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An Investigation of Attitudes towards the Research Activities of University Teachers

Shafqat Khan[*], Syed Manzoor Hussain Shah[**], and Tariq Mahmood Khan[***]

Abstract

The purpose of this analytical descriptive study was to investigate the attitudes of university teachers towards their research activities. Faculty of the public sector general universities of Khyber Pakhtunkhwa was the population of the study. Stratified random sampling was used to select a sample of 240 faculty members from six randomly selected universities. An attitude scale based on five point Likert technique was developed with the help of experts and related literature. Validity of the instrument was ensured by consulting experienced professors and experts in the field. Reliability coefficient of the scale was 0.76. Items of the rating scale were classified into six domains - research orientation, rewards influence research, personal interest, mission of university, research use, and research anxiety. For analysis, different statistical tools such as mean ratings, chi-square (χ^2), *Pearson* values, and one way analysis of variance (F test) were employed. University teachers showed positive attitudes towards research. Incentives played pivotal role in enhancing interest in scholarly activities. Research anxiety did not hamper intellectual activities of the faculty though significant number of the sample considered research stressful.

Keywords: Attitudes, Research activities, Faculty, Research orientation, Personal interests, Mission of university, Research use, Research anxiety.

* Ph.D. Scholar, Hazara University, Pakistan. Email: jadoonshafqat@gmail.com
** Registrar Hazara University, Pakistan. Email: drmhshaah@gmail.com
*** Assistant Professor, IER, University of the Punjab. e-mail: drtariq@dr.com

Introduction

Universities role has diametrically changed from what was in the late 19th and 20th centuries, and now these institutions are portraying themselves as guardians of public knowledge, as engine of up-to-date capitalist economy, and as an expander of frontiers of knowledge in the scientific and technological domains. Now universities are conveying their missions in line with these roles (Geiger, 1986). Creamer (1998) has noted that faculty's involvement in research activities and publishing can be taken as index of institutional status. Some studies claim that institutional status and output contribute to benchmarking of any institution's research proliferation (Henthorne et al., 1998). An increase in research publication has become a guarantee for prestige and an important factor for institutional ranking (Olsen, 1994; Boyer, 1990).Faculties' annual research production is not only used as criteria for teachers' promotion but also lifts university's reputation and rank. This boosted status may cause to increase students' enrollment and justifies claim for greater incentives and grants from government and donor agencies (Lertputtarak, 2008).

Research attitudes play an important role in the whole process of research. Hogg & Vaughan (2005, p.150) describe attitude as, "a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols". Similarly, Eagly, & Chaiken (1993, p.1) tried to explain attitude in these words, "…a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor". Attitudes have always been easier to gauge than to define, which has directed many a scholars to assumption that- "attitudes are what attitude scales measure". Similarly, social roles and social norms strongly influence the attitudes of individuals (McGuire, 1969; Hockenbury & Hockkenbury, 2007; Smith & Mackie, 2007). Jegede et al.'s (2007) findings reveal that attitude bears significant relationship with and also predicts competence.

Various studies have shown that positive attitude towards work has strong positive relation with job performance and job satisfaction (Ahmed, Ahmed, & Shah, 2010). Similarly, Locke (1976) has noted positive relationship between job appraisal and job satisfaction. Positive attitudes for the work and affiliation with the organization increase job satisfaction and performance of the individuals (Linz, 2002). Studies have confirmed that negative attitudes obstruct achievements in learning and in research activities, and consequent low performance (Wise, 1985; Waters et al., 1988; Elmore & Lewis, 1991; Woelke, 1991; Zeidner, 1991).

Attitude cannot be directly observed but must be inferred for overt behaviour, both verbal and nonverbal. However, attitudes are relatively permanent tendencies to respond in consistent ways to particular classes of objects or events. Individuals' attitudes towards their profession have an effect on their performance (Hussain, 2011). Teachers' attitudes towards their profession have a great importance in fulfilling the requirements of the profession (Durmusoglu, 2009; Terzi & Tezci, 2007). Moreover, attitudes towards professions are one of the most important factors to be successful in the profession (Cakir, 2005).

Walker (2010) has done a confirmatory factor analysis of attitudes toward research scale and observes that deficiency in research skills and relatively long interval between courses and thesis/dissertation work are two prominent factors related to constraints of research. Onwuegbuzie (2003), Onwuegbuzie (1997), and Wise (1985) in their publications suggest anxiety as the main cause of negative attitudes towards statistics and statistical manipulations. Similarly, Henson, (2010), Onwuegbuzie (2004), Pajares and Schunk (2001), Ranis (2003), and Ravid and Leon (1995) in their studies proclaim negative attitudes towards research and research activities a result of students sense of lack of usefulness of research, deficiency of understanding or preliminary awareness of research, scarce conception of the relevance of research in scholarly activities, or self-efficacy problems regarding capability and inspiration to acquire and accomplish research related processes.

