

Demographic Variables as Factors Influencing the level of Self-Efficacy of University Teachers in Pakistan

Dr. Sidra Kiran

Assistant Professor, Department of Education,
Alhamd Islamic University, Islamabad
Email: sidra.kiran@aiu.edu.pk

Dr. Um E Rubab

Assistant Professor, Department of Education,
Alhamd Islamic University, Islamabad
Email: dr.umerubab@aiu.edu.pk

Sameena Arif

PhD scholar, Department of Education,
Alhamd Islamic University, Islamabad
Email: sameenazeea@gmail.com

Abstract

Self-efficacy being a teacher is amalgamation of behavioral, cognitive, emotive and traditional aspects. All the four aspects are powerfully interconnected with each other. Self-efficacy is persistent by level of skills in a specific domain, as well as by our past achievements and experiences equally positive and negative. The study intended to examine the variables attributed to teacher self-efficacy at higher education level. The study analyzed the results of surveys completed by 167 university teachers from two major districts of Pakistan named as Faisalabad and Rawalpindi. Demographic variables considered in the analysis of data included gender, number of years of experience, age, marital status, locality etc. With the help of percentages, ANOVA and t test data was analyzed.

Keywords: Self-Efficacy, Demographics, Comparison, Teachers, Universities, Pakistan

INTRODUCTION

The university is built up to disclose information, direct research, and give administrations to the group. Smith and Porter (1970) certify this by expressing that the college is pre-famously an information foundation, which produces learning as abilities, research, and qualifications. The need for education at university level provoked the development of the students that will surely galvanize the human intellectual capacity.

McCormick and Tiffin (1994) perceive that positive attitude towards work can be revealed if the working staff observes that their values are realized in the job. Martins (1991) asserts that mostly problems of developing

countries includes economic problems, low wages, occasional selective promotion, and lack of social security. Ultimately student learning and self-efficacy is affected by these problems. In the absence of motivation student learning is unthinkable. The responsibility goes to authoritative bodies, the way in which they participate in process of decision making, job security, and establishment of conducive working environment.

Demographical factors additionally had a noteworthy connection with the self-efficacy level of the representatives of an association. They concurred that sexual orientation, age, conjugal status, work residency, and instructive level ought to be reflected relevant to level of self-viability. The previous foundation brings into center the requirement for experimental research that will explore statistic factors and self-adequacy level. (Popoola and Oluwole, 2007)

Literature Review

Demographics and self-efficacy have numerous effects on the learning of student. In most researches it is shown that, age, gender, level of education, and marital status have significant relationship with teacher efficacy as well as student learning. (Meyer and Allen 1984; Gruskey 1966; Mowday, Porter, and Steers, 1982). Sentiments and convictions worried about a person's apparent ability to deliver comes about and to accomplish doled out sorts of execution impact their level of self-adequacy. (Bandura, 1977)

Camilleri (2002) observes that numerous variables are crucial to level of self-efficacy such as suitable wages, conducive working environment, part of decision-making process, in time salaries, and time to time training during job. These are very important because they have a direct effect on the way a worker feels and may influence his self-efficacy level.

Demographic Variables

Age, gender, marital status, and educational qualifications have important effects on level of self-efficacy as demographic variables. Firebaugh and Harley (2000) assert that an organization must keep employees committed to their work by satisfying employees' requests in order to be successful. Porter, Steers, Mowday, and Boulian (1974) in their study submitted that representatives are more inventive, innovative as well as very self-effective.

Self-Efficacy

In social cognitive theory presented by Bandura (2001) self-efficacy is one of core aspects. Bandura explains self-efficacy as the individual's perceived capability to accomplish an assigned task in order to goals. Pajare (1996) initiate out that a robust sense of individual efficacy is associated to better health, higher achievement, creativity, and better social incorporation (Bandura, 1997; Schwarzer, 1992). Low self-viability is related with wretchedness, tension, and defenselessness. A man with low self-adequacy has low confidence and may have skeptical musings about their achievements and self-improvement (Schwarzer and Schmitz, 2005). A solid feeling of skill encourages psychological procedures and execution.

Individuals with high self-efficacy perform all the more difficult errands, enable individuals to choose challenges, investigate their condition, or make new ones (Bandura, 1997). Without possessing high level of self-efficacy, the individuals give up trying to accomplish goals and making self-limiting decisions (Lucas and Cooper, 2005).

