods module, sometimes are conflicting to each other, within diverse life disciplines. However, there is scarceness of research that can measure the M.A ELTL Graduates' Attitudes towards Research (ATR). The current study was designed to raise the output of M.A ELTL graduates of IER, University of the Punjab for the quench of research along with exploring its benefit for many such scholars studying and working in this field.

Therefore, it must be significantly acknowledged about the inclination to offer the Research modules (courses), apt achievable supervision and in order to facilitate the prospective researchers be effectual and proficient. Thus the following study looks for filling in the gaps concerning Graduates' Attitudes towards the Research at University generally and particularly the M.A ELTL Graduates' attitudes towards Research at IER (Institute of Education and Research) within the Master Degree Program of ELTL at University of the Punjab, Lahore, Pakistan.

The study might not only have meant to measure the attitude of M.A ELTL Graduates' research attitude (ATR) but also it was meant to raise the research productivity of the Institute (I.E.R) with respect to its influential role in the heart of Punjab (i.e., Lahore), Pakistan. Furthermore, this study may also cover the lacking of interest in the field of research by developing a research culture in the universities of Pakistan by taking an initiative. This paper may also improve the way of the teachers teaching research at I.ER, PU, Lahore by developing the research for the sake of research. It may also be beneficial for the academia and the policy makers to a great extent.

Literature Review

Research is the systematic process of gathering and analyzing information to enhance our perception of the phenomenon underneath learning (Swindoll, 2012). Inclusive definition of attitude comprises sensations, beliefs, thinking, behaviors and their interface (Zan& Martino, 2007). The attitude towards research fundamentally means a thorough study of feeling, views and the individual's behavior towards Research. There is a key role of research attitude in the whole process of research. (Hogg & Vaughan, 2005, cited from: Khan, Shah & Khan, 2018).

Theoretical Framework

Concerning the field of linguistics by means of language study taking its all different dimensions, Research within such area explores to remediate subject matters or determine issues on language. Ajzen & Fishbien (1980) represent 'attitude' like a well-read tendency to react within a constantly beneficial or un-beneficial way about a known entity. Students studying in the graduate programs at university level in Pakistan, usually confront research-related lessons with glum mind-set and attitude. Such glum attitudes have been conferred in diverse studies for many years concerning set of courses in research, mathematics and statistics (Adams & Holcomb, 1986; Elmore & Vasu, 1980; Wise, 1985).

Causal designs, though, recommend that attitudes play the role of mediators amid previous performance and future attainment (Meece, Wigfield, & Eccles, 1990). Former research studies have gained that gloomy attitudes toward a module (e.g., Mathematics or Statistics) have been noticed to clarify a considerable number of the divergence in students' learning (Ma, 1995). Roberts and Bilderback (1980) studied that the majority of students who study statistics become rather anxious.

The University of the Punjab has been a unique institution of Research since the last few years and has earned a fabulous creative name over the tedious struggling years. Many graduates from this rare University have been awarded with research degrees with an excellence shaping character. Also tremendous work has been being done in the English Language Teaching and Linguistics along with the Linguistics Research field by this HEC and world-ranking University, considered as Asia's best and largest working University. No doubt, the University is developing and spreading as well as shaping its Graduates with English Language Teaching and Linguistics

with Research. So, Linguistics and Research graduates of the University face lots of problems in Statistical, Mathematical and Research related processes like data collection, analysis, results and interpreting the results using SPSS or other Statistics techniques and softwares showing different attitudes towards research subjects (modules). Hence, the central aim of the following study is to investigate the multidimensional aspect structure of this "Attitudes towards Research scale (ATR) concerning the English Language Teaching and Linguistics Graduates of the University" and to scrutinize its psychometric characteristics

Previous Researches Concerning Anxiety of Research

The anxiety of university Research Graduates is a drawback for the cause that such condition is a self-provoked mechanism that predicts students' achievement.
The barrier of this might refer to the reality that the degree (graduate) students are supposed to gain late as compared to be never gained. Alternatively, it can be said that anxiety about the research essential in a class may outshine any benefits the learner may acquire from the content (Sevidy-Benton & O'Kelly, 2015).

The correlation between Statistics attainment and research anxiety, learning behavior, course burden and a lot of Statistics courses in use are considerable among trainee researchers (Onwuegbuzie, 2013).

Emotional and Motivational Factors Concerning Research

Emotional and motivational factors always tend to create difficulty in Research learning along with all learning but in Statistics and Quantitative Modules at university they are considerably noticeable. Whereas the teachers struggle to teach their pupils the contents of their subject area, students facing difficulties with their learning may undergo numerous emotions that retard their learning.

Unless with the end of the 1980s research on motivation, gave small contribution to research module on learning. A parallel history preserves the area for learning of the Statistics (SPSS) and Research. Gal and Ginsburg (1994) are of the view that Statistics instructors have concentrated upon developing the cognitive part of instruction, for example, the proficiencies and knowledge to which the students are likely to develop their competencies, minute regard has been conferred to non-

cognitive problems, for instance students' feelings, attitudes, convictions, interest, prospects and motivations. Just one exception regarding this exists: learning on anxiety in relation to Statistics.

Anxiety of Research

Concerning the Research (subject) generally or learning the Quantitative Research Methods, about no research on sensational factors subsists. Mainly, some research papers merely consider the problem that exists. The heralding effort of Onwuegbuzie (1997) investigated Statistics anxiety (i.e. dread of Statistics language, fright of Statistics knowledge application), Research Procedure anxiety (i.e. intimidation of language of Research, panic of Research knowledge application), opus anxiety in lettering (i.e. stuff anxiety, shape or structure and managerial anxiety), furthermore library anxiety (i.e. professed library competency, so-called relieve with the library).

Graduates' prior experiences with Mathematics are likely to clarify university Statistics module scores more than anxiety. The learners having taken more Mathematics courses had greater Statistics scores as compared to the students having fewer courses of Mathematics.