Stark (1986) and Clark (1987) have observed a major paradigm shift in the priorities of universities soon after World War II, when university teachers were nudged for research activities while still carrying out their traditional tasks of teaching meticulously. Consequently, research oriented faculty, with credentials typical of the research scholars, increased exponentially. "Publish or perish" has turn out to be the fundamental rule of law in many universities, where research, not performance in the classroom, is the irresistible feature in establishing a teacher's eminence and salary. Achievements in teaching appear more delicate and hard to explain than those in research (Toch, 1990; Mooney, 1992; University of Massachusetts, 1995; Colbeck, 1992).

University teachers have already sensed the compulsion of carrying out research and publish their papers in order to keep up the pace with the fast moving world and to advance their career. Majority of them are aware of the fact that results of their investigations are almost worthless for others save themselves (Taylor, 1984). Teaching used to be considered as an outstanding position, many university faculty members have realized that the pendulum has swayed in favour of research and publication. A fair amount of research publications, or at least the professed potential for significant scholarship activities, have turned out to be job preconditions of many ranks at universities (Horwitz, 1994).

Objectives of the Study

The objective of the study was to investigate the attitude of university teachers towards research activities.

Research Questions

The study was intended to probe the following research questions:

1) How university teachers' attitudes influence their research activities?

2) How research orientation, reward, personal interest, university mission, research use, and research anxiety influence university teachers' research activities?

Research Methodology

Population and Sample of the Study

University teachers of the public sector general universities of the Khyber Pakhtunkhwa were the population of the study. Initially six universities were randomly selected, and then stratified random sampling was used to select the sample from the faculties of both arts and sciences. Forty teachers from each university were selected; twenty from faculty of arts and twenty from sciences.

Table 1
Sampling Frame

Name of University	Arts Faculty	Sciences Faculty	Total
Abdul Wali Khan University	20	20	40
GomalUuniversity	20	20	40
Hazara University	20	20	40
Kohat University of Science & Technology	20	20	40
University of Haripur	20	20	40
University of Peshawar	20	20	40
Total	120	120	240

Research Instruments

An attitude scale based on five point Likert technique was developed with the help of experts in the field. Items of the scale were developed by studying and seeking guidance from existing literature. Such studies as Papanastasiou (2005); Walker (2010); Wang and Guo (2011); Tang and Chamerlain (1997); Murrey et al. (1994); and Monroe and Kumar (2011) provided beacon lights in the construction, improvement and finalization of the

scale. In order to make sure the validity of the instrument experienced professors and experts in the field were consulted and in the light of their suggestions statements of some items were modified, position of some items were shifted, and few items were dropped. Pearson product moment reliability coefficient of the scale was 0.76.

Data Collection

The researcher surveyed by employing attitude scale in order to seek answers of the questions raised in the study. Forty university teachers from each of the six public sector universities of Khyber Pakhtunkhwa were reached through e-mail, friends, and by personal contact. Data from two hundred and twenty-five (225) faculty members was received and analyzed.

Data Analysis and Interpretation

Data collected through attitude questionnaire was analyzed. Scale mean ratings and chi-square (χ^2) were calculated to gauge the inclinations of faculty towards different factors and to find out the association among different items of the factors. Items and variance of two factors were compared by calculating *Pearson* values and one way analysis of variances (F test).

Table 2

Responses showing mean ratings of attitude scale (N = 225)

S.#.	Factor-I Research Orientation	Scale Mean rating
1	I view myself primarily as researcher.	4.24
2	I feel professional satisfaction by conducting research.	4.19
3	I believe that university should retain faculty members who exhibit research production.	4.11
4	I can contribute to my university's rank by publishing research papers.	4.48
5	The intellectual challenge of academic research inspires me to work harder.	4.43
	Factor-II Rewards Influence Research	
1	I think rewards are effective means of influencing faculty performance in research.	3.99
2	I think reward influences faculty for research activities.	3.97
3	I think faculty members must be productive researchers or lose their jobs.	3.04
4	I think that if tenure/promotions were not binding on research, most faculty would devote less time and effort to research.	3.97
5	I can become an effective professional if I am able to have an educated critique about the quality of research.	3.97