Most research studies on self-efficacy in instructive settings have looked to decide the prescient estimation of self-efficacy on execution. This is the reason Bandura, (1986) contends that the more grounded the self-efficacy, the more probable the individual is to choose testing undertakings, hold on at them, and perform them effectively. Scholastic accomplishment depends incredibly on understudies' close to home conviction of being accountable for their own destiny.

Deming (1986) theorized that organizations were empowered with effectiveness when self-efficacy was orchestrated within the organization. Wong and Wong (1991) describe an efficient teacher (effective, productive, high self-efficacy) as one who exhibits: (a) high expectations for student achievement, (b) excellent classroom management, and (c) the ability to incorporate great depth in their lessons to attain student mastery.

Goddard's (2003) research continues to clarify the progress in analyzing an explanation for the positive link between efficacy and student achievement. Recent studies indicate efficacy (teachers sharing a strong collective belief, in the workplace) becomes a powerful contributor to influencing teacher performance and ultimately student achievement (Bandura, 1993).

Researchers have found that when teachers believe their teaching can make positive impacts on their students they have greater job satisfaction (Hoy & Miskel, 2001). Thus, teachers' sense of self-efficacy and collective efficacy has a profound effect on their job satisfaction and success of their students.

Teacher Self-Efficacy

Teacher self-efficacy is: "teachers' confidence in the ability to promote students' learning" (Hoy, 2000). Teacher self-efficacy is regarded as an integral part of the success that a teacher will have in the areas of instructional, classroom management and efficacy for student engagement. There is a developed belief in the link between teacher self-efficacy and high student achievement and the implementation of positive instructional techniques. Bandura (1997) proposed that because self-efficacy beliefs were clearly guided by a teacher's own inner nature and directed toward perceived abilities given specific tasks, they were powerful predictors of behavior. There are a number of factors that many would say contribute to the effectiveness of a teacher such as: (a) planning, (b) organization, (c) content knowledge, and (d) previous experience. But none of these factors impact student success as much as teacher self-efficacy. It is supported by evidence on the basis of researches that low self-efficacy is the basic reason to leave teaching profession. (Burley, Hall, Villeme, & Brockmeier, 1991; Glickman & Tamashiro, 1982).

When teachers understand that a given method may be more effective, their efficacy beliefs for enacting the new method will motivate their implementation decisions. So an individual's belief in oneself to make a difference increases the chances of actually turning the belief into action. What we come to believe about our product is what we will produce. In the eyes of teachers, how much they believe that they will make a positive difference will be evident in the success of their students. If teachers are to have high-achieving students, then it is necessary for teachers to have high achieving goals for themselves. The journey to teach students must begin first with the teacher's journey in believing that he or she can fulfill the obligation (teacher self-efficacy). (Gregoire, 2003)

It is highlighted in another research that some teachers' behaviors found to be related to a teacher's sense of efficacy. Instructors with a more grounded feeling of efficacy: Teach to demonstrate more noteworthy levels of arranging and association; are more open to creative thoughts and are more anxious to explore different avenues regarding new ways to deal with better address the issues of their students; are more steady and solid when things don't go easily; are less basic to understudies blunders and are less disposed to allude a troublesome understudy to a custom curriculum. Jerald (2007) However, teacher having high self-efficacy never want his or her students reach these milestones on their own, but rather through the impact of his behavior on the basis of effective lesson planning, classroom management, and instructional methodologies. Educators who set high objectives, who endure, who attempt elective strategy – as such, instructors who have a high feeling of adequacy and follow up on it – will probably have understudies who learn (Shaughnessy, 2004).

Objectives

- 1- To identify the demographics of the university teachers in Pakistan.
- 2- To identify proportion of working staff from the sampled universities in Pakistan.
- 3- To compare the self-efficacy levels of the university teachers in Pakistan with respect to stated demographic variables.

Hypotheses

H1: There is no difference between level of age and the perceived level of teacher self-efficacy.

H2: There is no difference between level of designation and the perceived level of teacher self-efficacy.

H3: There is no significant difference between demographic variables (gender, age, marital status, academic qualification, job status, numbers of years spent in job) and level of self-efficacy.

MATERIALS AND METHODS

Population and sample

The population in this study comprised of university teachers in Pakistan. The sample of the study comprised of 167 university teachers in Pakistan.