Summing up, prior researches recommend that previous Mathematics attainment has some connection with Statistics anxiety at university level moreover is still weakly connected with success in Statistics at university as well as Methodology modules (courses). Yet, connection between Statistics anxiety and Research and Statistics at university course grades does not appear always the same. Onwuegbuzie (1997) studied students displaying the greater kinds of Statistics anxiety likely to look Statistics as extraneous pro their future growth, either educational or professional. Concluding stages can be built from the results that Research or Statistics related high anxiety is linked to regardless of Research or Statistics much significant. Hence, supposing the current study about challenges faced in the learning of Quantitative Research Methods are related to excluding Research proficiencies much significant in practical life.

Views, Beliefs and Conceptions about Research

Individuals' Conceptions about Research

Individuals' conceptions about learning the Research Methods may be entrenched in broad conceptions of studying and learning. In the Research Methods leaning, students' earlier experiences affect their thinking way for the learning targets accordingly and they affect their learning habits while taking Research Methodology modules. Lonka and Lindblom-Ylänne (1996) experienced that conceptions of knowledge and learning were correlated. Lindblom-Ylänne and Lonka (1999) studied and observed that students' habits of correlating with the study atmosphere were linked with the study achievement. Driver, Leach and Ryder (1999) observed images of science of Natural Science students at university.

Diverse conceptions of science are not merely students' representative although can also be experienced amid expert researchers. Brew (2001) searched variation in how research is perceived by researchers. Brew recognized four kinds of conceptions. In the layer conception, concealed implications are revealed and Research is construed as a process of exploring, exposing or producing fundamental meanings. Students' conceptions concerning Research not only lead their route of selecting a module of Research Methods at the university. Students may have impractical attitudes about their prospect career, for example that Research competencies are not considered necessary in it. Onwuegbuzie (2000, 329) determined that Education graduates' presumed employment skill was not linked to Statistics anxiety.

Cognitive Processes Involved in Learning the Research

A main complexity that confuses starting students and slows down Statistics learning is that the significant basic Statistics concepts are typically theoretical. Onwuegbuzie (1997), within a research about university graduates' anxiety into research proposal writing, observed that few of students hold a terror concerning language of Statistics.

The complexity in Statistics learning and Research Methodology cannot be illustrated merely by emotional and conceptual aspects. Probably some other features occupy the Research areas which make its learning hard for a lot of people. Research

Methodology consists of constituents that make its learning difficult cognitively, for example, complexity and abstractness. The conventions and rules governing Research within society have been expanded and improved with a longer time span and they have increased the amount of abstractness in Research Methodology (Lakoff & Núñez, 1997).

Research Anxiety among Students and its Influence upon their Attitudes

Research anxiety in learner's curriculum has included as well in the outline of Research currently. Earlier Researches onto the research anxiety of university graduates, uncovered diverse outcomes. Trimarco (1997) discovered that university graduates holding an enhanced level of understanding, observed fewer 'anxiety' in the USA perspective. Abdullah, Abdul Karim and Erfanmanesh (2014) described that a sure extent of knowledge looking for 'anxiety' was existing within Malaysian postgraduate scholars. Iranian graduates, conversely, were observed to be proficient with a self-controlled extent of Research anxiety, sharing great degree of Research self-achievement and holding optimistic attitudes towards Research (Rezaei and Zamani-Miandashti, 2013).

Research Anxiety among ELT Graduates

Contemporary Issues in Education (2015) described that South African university graduates were excited in learning and were optimistic as regards the Research significance within their career, even if Research being a hard module to master. Regarding gender variable, researches confirmed to be no considerable association involving graduates' anxiety levels with their gender (Bibi, Lqbal, & Majid, 2012; Trimarco, 1997). Talking about 'study variable', an evident was conducted and found that students of M.A within the program of ELT amongst the groups; they displayed Research anxiety to greater extents compared with the graduates from various other courses (Bibi et al., 2012).

Worries of graduates in relation to Research have been explored in Turkey as well. i.e., graduates experienced that compiling of the 'discussion section' into a Research thesis to be extremely tough portion of compiling Research theses whereas lettering the references list found to be the less difficult section (Köksal & Razi,

2011). Regarding the research anxiety, the study claims that Turkish graduates had small extents about Research anxiety (Bayar, Bayar, Eğmir, Ödemiş, & Kayir, 2013; Saracaloğlu, 2008).

Gender Differences within Research Attitudes

Within daily living, people persist on behaviours they think are probable. They certainly endeavor the task they persuaded at, possessing the ability to accomplish it, although, doubt makes them disinclined. The similar is the situation occurs to the Researchers. Having a confident attitude towards Research, they surely accomplish the Research enjoyably posing good worth. Researchers' optimistic or pessimistic direction towards Research is said to be Research attitude (Saeed, Saleem & Waheed, 2014). Alternatively, Research attitudes portray the researchers' zeal or taste about research procedure.

Various disciplines of Research have been studying the attitudes of males and females since long. Gender discrepancies into Pakistani universities overcome within the Research area, e.g. picking out a Research topic, espousal of a suitable research technique, choosing the supervisors for the accomplishment of research (Saleem, Saeed, & Waheed, 2014). Very little work has been done over the examination of graduates' attitude towards, especially gender disparities into Research attitudes.

Papanastasiou (2005) deduces that studying the attitudes about Research is noteworthy in order that optimistic attitudes can be full-fledged into the both gender groups. In addition, some phases from the ordinary social life appear to develop research attitude via both gender categories. The literature proposes that gender distinctions play a part in mounting attitudes while performing Research and in learning Research classes.

Furthermore, disparities into the conversation ways into males and females probably compel the process of research. Numerous researches (Henly, 1995; Langlois et al., 1994) underscored diverse examples in conversation which occurs like gender précised.

Many researches corroborate that attitudes of male and female towards Research are normally dissimilar. Males are more relevantly tending to carry out research compared with females.

