Self-efficacy as Predictor of Occupational Stress Among Academic Faculties of Panjab University and Guru Nanak Dev University

Ritu Aggarwal

ABSTRACT :

The study seeked to explain the interactive as well as relative effects of self-efficacy on occupational stress of academic faculty of Panjab University, Chandigarh and Guru Nanak Dev University, Amritsar. The sample was 131 and 112 academic faculties from Panjab University, Chandigarh and Guru Nanak Dev University, Amritsar. The sample was obtained from seven faculties i.e. arts, science, computers, laws, pharmacy, languages and business management and commerce. The instruments used were Teacher Self-efficacy Scale and Occupational Stress Scale. The Occupational stress was measured by six scales namely role overload, role insufficiency, role ambiguity, role boundary, responsibilities and physical environment. Data analysis involved the use of Spearman's rank correlation and regression analysis to investigate the predictive capacity of independent variable on scales of occupational stress. The result indicates that self-efficacy is effective in predicting role insufficiency and role ambiguity incase of Panjab University, Chandigarh and Guru Nanak Dev University, Amritsar. On the basis of these findings, it is suggested that training workshops on self-efficacy will help the teachers to cope up with stress due to role insufficiency and role ambiguity.

INTRODUCTION :

Universities play a vital role in the economic and social life of a country. They train the nation's teachers, scientists, engineers, lawyers, doctors and other professionals and produce much of its cutting-edge research; but, in order to fulfil this role successfully they need to attract and retain high quality staff and provide a supportive working environment.

University teaching has traditionally been regarded as a low stress occupation (Fisher, 1994). Although not highly paid in comparison to professionals in the commercial sector, academics have been envied for their tenure, light work loads, flexibility, perks such as overseas trips for study or conference purposes, and the freedom to pursue their own research interests. However their ability to do so has been threatened over the past decade by deteriorating working conditions. Increasing numbers of academic positions are now untenured, workloads have

increased and academics are under increasing pressure to attract external funds, and publish or perish (Fisher, 1994).

Research on stress among academic and general staff of universities from across the globe indicates that the phenomenon of occupational stress in universities is alarmingly widespread and increasing. There is growing evidence that universities no longer provide the low stress working environment that they once did (Association of University Teachers, 1990; Boyd and Wylie, 1994; Winefield, 2000). The United Kingdom Association of University Teachers study (AUT, 1990) found that 49% of university employees reported that their jobs were stressful and 77% reported an increase in occupational stress over recent years. Similarly, in a study on stress in seven New Zealand universities, Boyd and Wylie (1994) reported that half of the academics often or almost always become more stressful in recent years. In addition, 46% expected further increase in workload in the future

A major source of stress among university teaching faculty is the dramatic increase in the enrollment of students. Student numbers have dramatically increased over the past few years.

As pointed out by Awopegba (2001) there has been an astronomical increase in student enrollment without a corresponding increase in teaching personnel. The resultant effect is increase in workload and stressed teachers.

In India also there is linear expansion in the existing system of higher education. The number of universities has increased from 25 in 1950 to 221 in 1999-2000, whereas the colleges have also increased in number from about 700 to more than 11000 during the same period (Ghadohya, 2000). As of 2011, India has 20 central universities, 215 state universities, 100 deemed universities, 5 institutions established and functioning under the State Act, and 13 institutes which are of national importance(India,2009).According to MHRD (Ministry of Human Resource Development, 2009) at present our country has 16,885 colleges with about 99.54 lakhs students and 4.57 lakhs of teachers.

Indian higher education and research sector is the third largest in the world, in terms of the number of students it caters to. There has been a rapid expansion in higher education, with student enrollment growing at about 5 percent annually over the past two decades.

The teachers are at the receiving end of this ongoing transformation in higher education. They are juggling between many responsibilities such as teaching, research and extension requirements at colleges and universities. Even more demanding than the complexity of teaching is the fact that teaching can also generate a high level of stress and fatigue among teachers. Contributing factors

to this stress also includes: unclear expectations , spending many hours in class, classes that take more preparation time or having a high number of course preparations in a given semester, handling classes with large enrollments, planning productive activities, or dealing with difficult or very needy students, dealing with social and learning issues, such as AIDS, learning disabilities and attention-deficit disorder, newer curricular and teaching approaches, including the use of technology, time involved in student advising and conferences, increasing demands from administrative, clerical and committee duties, increasing diversification of expertise, campus politics and meeting the economic necessities of the institution, changes in administrative demands or administrative leadership, lack of financial and personnel support, time pressures and deadlines, continual overload of work, and dealing with inequities and inequalities.