	Factor-III Personal Interests	
1	I think that personal Interests are the most important factor in determining the allocation of time to research.	4.4
2	I feel free to pursue my academic interests (within the context of research).	3.7
3	I think sharing research results with colleagues is self-satisfying.	4.1
4	I want to build up my reputation as an academic scholar through research.	4.5
	Factor-IV Mission of University	
1	Research is a motivating factor to the mission of my university.	4.06
2	I believe that research and teaching are mutually supportive activities.	4.00
	Factor-V Research Use	
1	In my opinion research should be mandatory for professional training.	4.17
2	I think research is useful to every professional.	4.17
3	In my opinion research-oriented thinking plays an important role in everyday life.	4.26
	Factor-VI Research Anxiety	
1	Research makes me nervous.	2.22
2	Research is stressful.	2.68
3	I feel insecure concerning the analysis of research data.	1.75

Table 2 reveals that mean ratings of the five items of Factor-I (research orientation) ranged from 4.11 to 4.48indicating strong inclination of university teachers towards research activities. Mean ratings of the items of Factor-II (rewards influence research) fluctuated from 3.04 to 3.99 respectively; which indicated that reward system had a great impact on research activities inside the campuses. Score-frequency ratios of the items of Factor-III (personal interests) ranged from 3.7 to 4.5 indicating university teachers' confirmation that personal interests play an important role in carrying out research activities.

Mean ratings of the two variables in the Factor-IV (mission of university) were 4.06 and 4.00, indicating university teachers' attitudes in line with the mission of their universities. Score-frequency ratios of the items of Factor-V (research use) vacillated from 4.17 to 4.26 indicating positive attitude of faculty towards use of research in professional and daily lives. Score-frequency ratios of the variables of Factor-VI (research anxiety) were 2.22, 2.68, and 1.75. Being less than 3, the median value, these values showed no anxiety or fear, on part of university teachers, related with research process and procedures. Notwithstanding that substantial population considers research as stressful activity.

Table 3
Pearson correlation coefficient and one-way analysis of variance between pair of factors

Factors	*r*	F- value	Perc. points*
F-I (Research Orientation) F-II (Rewards Influence Research)	0.91	0.245	1.98
F-II (Rewards Influence Research) F-III (Personal Interests)	0.937	0.181	2.11
F-III (Personal Interests) F-IV (Mission of University)	0.937	0.181	2.11
F-IV (Mission of University) F-V (Research Use)	0.992	0.6502	2.65
F-V (Research Use) F-VI (Research Anxiety)	- 0.74	0.463	2.40
F-VI (Research Anxiety) F-I (Research Orientation)	- 0.73	0.355	2.11

$\alpha = 0.05$*

Table 3 presents positive coefficient of correlation (0.91) between the items of the factors, research orientation and rewards influence research. Calculated value of F (0.245) signified equality of variance of both the factors. There was a perfect correlation between the items of the two factors—rewards influence research and personal interests; and one-way ANOVA of the two factors yielded no significant difference between groups with regard to variance. *Pearson* product-moment correlation (r = 0.937) indicated positive correlation between the items of the two variables, personal interests and mission of university; and one-way analysis of variance between items of the two factors indicated equivalence of variance. *Pearson* coefficient of correlation showed positive correlation between the items of the factors, mission of university and research use; and one-way ANOVA yielded no significant difference between the items of the two groups regarding overall frequencies of attitudes. *Pearson* correlation value (- 0.74) indicated a negative association between the items of the two factors—Factor-V (research use) and Factor-VI (research anxiety), while **o**ne-way analysis of variance specified equivalence of variance of both the factors. *Pearson* correlation value (- 0.73) indicated a negative correlation between the two factors-research anxiety and research orientation; and one-way ANOVA yielded no significant difference between the items of the two factors.

Table 4
Cross tabulation of different categories of variables

S.#.	Factors	Chi-Sq.(χ^2)	df	Perc. point*	p-value
1	Research Orientation	42.13	16	7.96	.00038
2	Rewards Influence Research	43.32	16	7.96	.00025
3	Personal Interests	106.6	12	5.23	.00035
4	Mission of University	25.17	4	0.711	.00005
5	Research Use	51.18	8	2.713	.0000
6	Research Anxiety	125.21	8	2.73	.0000

$\alpha = 0.05$*

Table 4 shows Chi-square (χ^2) value (16, N = 225) = 42.13, $p < .05$), with a corresponding *p*-value 0.00038. It proves significant relationship among the five items of Factor-I. Chi-square test for independence indicated strong association among the variables of the Factor-II. Cross tabulation confirmed positive association among the items of the F-III. Chi-square test indicated a significant relationship among the items representing attitudes of university teachers towards mission of their universities. Chi-square (χ^2) test for independence of variables of Factor-V showed significant association among the items. Cross tabulation at three different levels of Factor-VI indicated strong association among the items of the Factor-VI.