The literature concerning the gender disparity about the attitude enlightens us that the male graduates are rather expected having optimistic attitude towards the Research (Costello, 1991; Shaukat et al., 2014). So it looks that Research is male-governed territory. A feasible motive to justify that, finding may pursue the reality about the males' assumption that the research is valuable for their occupational career (Butt & Shams, 2013).

In lieu to the present way of life within Pakistani universities, the instructors and scholars are deficient in the research capability and less inclined into the Research procedure (Lodhi, 2011). It has also been very beautifully addressed into the opinionnaire used as an indispensible tool to collect data for the execution of this great motive behind the endeavour by the researchers as well that to measure the attitudes of M.A ELTL graduates of PU towards Research from the both genders, i.e., males and females.

Screening the literature, narrow figures are available on gender variations towards the Research attitude, essentially the gaps within Research attitude into the government and non-government institutes in Pakistan. The graduates studying in the Masters Degree Program like the graduates of M.A ELTL of PU morning as well as evening classes including which males and females tend to have diverse approaches to the Research procedure, also there are many other complexities, varying trends and attitudes of both male and female graduates of ELTL program within the University of the Punjab, Lahore (Pakistan), i.e. studying Research module at IER (Institute of Education and Research), facing difficulties in Statistical and Quantitative Methods, the great pressure raised due to the computer Statistical techniques while operating SPSS software, entering the data into SPSS, calculating and its analysis, applying different tests on the data like T-test, Anova or Manova tests, discussing and interpreting results, citation, the way supervisors are viewed, and their impact on male and female supervisors etc.

Gaps in the Study and Contribution towards Research

Regarding the Literature Review, evident work needs to be done so far with the measurement of ELTL Graduates' Attitude towards Research (ATR) at I.E.R, University of the Punjab, Lahore and in the Punjab Province. Anyhow, diverse students' Attitude towards Research study (ATR) has been measured in the previous studies concerning different levels (i.e. Intermediate level, University level, Postgraduate level like Attitude of M.Ed. students towards Research, Public and Private Sector Postgraduate Students' Attitude towards Research etc.), but no specific work has been done with the measurement of M.A ELTL Graduates' Attitude towards Research.

So, fulfilling the gap within the previous Research studies (as has been a civilized and ongoing convention), it is a passionate and humble endeavor on the part of the researchers of the current Research Study that the following study has been made for exploring the Attitude of M.A ELTL Graduates' Attitude towards Research at IER in PU, Lahore.

METHODOLOGY

Procedure of the Study

The researchers, after finalizing the topic went through the literature review from the library, internet and other available resources. An opinionnaire (questionnaire) was developed for data collection. The research was compiled by using the following key steps. First of all, target population was decided then sampling was made. Afterwards, the opinionnaire was circulated amongst the chosen sample and the data collection process was administered by both of the investigators. Then collected data was entered into the SPSS and it was analyzed as well. Hence, conclusions were drawn on the basis of results obtained through the analysis. Each step is portrayed below.

Research Design/Framework

The following Research study employs an action research framework which is basically an applied research that is conducted with the aim of leading to a change or some kind of upgrading after identifying the problem. One can define the Action

Research as 'a strategy in which the action researcher and a colleague act as a team for finding the problem in order to develop a solution on the basis of diagnosis' (Bell and Bryman, 2011, p.414).

Regarding this, the following Research work is conducted with the intention that the results could be employed to offer recommendations to implement the best practice ideology within the linguistics instructions for solving any difficulty or address limitations recognized that impede the success of M.A ELTL graduates at PU into the understanding and implementation of Research-relevant procedural facts. The Quantitative Research method was used for data collection and its analysis.

Sources of Data

Data was collected from the following main sources;

i)   M.A ELTL Graduates enrolled in Morning Program at IER in PU.

ii)   M.A ELTL Graduates enrolled in Self-supporting Program at IER in PU.

The answers of the respondents against the opinions or statements of opinionnaire used in this study were vitally analyzed and are presented in the Chapter IV of the following Thesis.

Population of the Study and Sample

Since the current study sample was constrained to a very fastidious population of graduates of M.A ELTL Degree program at PU, who were studying the modules of Research Methods I and Research Methods II for English Language Teachers along with other different Courses of ELT and Linguistics at the Department of IER (Institution of Education and Research), it was classified as a 'purposive sample'. Therefore, the individuals were chosen on the basis of such criteria and they were evaluated as 'information-rich' entities for the variable analysis. The data from the 'purposive sampling technique' was gathered at the Department of IER from The University of the Punjab, Lahore (Pakistan), Quaid-e-Azam Campus, Faisal Town, during the fourth semester of the academic year 2014-2016. For maximum representation, following strata were kept in view:

a)   Morning and Evening Program of ELTL

b)   Male and Female

c)   Rural and Urban

Instrumentation/ Tool of the Study

The background Research instrument was an 'opinionnaire'/Questionnaire furnished from the 'Attitudes towards Research' Scale (ATR) generated by Papanastasiou (2002), with the objective of verification of the dimensions of the attitudes towards Research amongst the PU ELTL Graduates who had accomplished an obligatory Masters Course (Module I & II) in Methods of Linguistics Research along with some other relevant variables. Therefore, based on its analogy with the intent of the present study, Papanastasious's ATR scale along with some other relevant variables was considered ample for the current Research.

Thus, the opinionnaire consisted of 26 'opinions/ statements' in the form of a five-point Likert scale that ranged from 'Strongly Agree (1)' to 'Strongly Disagree (5)'. An adjoined middle column was provided in the format of 'opinionnaire' for 'Undecided/ no response (3). The pessimistically-worded items were inverted in order that a higher numbered response onto the Likert scale might signify a negative attitude and vice versa. The graduates' attitudes were shown by their response to fill in the intended opinion checkbox against the Likert Scale. Data were accumulated from individuals' personal confidential point of view by providing their true opinion.