These factors may be compounded by student attendance, attention, discipline, and lack of motivation. The latter can be especially stressful because uninterested students disrupt a classroom and the work of other students. Moreover, teaching uninterested or unmotivated students can also be exhausting and damaging to a teacher's positive sense of self.

Despite teachers braving through all these odds, the nation today witnesses the declining popularity of teaching as a profession, not only among the students that we produce, but also among parents, scientists, society and the government. The teaching profession today attracts only those who have missed all other better opportunities in life, and is increasingly mired in bureaucratic controls and anti-education concepts such as hours of teaching load, paid-by-the-hour, contractual teachers etc. With privatization reducing education to a commodity, teachers are reduced to tutors and teaching is reduced to coaching.

All this is a cause of concern and inturn gives rise to stress among teachers. Teachers stress can be categorized as a serious working hazard which has a power to bring a crisis on the teacher and teaching as an occupation.

Various studies have recognized the importance of self-efficacy as an important psychological factor in behaviour of individual workers in organizations.

Self-efficacy refers to ones level of confidence in mobilizing the energy and choosing the appropriate response strategy in a given task situation (Wood and Bandura , 1989).

In the work context, self-efficacy refers to judgments employees make concerning their ability to do what is required to successfully perform their jobs

(Riggs and Knight, 1994). Unlike dispositional characteristics, self-efficacy beliefs are situationally specific (Wang and Richarde, 1988) and should, therefore, respond to organizational initiatives designed to enhance employees' perceptions of self-efficacy. In this respect, Bandura (1977) identified several sources of information that may engender high levels of self-efficacy. These include internal cues drawn from an individual's own state of physiological arousal, verbal persuasion aimed at convincing an individual of his or her capabilities, vicarious experience by way of behavior modeling, and, also, enactive mastery through repeated performance. There is considerable research evidence documenting the direct relationship between high levels of job-related self-efficacy and increased levels of learning, persistence and subsequent performance in complex task environments (Gist and Mitchell, 1992).

Bandura (1994) defined perceived self-efficacy as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes.

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways. People with high assurance in their capabilities approach difficult tasks as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep engrossment in activities. They set themselves challenging goals and maintain strong commitment to them. They heighten and sustain their efforts in the face of failure. They quickly recover their sense of efficacy after failures or setbacks. They attribute failure to insufficient effort or deficient knowledge and skills which are acquirable. They approach threatening situations with assurance that they can exercise control over them. Such an efficacious outlook produces personal accomplishments, reduces stress and lowers vulnerability to depression.

In contrast, people who doubt their capabilities shy away from difficult tasks which they view as personal threats, have low aspirations and weak commitment to the goals they choose to pursue. When faced with difficult tasks, they dwell on their personal deficiencies, on the obstacles they will encounter, and all kinds of adverse outcomes rather than concentrate on how to perform successfully. They slacken their efforts and give up quickly in the face of difficulties. They are slow to recover their sense of efficacy following failure or setbacks. Because they view insufficient performance as deficient aptitude it does not require much failure for them to lose

faith in their capabilities. They fall easy victim to stress and depression.

According to Schwarzer (1999) self-efficacy can make a difference to people's ways of thinking feeling and acting. With respect to feelings, a low sense of self-efficacy is associated with depression, anxiety and helplessness. People with low self-efficacy also harbour pessimistic thoughts about their performance and personal development. In contrast, a strong sense of belief in oneself facilitates cognitive and executive processes in multiple contexts, influencing, for example, decision making and academic achievement. (Bandura,1995 ; Schwarzer, 1999).

Self-efficacious people, however, perform well on specific tasks, cope better with anxiety, depression and helplessness, set higher goals, and follow through with them, recover more quickly from failure, and think more strategically than those who are not self-efficacious (Bandura, 1995, 1997). In other words, self-efficacy affects the choices people make, the amount of effort they expend on an activity, how long they persevere at doing a task, and their emotional reactions. Nonetheless, self-efficacy is concerned not with the number of skills that you have, but with what you believe you can do with what you have under a variety of circumstances (Bandura, 1997). Self-efficacy beliefs, which, according to Bandura (1997) are context-specific judgments that are derived from master experiences, vicarious experiences, verbal persuasion, and psychological states, are specific to tasks, and they are made and used relative to one's goals.

Various studies have proved that teachers with strong self-efficacy exhibits greater planning, organization and enthusiasm.