Data Collection

A questionnaire used as tool of research was used on five point Likert-scale. The questionnaire was based on 34 items reflected three domains of teaching such as teaching, research and management. Twenty four teachers were included in pilot study. Under the light of pilot study modifications were made and group of experts assured the validity.

Data Analysis

The collected data was analyzed by using different techniques depending upon the nature of the stated objectives in the study such as frequencies, percentages, ANOVA and t-test for comparison.

Table 1: Frequencies and percentages of the categories of respondents' demographics

Demographic Variables of University Teachers in Pakistan			
		n	%
1	Teaching Experience		
	1-5 years	43	25.74
	6-15 years	64	38.32
	16-25 years	38	22.75
	26-40 years	22	13.17
	Total	167	99.98
3	Qualification		
	M.A/M.Sc	1	0.59
	M.Phil	38	22.75
	Ph.D	128	76.64
	Total	167	99.98
4	Age		
	20-35 years	59	35.32
	36-50 years	72	43.11
	51-65 years	36	21.55
	Total	167	99.98
5	Gender		
	Male	128	76.64
	Female	39	23.35

	Total	167	99.99
6	Marital Status		
	Single	18	10.77
	Married	149	89.22
	Total	167	99.99
7	Location		
	Rural	27	16.16
	Urban	140	83.83
	Total	167	99.99

Table 1 shows the demographics from the sampled universities in Pakistan. Forty three respondents fall under the teaching experience between 1-5 years. Sixty four respondents fall under the teaching experience between 6-15 years. Thirty eight respondents fall under the third category that is 16-25 years of teaching experience. Twenty respondents fall under the fourth category of teaching experience that is 26-40 years.

While with respect to respondents qualification only one respondent having master's degree participated in the study. In second category of qualification that was M.Phil there were thirty eight respondents. In third category of qualification that was Ph.D one hundred twenty eight respondents were there. In addition age as another demographic variable that was age falls under three categories. In first category that is 20-35 years there were fifty nine respondents. In second category seventy two respondents fall under the category that ranges between 36-50 years of age. In the last and forth category that ranges from 51-65 years thirty six respondents were there. Gender as one of the stated variables in the study 128 male respondents and 39 female respondents were identified. Similarly it is identified that eighteen respondents were single at the time if data collection and 149 respondents were married.

Furthermore with respect to location twenty seven respondents belong to rural area and 140 respondents belong to urban area.

Table 2: Proportion of Teaching Staff

	Designation	n	%
1	Professor	27	16.16
2	Associate Professor	25	14.97
3	Assistant Professor	68	40.71
4	Lecturer	47	28.14
	Total	167	99.98

Table 2 shows the number of teaching staff under four strata's such as Professor, Associate Professor, Assistant Professor and Lecturers in the sampled universities of Pakistan. There were twenty seven Professors, twenty five Associate Professors, sixty eight Assistant Professors and forty seven Lecturers participated in study as respondents.

Table 3: Variance between level of age and the perceived level of teacher self-efficacy

Self-efficacy

Domain		ANOVA Sum of Squares	Mean Square	F	Sig.
Teaching	Between Groups	333.431	166.716	4.637	0.011
	Within Groups	5896.533	35.954		
Research	Between Groups	19.605	9.803	0.319	0.728
	Within Groups	5016.371	30.775		
Management	Between Groups	196.156	98.078	1.606	0.204
	Within Groups	10014.467	61.064		
* The mean difference is significant at the 0.05 level.					

Table 3 shows the variance between level of age and the perceived level of teacher self-efficacy between groups and within groups. The value of sum of squares between groups is 333.431 and within groups is 5896.533. Whereas p value 0.01 which is less than alpha value 0.05 shows significant result. So it rejects null hypothesis no. 1 that there is no significant difference between demographic variables and level of teaching efficacy.

While with respect to research domain the value of sum of squares between groups is 19.605 and within groups is 5016.371. The p value is 0.728 which is greater than alpha value 0.05 shows no significant result. In this way the null hypothesis is accepted that there is no significant difference between demographic variables and level of research efficacy.

On the contrary for management domain the value of sum of squares is 196.156 between groups and 10014.467 within groups. Whereas the p value 0.204 is greater than alpha value 0.05 shows no significant result. Therefore null hypothesis is accepted that there is no significant difference between demographic variables and level of management efficacy.