Data Collection

For data collection, the Attitude towards Research (ATR) scale developed by Papanastasiou (2005) was used along with the opinionnaires. The opinionnaires were managed as the feedback through the specific survey of the both classes of ELTL Gradates' i.e. Morning and Self-supporting conducted at the IER Department in the University of the Punjab (PU), Lahore. Willing participants were appreciated to fill in the opinionnaires and the M.A ELTL Graduates were notified that they could take out at any time whether they were feeling uneasy. The respondents were provided with the opinionnaires with the kind instructions of not to jot down any recognizing information on the opinionnaire and they were assured clearly that each and every response of theirs would be held top confidential.

Data Analysis

Data which was collected by both the researchers as per requirement of their Research study with purposive sampling, was entered into the SPSS (Statistical

Package for Social Sciences) Software of Version 20.0, variables were defined accordingly and finally was analyzed using Frequency counts and percentages for presenting the data in tables.

Reliability and Validity

Pilot study was conducted to check the reliability of the Questionnaire including 26 statements used in the following study. For the internal consistency of the variables, Cronbach Alpha was performed at the Questionnaire. The Questionnaire got a value of 0.797, which was greater than 0.70 and was supposed as reasonable making the Questionnaire reliable for data collection and analysis. Hence, it was declared that Questionnaire was valid and its contents are reliable.

Delimitations of the Study

The current Research study is confined to the ELTL Graduates, studying in Masters Degree Program of M.A ELTL at IER in the University of the Punjab, Quaid-e-Azam Campus, Faisal Town, Lahore (Pakistan).

Operational Definitions

Attitude: An optimistic or pessimistic influence about a specific subject matter is known as 'attitdue'. The two-directional definition comprises attitude like self-beliefs to well-concerning subject. Widespread definition of attitude embraces sensations, beliefs, conducts and their interface (Martino & Zan, 2007).

M.A ELTL: Degree Program of Masters of Arts in English Language Teaching and Linguistics (being conducted at IER, University of the Punjab, Lahore).

M.A ELTL Graduates: Students enrolled in the Master Degree Program of ELTL at IER (Department) in the University of the Punjab, Lahore (Pakistan) from diverse study disciplines like Medical, Engineering, Arts, Social Sciences, Humanities or Commerce etc.

PU: University of the Punjab, Lahore (Pakistan)

Analysis and Interpretation of Data

This part of study deals with the analysis and interpretation of data on "Attitude of ELTL (English Language Teaching and Linguistics) Graduates' towards Research". The instrument used to collect data was Questionnaire. SPSS 16

(Statistical Package for Social Sciences) software was used to analyze data in the form of Frequencies, Percentage, Mean, Standard Deviation and T-test.

Table 1

Sample Description on the basis of Variables

Variables	Frequency	%	Total
M.A ELTL (Morning)	50	50.0	100
M.A ELTL (Evening)	50	50.0	100
Male	31	31.0	100
Female	69	69.0	100
Rural	40	40.0	100
Urban	58	58.0	100

Table 1 shows that M.A ELTL Graduates from morning and evening program were equal in number (50) including 31% males and 69% females from rural (40%) and urban (58 %) areas. Therefore, majority of the students (69%) were females.

Table 2

Responses of Sample students about Research Usefulness for Profession

Sr.	Statements	SA		A		U		DA		SDA		M	S.D
		F	*%*	*F*	*%*	*F*	*%*	*f*	*%*	*F*	*%*		
1	Research is very valuable	40	40.0	56	56.0	1	1.0	2	2.0	1	1.0	4.32	.695
2	Research is related to my field of life	44	44.0	50	50.0	0	0	5	5.0	1	1.0	4.36	.674
3	Research means appraising (evaluating) information.	33	33.0	53	53.0	9	9.0	4	4.0	1	1.0	4.13	.812
4	Most of the students benefit from Research	34	34.0	55	55.0	5	5.0	6	6.0	0	0	4.17	.779

5	Research is important to advance knowledge	20	20.0	55	55.0	18	18.0	6	6.0	1	1.0	3.87	.837
6	Research is essential to discover new things	24	24.0	56	56.0	15	15.0	5	5.0	0	0	3.99	.772
7	Research is useful for adopting as a profession	34	34.0	46	46.0	9	9.0	5	5.0	6	6.0	3.97	1.087
8	The skills acquired in research will be helpful for me in my future	21	21.0	47	47.0	15	15.0	7	7.0	10	10.0	3.62	1.187
9	Research means gathering information.	35	35.0	47	47.0	10	10.0	5	5.0	3	3.0	4.06	.962
10	Research has an International scope	21	21.0	49	49.0	18	18.0	9	9.0	3	3.0	3.76	.986

Concerning statement 1 table 2 shows that majority of students (96%) agreed that Research is very valuable. Regarding statement 2 table 2 depicts that majority of students (94%) agreed that Research is related to their field of life. About statement 3 table 2 explains that majority of students (86%) agreed that Research means appraising (evaluating) information. For statement 4, table 2 shows that majority of students (89) % agreed that Most of the students benefit from Research. On statement 5, table 2 shows that majority of students (75%) agreed that Research is important to advance knowledge. About statement 6, table 2 explains that majority of students (80%) agreed that Research is essential to discover new things. For statement 7, table

2 explains that majority of students (80%) agreed that Research is useful for adopting as a profession. About statement 8, table 2 shows that majority of students (68%) agreed that the skills acquired in research will be helpful for them in their future. For statement 9, table 2 shows that majority of students (82%) agreed that Research mean gathering information. Regarding statement 10, table 2 clarifies that majority of students (70%) agreed that Research has an International scope.