Discussion

University faculty overall showed positive disposition towards scholarly activities. Primarily viewed themselves as researcher, felt professional satisfaction in research activities, favoured the retention of only those teachers who exhibit research proliferation, and contributed to their university ranks through their publications by taking research as an intellectual challenge. This is in line with studies of Stark (1986), Clark (1987), and Boyer (1987) who have pointed out that after the World War II within a short span of time the number of research oriented academicians increased many fold. Koplik and Welsh (1993) and Mooney (1992) also confirmed this leaning of university teachers towards research. Toch (1990) observes the phenomena of 'publish or perish', in many universities of the United States, which has become the yard stick for teachers' status and salary.

Rewards both in the form of intrinsic and extrinsic motivation influenced their research activities and influenced their performance. Tenure and promotion contingent upon research resulted into the devotion and efforts on part of faculty. Social and academic praise and criticism turned teachers into an effective professional. Toch (1990) has noted that the highest correlate of jobs moves is top-tier publications. Murrey et al. (1994) in their research findings have pointed out that reward system may strongly affected academic behaviour. Bok (1993) and Kasten (1984) have done comprehensive investigations on the reward systems and come up with the conclusion that rewards stimulate teachers for more input in research activities. De Young (1985) dares to print that professors have little choice but to play the 'publications' game, as prevailing reward system inspire them to be extremely observable.

Faculty members' personal interests determined allocation of time to scholarly activities; and they felt free to chase their academic interests. Sharing research results with contemporaries was self-satisfying and teachers aspired to build up their reputation as an academic scholar. Taylor et al. (1984) in their study have pointed out that teachers at tertiary level feel compelled to do research and publish in order to retain their position and to advance their careers. University faculties' wish to ascend the status and their ranking methodologies invariably places a significant emphasis on faculty research productivity. Because of these realities and personal benefits faculties are incessantly in strive to enhance their research profiles and get personal benefits (Monroe & Kumar, 2011; Clarke, 2004; Ng & Li, 2000; Tapper & Salter, 2004; Tierney, 1999; Tien & Blackburn, 1996).

University faculty considered research as a motivating factor for the mission of their universities and research and teaching as mutually supportive activities. These findings are in line with research investigations such as Murrey (1994) and Taylor et al. (1984) who have found administrators' expectations from faculty members in universities to publish while carrying heavy teaching load. Clement (1988) have found that true academic research not only inspires creative teaching, and keeps faculty members' intellectual interest alive but also have an economic value by securing research grants which bring much-needed relief to universities' budgets.

The study unearthed that university teachers considered research useful for their professional performance as well as in their daily lives. Similar results have been established in the investigations of Shaukat (2014) who found significantly positive attitudes towards usefulness of research among the senior research students, particularly those who have been involved in some kind of research activities or working in some research projects.

Study revealed no anxiety or fear about research by the university faculty. Research was neither stressful nor it made them nervous, never the less significant number considered it stressful. Similar results have been found by Horwitz (1994) who has noted inclinations of university teachers towards research. While studies such as Mills (2004), Schau (1995), Kennedy and McCallister (2001), Cashin and Elmore (1997), and Onwuegbuzie (2004) found anxiety and feeling of insecurity among students about research and research related issues. Similarly, Butt and Shams (2013) in their study found master in education students of universities in Pakistan quite apprehensive about research activities.

Conclusions

There is a strong orientation of faculty members towards research. Moreover, there is a consensus among the respondents that rewards influence research. Respondents are in perfect harmony that personal interests greatly influence performance in research, and that their research activities are in line with the mission of their universities. There is unanimity among the sampled population that research is advantageous and useful in their professional as well as personal lives; and that neither they feel any research anxiety nor it hampers their research progress notwithstanding sizeable population, particularly young university teachers, considering research stressful.

Recommendations

Keeping in mind the findings of present study and in the light of conclusions drawn following recommendations are suggested:

Research attitudes, and inclinations, of university teachers towards research can be capitalized by promotion of standardized research activities and provision of publication facilities. University teachers who exhibit good performance in research be fairly rewarded both financially and socially. Weightage should be given to research publications during appointment of university faculty. Universities should provide research opportunities in a variety of areas in each discipline, so that university teachers may involve themselves in research activities in areas of their interests. Competitive research projects in line with personal and professional development of university teachers should periodically and regularly be announced under the auspices of higher education commission for maximum benefits of research faculty. Students at post graduate level and newly inducted university teachers be provided ample opportunities of training in such vital areas of research such as research designing, tools development, data analysis, etc. that would help them in overcoming the research anxiety much earlier in their career.

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