Table 4: Variance between level of qualification and the perceived level of teacher self-efficacy

Domain		ANOVA Sum of Squares	Mean Square	F	Sig.
Teaching	Between Groups	3.403	1.702	0.045	0.956
	Within Groups	6226.561	37.967		

Research	Between Groups	5.027	2.514	0.081	0.922
	Within Groups	5030.948	30.865		
Management	Between Groups	89.228	44.614	0.723	0.487
	Within Groups	10121.395	61.716		
* The mean difference is significant at the 0.05 level.					

Table 4 shows the variance between level of qualification and the perceived level of teacher self-efficacy. The value of sum of squares between groups is 3.403 and for within groups is 6226.561 with respect to teaching domain. On the other hand the value of sum of squares for research domain between groups is 5.027 and for within groups is 5030.948. Whereas the value of sum of squares with respect to management domains between groups is 89.228 and within groups the value of sum of squares is 10121.395. In all the three domains the p values are greater than alpha value which is 0.05 shows no significant results. So null hypothesis no.2 is accepted that there is no difference between level of qualification and the perceived level of teacher self-efficacy.

Table 5: Variance between level of qualification and the perceived level of teacher self-efficacy

Domains	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
				Lower Bound	Upper Bound
Gender					
Teaching	0.362	1.14503	1.24681	-1.35426	3.64432
Research	0.594	0.65455	1.22138	-1.79884	3.10794
Management	0.037	2.96254	1.38844	0.18983	5.73525
Marital Status					
Teaching	0.487	-1.11298	1.57309	-4.38421	2.15826
Research	0.092	-2.47898	1.40601	-5.40244	0.44448
Management	0.357	-1.47688	1.5747	-4.72119	1.76743
Location					
Teaching	0.105	2.07338	1.24705	-0.45518	4.60194
Research	0.099	1.92967	1.13832	-0.37915	4.23849
Management	0.921	0.1653	1.65861	-3.20106	3.53167
HEC Approved Supervisor					
Teaching	0.132	-1.3963	0.92168	-3.21638	0.42378
Research	0.319	-0.87924	0.87859	-2.61593	0.85744
Management	0.122	-1.97121	1.26672	-4.47767	0.53525
* The mean difference is significant at the 0.05 level.					

Table 5 shows 1.14503 mean difference value with standard error 1.24681. p value which is 0.362 is greater than alpha value 0.05 shows no significant difference. Therefore null hypothesis no. 3 is accepted that there is no significant difference between demographic variables and level of teaching efficacy. For research domain the mean difference value is 0.65455 with standard error 1.22138. P value which is 0.594 is greater than alpha value 0.05 shows no significant difference. Therefore, null hypothesis no. 3 is accepted that there is no significant difference between demographic variables and level of research efficacy. For management efficacy value of mean difference is 2.96254 with standard error 1.38844. P value which is 0.0357 is less than alpha value 0.05 shows significant difference. Therefore, null hypothesis no. 3 is rejected that there is no significant difference between demographic variables and level of management efficacy.

For the category of marital status the mean difference value is -1.11298 with standard error 1.57309. For research domain the mean difference value is -2.47898 with standard error 1.40601. For management domain the value of mean difference is -1.47688 with standard error 1.5747. In all the three domains the p value is greater than alpha value. Such as for teaching the p value is 0.487 for research domain 0.092 for management domain p value is 0.357 which are greater than alpha value 0.05. Therefore, null hypothesis no. 3 is accepted that there is no significant difference between demographic variables and level of self- efficacy.

For the category of location the mean difference value is 2.07338 with standard error 1.24705. For research domain the mean difference value is 1.92967 with standard error 1.13832. For management domain the value of mean difference is 0.1653 with standard error 1.65861. In all the three domains the p value is greater than alpha value. Such as for teaching the p value is 0.105 for research domain 0.099 for management domain p value is 0.921 which are greater than alpha value 0.05. Therefore, null hypothesis no. 3 is accepted that there is no significant difference between demographic variables and level of self- efficacy.

For the category of HEC approved supervisor the mean difference value is -1.3963 with standard error 0.92168. For research domain the mean difference value is -0.87924 with standard error 0.87859. For management domain the value of mean difference is -1.97121 with standard error 1.26672. In all the three domains the p value is greater than alpha value. Such as for teaching the p value is 0.132 for research domain 0.319 for management domain p value is 0.122 which are greater than alpha value 0.05. Therefore null hypothesis no. 3 is accepted that there is no significant difference between demographic variables and level of self- efficacy.