Table 3

Responses of Sample students about Research Anxiety

Sr.	Statements	SA		A		U		DA		SDA		M	S.D
		f	%	F	%	f	%	f	%	f	%		
11	Research makes me anxious	23	23.0	54	54.0	17	17.0	5	5.0	1	1.0	3.93	.832
12	Research is stressful.	23	23.0	39	39.0	29	29.0	7	7.0	2	2.0	3.74	.960
13	Research scares me.	46	46.0	42	42.0	8	8.0	4	4.0	0	0	4.30	.785
14	I am worried that I will make many mistakes in Research.	28	28.0	51	51.0	19	19.0	1	1.0	1	1.0	4.04	.777

Table 3 about statement 11, shows that majority of the students (77%) agreed that Research makes them anxious. As regards statement 12, table 3 shows that majority of the students (62%) agreed that Research is stressful. Concerning statement 13, table 3 describes that majority of the students (88%) agreed that Research scares them. On statement 14, table 3 shows that majority of the students (79%) agreed that they were worried that they would make many mistakes in Research.

Table 4

Responses of Sample students about Positive Attitude towards Research

Sr.	Statements	SA	A	U	DA	SDA	M	S.D

Sr.	Statements	f	%	F	%	F	%	f	%	F	%	M	S.D
15	I enjoy doing Research.	33	33.0	42	42.0	16	16.0	6	6.0	3	3.0	3.96	1.004
16	I am interested in studying the details of Research	31	31.0	42	42.0	23	23.0	3	3.0	1	1.0	3.99	.870
17	Research supports and develops my field of study	46	46.0	43	43.0	10	10.0	1	1.0	0	0	4.34	.699
18	Research replicates (regenerates) the things.	27	27.0	27	27.0	20	20.0	18	18.0	8	8.0	3.47	1.283
19	I need SPSS training in a professional way.	17	17.0	27	27.0	14	14.0	32	32.0	10	10.0	3.09	1.296

Table 4 reveals about statement 15 that majority of the students (75%) agreed that they enjoy doing Research. About statement 16, table 4 shows that majority of the students (73%) agree that they are interested in studying the details of Research. For statement 17, table 4 describes that majority of the students (89%) agree that Research supports and develops their field of study. About statement 18, table 4 reveals that majority of the students (54%) agree that Research replicates (regenerates) the things. In relation to statement 19, table 4 describes that majority of the students (44%) agree that that they need SPSS training in a professional way.

Table 5

Responses of Sample students about Factor of Research Usefulness for Life

Sr.	Statements	SA		A		U		DA		SDA		M	S.D
		f	%	F	%	F	%	f	%	F	%		

20	Research plays an important role in everyday life	21	21.0	38	38.0	17	17.0	22	22.0	2	2.0	3.54	1.114
21	Research has relevance to life.	33	33.0	47	47.0	6	6.0	10	10.0	4	4.0	3.95	1.077
22	Research is mainly experimenting or testing hypothesis.	21	21.0	44	44.0	19	19.0	14	14.0	2	2.0	3.68	1.024

Table 5 shows that concerning statement 20, majority of respondents (59%) agree that Research plays an important role in everyday life. About statement 21, table 5 describes that majority of the respondents (80%) agree that Research has relevance to life. For statement 22, table 5 portrays that majority of the respondents (65%) agree that Research is mainly experimenting or testing hypothesis.

Table 6

Responses of Sample students about Factor of Research Difficulty

Sr.	Statements	SA		A		U		DA		SDA		M	S.D
		f	%	F	%	f	%	f	%	F	%		
23	Research is difficult.	17	17.0	40	40.0	25	25.0	15	15.0	3	3.0	3.53	1.039
24	I am not interested in Research.	26	26.0	38	38.0	17	17.0	16	16.0	3	3.0	3.68	1.118
25	I face a lot of problems in data collection.	20	20.0	28	28.0	16	16.0	29	29.0	7	7.0	3.25	1.266
26	I am confused in	15	15.0	41	41.0	18	18.0	22	22.0	4	4.0	3.41	1.111

applying test

in   data

analysis.

Table 6, regarding statement 23 shows that majority of the students (57%) agree that Research is difficult. About statement 24, table 6 describes that majority of the students (64%) agree that they are not interested in Research. On statement 25, table 6 tells that majority of the students (48%) agree that they face a lot of problems in data collection. Regarding statement 26, table 6 represents that majority of the students (56%) agree that they are confused in applying test in data analysis.

Table 7

Responses of Sample students about Factors (N = 100)

Statements	Minimum	Maximum	Mean	Std. Deviation
Research Usefulness for profession	10.00	29.00	18.5400	4.27683
Research Anxiety	4.00	19.00	10.1300	3.64776
Positive Attitude towards Research	5.00	19.00	10.7000	2.70615
Research Relevance to life	3.00	12.00	6.2600	1.66739
Research Difficulty	4.00	20.00	10.2200	3.61417

Table 7 shows that Mean value for the Factor of Research Usefulness for Profession (M = 18.5400, S.D = 4.27683), Research Anxiety (M = 10.1300, S.D= 3.64776), Positive Attitude towards Research (M= 10.7000, S.D = 2.70615), Research relevance to life (M = 6.2600, S.D = 1.66739), and Research difficulty (M = 10.2200, S.D = 3.61417). It is concluded that the mean of research usefulness for profession Higher than the other factors.

Table 8

Comparison of Perception of the students' satisfaction on the basis of male and female students regarding Research Usefulness for Profession

Gender	N	Mean	F	Sig.	t	Df
Male	31	19.1290	.890	.348	.922	98
Female	69	18.2754				

Table 8 shows that there is no significant difference in perception of respondents about Research Usefulness for Profession. (t=.922, df=98, p>.05).

Table 9

Comparison of Perception of the students' satisfaction on the basis of male and female students regarding Research Anxiety

Gender	N	Mean	F	Sig.	t	Df
Male	31	11.6452	1.846	.177	2.885	98
Female	69	9.4493				

Table 9 shows that there is no significant difference between perception of male and female students' responses with respect to Research Anxiety. (t=2.885, df=98, p>.05).

Table 10

Comparison of Perception of the students' satisfaction' on the basis of male and female regarding Positive Attitude towards Research

Gender	N	Mean	F	Sig.	T	Df
Male	31	10.6774	.048	.827	-.056	98
Female	69	10.7101				

Table 10 shows that there is no significant difference between perception of male and female students' responds' respect to Positive Attitude towards Research. (t=-.506, df=98, p>.05)

Table 11

Comparison of Perception of the students' satisfaction' on the basis of male and female students regarding Research Relevance to Life

Gender	N	Mean	F	Sig.	t	Df
Male	31	6.4839	.038	.847	.899	98
Female	69	6.1594				

Table 11 shows there is no significant difference between perception of male and female students' responses with respect to Research Relevance to Life. (t=.899, df=98, p>.05).

Table12

Comparison of Perception of the students' satisfaction' on the basis of male and female students regarding Research Difficulty

Gender	N	Mean	F	Sig.	t	Df
Male	31	11.1290	.960	.330	1.702	98
Female	69	9.8116				

Table 12 shows that there is no significant difference between perception of male and female students' responses with respect to Research Difficulty. (t=.1.702, df=98, p>.05)

Table 13

Comparison of Perception of the students' satisfaction' on the basis of rural and urban students regarding Research Usefulness for Profession

Gender	N	Mean	F	Sig.	t	Df
Male	40	18.5250	.542	.464	.166	96
Female	58	18.3793				

Table 13 shows that there is no significant difference between perception of rural and urban students' responses with respect to Research Usefulness for Profession. (t=1.66, df=98, p>.05)

Table 14

Comparison of Perception of the students' satisfaction' on the basis of rural and urban students regarding Research Anxiety

Gender	N	Mean	F	Sig.	t	Df
Male	40	10.7250	2.211	.140	1.238	96
Female	58	9.7931				

Table 14 shows that there is no significant difference between perception of rural and urban students' responses with respect to Research Anxiety.

(t=1.238, df=98, p>.05)

Table 15

Comparison of Perception of the students' satisfaction' on the basis of rural and urban students regarding Positive Attitude towards Research

Gender	N	Mean	F	Sig.	T	Df
Male	40	10.6750	.455	.502	.129	96
Female	58	10.6034				

Table 15 shows that there is no significant difference between perception of rural and urban students' responses with respect to positive attitude towards research. (t=.129, df=98, p>.05)

Table 16

Comparison of Perception of the students' satisfaction' on the basis of rural and urban students regarding Research Relevance to Life

Gender	N	Mean	F	Sig.	t	Df
Male	40	6.2250	.784	.378	-.047	96
Female	58	6.2414				

Table 16 shows that there is no significant difference between perception of rural and urban students' responses with respect to Research Relevance to Life. (t=-.047, df=98, p>.05)

Table 17

Comparison of Perception of the students' satisfaction' on the basis of rural and urban students regarding Research Difficulty

Gender	N	Mean	F	Sig.	t	Df
Male	40	10.6250	.369	.545	.751	96
Female	58	10.0690				

Table 17 shows that there is no significant difference between perception of rural and urban students' responses with respect to Research Difficulty. (t=.751, df=98, p>.05)

Discussion of Results

The focus of the current study was to calculate the Research Attitude of M.A ELTL Graduates. The analysis of the data was measured into the Frequencies, Mean Scores, Percentage, Standard Deviation and T-test by using SPSS software. The data was analyzed dividing it into five main factors i.e. 'Research Usefulness for Profession', 'Research Anxiety', 'Positive Attitude towards Research', 'Research Relevance to Life' and 'Research Difficulty'.

The Mean of the Factor 'Research Usefulness for Profession' is 18.15, for 'Research Anxiety' is 10.13, for 'Positive Attitude towards Research' is 10. 7000, for 'Research Relevance to Life' is 6.26 and 'Research Difficulty' is 10. 20, respectively. The larger Mean among the factors is 18.15400 that is of "Research Usefulness for Profession."

The current Research results show that majority of the University Graduates have positive Attitude towards Research regarding the above five main Factors of the following study. There is a strong correlation among three of the factors of Attitude like 'Research Anxiety', 'Research Positive Attitude' and 'Research Difficulty' by their Mean (as 10) but the Mean for the Factor of 'Research Relevance to Life' is 6. Thus the following study of Research Attitude determined that Research is much 'Useful for Professional Life' with 18 Mean value than that of 'Research Relevance to Life'. While addressing the previous studies regarding the following five factors their appeared a significant difference among the factors' results with regards to all these factors, like the Research Usefulness for Profession, has increased within the passage of time. Research Anxiety and Research Difficulty has been decreased over the passage of time. While according to the factor scaling of this study, 'Research Relevance to Life' has been decreased so far by the view of M.A ELTL Graduates at IER, PU as compared to the previous studies. Overall, Research Attitude concerning the five factors has developed over time. The Graduates are taking more interest in studying the Research relevant programs at the University.

The First Main Research Question was to explore the attitudes of M.A ELTL Graduates towards Research at IER in University of the Punjab, Lahore. The study calculated a more positive Attitude of ELTL Graduates towards Research concerning

the five main factors the i.e. Research Usefulness for Profession, Research Anxiety, Positive Attitude toward Research, Research Relevance to Life, Research Difficulty. So, the answer to the first Main Research Question is positive Attitude toward Research Study (ATR) by the respondents.