Conclusion

The following major conclusions were drawn:

- 1- There is not equal number of teaching staff with respect to designation in the common departments of the sampled universities in Pakistan.
- 2- Significant difference was reported by the respondents regarding management efficacy.
- 3- There is a huge difference between the demographic variables of the respondents of the sampled universities in Pakistan.

Recommendations

- 1- Equal number of opportunities in shape of training sessions must be provided to all the teaching staff without any discrimination regarding demographic variables.
- 2- Every teaching staff member should be provided opportunities to share ideas for the betterment of the students as well as of institution.

References

- Bandura, A. 1993. Perceived self-efficacy in cognition development and functioning. *Educational Psychologist*, 28(2): 117-148.
- Burley, W. W., B. W. Hall, M. G. Villeme and L. L. Brockmeier. 1991. A path analysis of the mediating role of efficacy in first-year teachers' experiences, reaction, and plans. Paper presented at the annual meeting of the American Education Research Association, Chicago.
- Bandura, A. 2001. Social cognitive perspective. *Annual Review of Psychology* 52: 1-26
- Bandura, A. 1977. Self-efficacy: Toward a unifying theory of behavioural change. *Psychology Review* 84: 191-215.
- Bandura, A. 1986. Social foundations of thought and action. Englewood Cliffs, NJ: Prentice Hall. 213
- Bandura, A. 1997. Self-efficacy: The exercise of control. New York: Freeman.
- Camilleri, E. 2002. Some antecedents of organisational commitment. *Bank of Valletta Review* 25 (Spring): 204
- Deming, W. E. 1986. Out of crises. Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Firebaugh, G. and B. Harley. 1995. Trends in job satisfaction in the United States by race, gender, and type of occupation. *Research in the Sociology of Work* 5: 87-104
- Goddard, R. D. 2003. The impact of schools on teacher beliefs, influence, and student achievement: The role of collective efficacy. In J. Raths & A. McAninch (Eds.), *Advances in teacher education* (Vol. 6, pp. 183-204). Westport, CT: Information Age.

- Gregoire, M. 2003. Is it a challenge or a threat? A dual-process model of teachers' cognition and appraisal process during conceptual change. *Educational Psychology Review*, 15(2): 147-179.
- Jerald, C. 2007. Believing and achieving (Issue Brief). Center for Comprehensive School Reform and Improvement. Retrieved January 4, 2010, from <http://www.eric.ed.gov/PDFS/ED495708.pdf>.
- Lucas, W. and S. Cooper. 2005. Measuring entrepreneurial self - efficacy. Paper presented at the EDGE Conference Bridging the Gap: July 11-13, 2005, Singapore.
- Martins, J. 1991. Factors affecting the future of libraries. *Aslib Proceedings* 43:9.
- McCormick, E.J. and J. Tiffin. 1994. *Industrial psychology*. 6th ed. New Jersey: Prentice Hall. 162-168.
- Meyer, J. P. and N. J. Allen. 1984. Testing the "side-bet theory" of organisational commitment: Some methodological considerations. *Journal of Applied Psychology* 69: 3.372-378.
- Pajares, F. and E. Johnson. 1996. Self-efficacy beliefs and the writing performance of entering high school students. *Psychology in the Schools* 33 (2): 163-175.
- Popoola, S. O. and D. A. Oluwole. 2007. Career commitment among records management personnel in Osun State civil service in Nigeria. *Records Management Journal* 17 (2): 97-116.
- Porter, L.W., R. M. Steers, R. T. Mowday, and P.V. Boulian. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59: 603–609.
- Schwarzer, R. (ed.) 1992. *Self-efficacy: Thought control of action*. Washington, DC: Hemisphere.
- Shaughnessy, M. F. 2004. An interview with Anita Woolfolk: The educational psychology of teacher efficacy. *Educational Psychology Review*, 16(2): 153-176.
- Smith, F. J. and L. W. Porter. 1970. The etiology of organizational commitment. Unpublished Paper. University of California, Irvine. 53
- Tschannen-Moran, M. and A. Woolfolk Hoy. 2001. Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17: 783-805.
- Wong, H. and R. T. Wong. 1991. *The first days of school: How to be an effective teacher*. Sunnyvale, CA: Harry K. Wong Publications.