The second Research Questions was about to explore the significant difference male and female M.A ELTL Graduates towards Research. The results of the Data Analysis (in the answer to the second Sub-Research Question) found that there is no as such significant difference in the attitudes of males and females regarding Research. All the respondents showed the same positive response towards Research regarding the five factors of the study as described above in the table 7. It depends upon many factors which facilitate the learning of Research of the graduates within the University of the Punjab, Lahore. One of the reasons can be that all the male and female graduates in the M.A ELTL Degree Program at University of the Punjab are exposed to the similar resources and instructional material. They were provided with energetic and well-qualified teaching faculty. No discrimination was made to them concerning their instruction of Research into the classroom. They were delivered with the same coaching of the same quality. So it is explored in the results of the current study that within the passage of time, both of the male and female graduates got good command over their Research skills that their interest level went on enhancing gradually in the Research and hence they became able to have a good grip over Research study. Currently, the M.A ELTL Graduates have developed their Language and Research caliber and potential more as compared to when they entered for the first time in the class being fresh ELTL students. This is why, it is determined that at the level of Masters Degree Program, the graduates enhanced their Research proficiencies and they developed an optimistic Attitude toward Research.

The third Research Question was to find out whether there is significant difference in Attitude of Rural and Urban M.A ELTL Graduates towards Research. The study results discovered that there is not as such significant difference in the Attitude of Rural and Urban Graduates towards Research in the ELTL Masters Degree Program. It is declared that there was no as such background effect upon students regarding Research. If it was between them then it could be before joining

the current Masters Degree Program but with the passage of the time they developed a great level of interest in the Research classes and hence, by the same and equal instruction, well-qualified staff members at PU and other facilities provided to them, they overcame upon their background barriers in learning of Research at the department of IER in PU, Lahore. The students especially from the rural areas had anxiety toward research but with the effect of similar coaching as compared to the urban M.A ELTL Graduates at IER, ELTL classrooms, they became capable of having much grasped over their Research learning barriers and hence being passionate of Research study at the University of the Punjab, they became proficient in it. This is why, there is no significant level of difference between the Rural and Urban area M.A ELLTL Graduates as they have developed great level of interest in the Research study as well.

Limitations of the Study

The following study is limited in the following sense;

The current Research study is not reliable only on the basis of just Quantitative Methods in order to measure the (projected) Research Attitude of M.A ELTL Graduates at IER in PU. The Attitude of M.A ELTL Graduates is supposed to be measured by using both Qualitative and Quantitative Research Methods (Mixed Method) for the more reliable results.

So, it was discovered (and made limited) that students interested in measuring the M.A ELTL Graduates' Attitude towards Research (ATR) hereafter, are supposed to use a Mixed Method of Research (i.e. Qualitative and Quantitative) in order to get more reliable results from their prospective Research study.

Conclusion and Future Implication

The current Research study explored that there was positive attitude among ELTL Graduates towards Research at the department of IER. After measurement of the Attitude of the ELTL Graduates thorough the Questionnaire analysis, it was found that there is no significant difference in interest level of Male and Female M.A ELTL Graduates' Attitude towards Research at IER. Also there is no as such significant difference between interest level of Rural and Urban M.A ELTL Graduates' Attitude towards Research at IER. Students ELTL Classroom, hold a good grasp over

Research as compared to the other Arts Degree Programs in the University of the Punjab.

Future Implications

Following recommendations can be suggested on the basis of the following study;

- Government should facilitate and provide the affordable resources to the Research at the University Level in order to enhance the Research Proficiency of the Students.

- The University administration should assist the Research volunteers with financial aid in order to finalize their Research work (to get them become motivated Researchers).

- There is lower scope of Research study in the Pakistani Government Universities that is why; students do not adopt the Research Programs at further higher studies. Regarding this, they should be encouraged and facilitated with World Class Faculty Members and World Class facilities as well in order to beat up the International Market of Research.

- The element of time management should be included in instruction by the University administration in order to get the students well aware of the whole planning of their Research Process because most of the students are able to submit their Research Paper timely.

- On the basis of the following study, it is recommended that for the measurement of 'Attitude of M.A ELTL Graduates towards Research at the University' is much technical in nature, so, adding Qualitative Method, a Mixed Method should be used to get the more reliable results about the Attitude Measurement towards Research.

- The students at the graduation level at Pakistani Universities are not given a great touch with the Research. They are not reasonably familiar with Research study as compared to foreign universities. So, they should also be introduced

with the Research Methods in their university curriculum and instruction to make the Research quality enhanced henceforward.

- The current Research study is also recommended as a prospective guideline for the novice researchers in the field of ELTL interested in doing their Research henceforth on measuring the M.A ELTL Graduates' Attitude towards Research at any University in Pakistan.

References

Adams, N. A., & Holcomb, W. R. (1986). Analysis of the relationship between anxiety about mathematics and performance. *Psychological Reports, 59*, 943-948.

Andrews, P., & Hatch, G. (1999). A new look at secondary teachers' conceptions of mathematics and its teaching. *British Educational Research Journal, 25*(2), 203-223.

Addison-Wesley. Gross, R. (2001). *Psychology: The science of mind and behavior. London*

Ali, M. A. (2000). Supervision for teacher development: an alternative model for Pakistan. *International Journal of Educational Development,* 20**,** 177-188.

Ali, T. (2011). Understanding how Practices of Teacher Education in Pakistan Compare with the Popular Theories and Narrative of Reforms of Teacher Education in International Context. *International Journal of Humanities and Social Science*, 1(8), 208-222.

Akhter, N. (2009). *Teachers' perception of problem-solving methods in mathematics education in Pakistani Schools*, Thesis, School of Eduction, University of Glasgow.

Akhter, N. (2013). An Investigation of Pakistani University Teacher-educators' and Student-teachers' perceptions of the Role and Importance of Inquiry-based Pedagogy in their Professional Learning Experiences in Initial Teacher Education, PhD Thesis, University of Glasgow, UK

Butt, I. H. & Shams, J. A. (2013). Master in Education Student Attitudes towards Research: A comparison between two public sector universities in Punjab, *South Asian Studies 28* (1), 97-105.

Cohen, J. (1988). *Statistical power analysis for behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum Associates.

Comrey, L., & Lee, H. (1992). *A first course in factor analysis*. Hillsdale, NJ: Lawrence Erlbaum.

Cruise, R. J., Cash, R. W., & Bolton, D. L. (1985). Development and validation of an instrument to measure statistical anxiety. *American Statistical Association Proceedings of the Section on Statistics Education,* 92-97.

Dauphinee, T. L. (1993). *The factor structure and gender factor invariance of an instrument to assess adult attitudes toward statistics*. Unpublished doctoral dissertation, The University of New Mexico, Albuquerque, New Mexico.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.

Costello, J. (1991). *Teaching and Learning Mathematics*, London: Routledge.

Creswell, J. W. (2012). *Educational research : planning, conducting, and evaluating quantitative and qualitative research*. Boston: Pearson.

Doughty, E. A. and Leddick, G.R. (2007). Gender Differences in the Supervisory Relationship. *Journal of Professional Counseling: Practice, Theory & Research*, 35 (2), 17-30.

Dauphinee, T. L., Schau, C., & Stevens, J. J. (1997). Survey of attitudes toward statistics: Factor structure and factorial invariance for women and men. *Structural Equation Modeling, 4*(2), 129-141.

Elmore, P. B., & Vasu, E. S. (1980). Relationship between selected variables and statistics achievement: Building a theoretical model. *Journal of Educational Psychology, 46*, 215-222.

Elmore, P. B., & Lewis, E. L. (1991, April). *Statistics and computer attitudes and achievement of students enrolled in applied statistics: Effect of computer laboratory*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Elabbar, Ageila Ali (2011). *An investigation of influences affecting Libyan English as Foreign Language University Teachers (LEFLUTs),teaching approaches in the language classrooms*. PhD thesis, University of Glasgow, UK

Fishbein, M. &Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour: An introduction to theory and research*. London:

Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York: McGraw-Hill.

Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.

Granello, D.H., Beamish, P.M., & Davis, T.E. (1997). Supervisee empowerment: Does gender make a difference? *Counsellor Education and Supervision*, 36, 305-318.

HEC. (2013). *HEC Recognized Universities and Degree Awarding Institutions*. Retrieved August 11, 2014, from http://www.hec.gov.pk/Ourinstitutes/pages/Default.aspx universities: the academics' perspective, *Social and Behavioural Sciences* 31,473 – 479

Johnson, D. E. (1998). *Applied multivariate methods for data analysis*. Pacific Grove, CA: Duxbury Press.

Kaiser-Messmer, G. (1993). Results of an empirical study into gender differences in attitudes towards mathematics. *Educational Studies in Mathematics, 25*.

Khan, S., Shah, S. M. H., & Khan, T. M. (2018). An Investigation of Attitudes towards the Research Activities of University Teachers. *Bulletin of Education and Research*, *40*(1), 215-230.

Lindsay, R., Breen, R. & Jenkins, A. (2010). Academic Research and Teaching Quality: The views of undergraduate and postgraduate students, *Studies in Higher Education,* 27(3), 309-327.

Lodhi, A.S. (2012). A pilot study of researching the research culture in Pakistani public

Ma, X. (1995). Factor structure of attitudes toward mathematics among high, average, and low

achieving high school senior students in the Dominican Republic. *Focus on Learning Problems in Mathematics, 17*(4), 20-35.

Marcoulides, G. A., & Hershberger, S. L. (1997). *Multivariate statistical methods: A first course.*

Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Meece, J. L., Wigfield, A., & Eccles, J. S. (1990). Predictors of math anxiety and its influence on young adolescents' course enrollment intentions and performance in mathematics. *Journal of Educational Psychology, 82*, 60-70.

Mazerolle, S.M., Borland, J.F., and Burton, L.J. (2012). *The Professional Socialization of Collegiate Female Athletic Trainers: Navigating Experiences of Gender Bias.*

Norusis, M. J. (1990). *SPSS: Statistical data analysis.* Chicago: SPSS Inc.

Papanastasiou, E. C. (2005). Factor structure of the attitudes towards research scale. *Statistics Education Research Journal, 4*(1), 16-26.

Patak, A.A ,Naim, H. A. (2012). ESL/EFL Students Attitude toward Research Report Writing in Higher Education: A Literature Review, *Management Educator: Courses, Cases & Teaching Journal, 5* (65), DOI:10.2139/ssrn.2119602. Private Sector Education in Pakistan: Mapping and Musing.

Roberts, D. M., & Bilderback, E. W. (1980). Reliability and validity of a statistics attitude survey. *Educational and Psychological Measurement, 40*, 235-238.

Rummel, R. J. (1970). *Applied factor analysis.* Evanston: Northwestern University Press.

Schau, C., Stevens, J., Dauphinee, T. L., & Del Vecchio, A. D. (1995). The development and validation of attitudes towards statistics. *Educational and Psychological Measurement, 55*(5), 868-875.

SPSS, Inc. (1998). *SPSS Base 8.0: Applications guide.* Chicago, IL: Author.

Saleem, K., Saeed, M., & Waheed, S. A. (2014). Relationship between Cultural Variations and Students' Research Preferences: A Gender Based Comparison. *Sindh University Journal of Education, 43.*

Sprague, J. &Massoni, K. (2005). Student evaluations and gendered expectations: What we can't count can hurt us. *Sex Roles*, 53, 779-793.

Waters, L. K., Martelli, T. A., Zakrajsek, T., & Popovich, P. M. (1988). Attitudes toward statistics: An evaluation of multiple measures. *Educational and Psychological Methods, 48*, 513-516.

Wise, S. L. (1985) The development and validation of a scale measuring attitudes toward statistics. *Educational and Psychological Measurement, 45*, 401-405.

Woelke, P. L. (1991, April). *An examination of the factor structure of Wise's attitude toward statisticsscale.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Zeidner, M. (1991). Statistics and mathematics anxiety in social science students: Some interesting parallels. *British Journal of Educational Psychology, 61*, 319-328.