OBJECTIVES

On the basis of various studies and current scenario, the objectives have been formulated

To find out contribution of self-efficacy towards occupational stress of academic faculty members of Punjab University, Chandigarh

To find out contribution of self-efficacy towards occupational stress of academic faculty members of Guru Nanak Dev University, Amritsar

HYPOTHESES

On the basis of various studies and current scenario, the main hypotheses of the study were:

Their will be no significant effect of self-efficacy towards occupational stress of academic faculty members of Punjab University, Chandigarh

Their will be no significant effect of self-efficacy towards occupational stress of academic faculty members of Guru Nanak Dev University, Amritsar

METHOD

The study was conducted using descriptive survey method.

Sample

The sample comprised of faculty members working at the Panjab University, Chandigarh, Punjabi University, and Guru Nanak Dev University, Amritsar (N=243), were taken from faculties of Arts, Science, Pharmacy, Management and business administration, computers, languages and law for collecting the data. Similar and common faculties from all the three universities were included in the study. Approximately one Professor, one Reader and two Lecturers were selected from all the concerned departments. The technique of sampling was stratified random sampling. The selected sample thus included 131 faculty members from Panjab University, and 112 faculty members from Guru Nanak Dev University.

Materials

In the present investigation following tools were used:

-Occupational stress was measured using Occupational Role Questionnaire by Osipow and Spokane (1998).

The occupational stress is measured by a set of six scales which are collectively called the occupational role questionnaire.

Role Overload (RO) - Measures the extent to which job demands exceed resources (personal and work place) and the extent to which an individual is able to accomplish expected workload.

Role Insufficiency (RI) - Measures the extent to which the individuals training, education, skills and experience are appropriate for job requirements.

Role Ambiguity (RA) -Measures the extent to which the priorities, expectation and evaluation criteria are clear to the individual.

Role Boundary (RB) - Measures the extent to which the individual is experiencing conflicting role demands and loyalties in the work setting.

Responsibility (R) - Measures the extent to which the individual has or feels, a great deal of responsibility for the performance and welfare of others on the job.

Physical Environment (PE) - Measures the extent to which the individual is exposed to high levels of environment toxins or extreme physical conditions.

The scale had significant reliability and validity.

Self-efficacy was measured using Teacher Self-Efficacy Scale developed by Schwarzer, Schmitz, and Daytner (1999) first a 27-item version and later as a reduced 10-item version.

PROCEDURE

For the data analyses, the various statistical techniques employed were Descriptive statistics such as means, standard deviations, were computed to study the nature of distribution for scores for all the variables of the study.

The relationship between occupational stress (role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment) and self-efficacy was examined using Product –moment coefficient of correlation.

Regression analysis was employed to study the predictor of occupational stress (role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment) from the independent variable of self-efficacy in case of Panjab University, Chandigarh and Guru Nanak Dev University, Amritsar..

SPSS version 16.0 for windows was the statistical software program used to perform all procedures.

RESULTS

The results of the data analysis indicating the mean, standard deviation and co-relation matrix of occupational stress (role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment) and self-efficacy are presented vide Table 1 and 2 in Panjab University and Guru Nanak Dev University. Coefficients of correlation were calculated separately for six scales of occupational stress viz role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment as dependent variable with the independent variable of self efficacy. However, the results and discussion was done only in case of significant correlations between the dependent and independent variable.

Table 1: Descriptive Statistics and Correlation between Occupational Stress and elf-Efficacy in Panjab University (N=131)

Variables	Mean	SD	RI	RA	SE
RI	20.15	6.045	1	.568**	-.371**
RA	20.49	5.961	.568**	1	-.428**
SE	34.05	3.346	+.371**	-.428**	1

* Significant at .05 level; ** Significant at .01 level

Discussion Based on Table 1

The dependent variable of occupational stress is measured through six scales viz role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment in Panjab University. Hence each of these scales was separately correlated with independent variable of self efficacy. Only significant correlations are depicted. The results revealed significant negative correlation between role insufficiency and self-efficacy (r= -.371) at 0.01 level of significance. Negative but significant correlation (at 0.01 level) was also found between role ambiguity and self-efficacy (r= -.428).

The results show that people with higher self efficacy perceive lower levels of stress due to role insufficiency and role ambiguity. Similar finding of significant but negative correlation between occupational stress and self efficacy has also been reported by Jespon and Forest (2006).

Table 2: Descriptive Statistics and Correlation between Occupational Stress and elf-Efficacy in Guru Nanak Dev University (N=112)

Variables	Mean	SD	RI	RA	SE
RI	20.29	5.803	1	.651**	-.219*
RA	20.84	6.046	.651**	1	-.364**
SE	33.62	3.146	+.219*	-.361**	1

Significant at .05 level; ** Significant at .01 level

Discussion Based on Table 2

The dependent variable of occupational stress is measured through six scales viz role overload, role insufficiency, role ambiguity, role boundary, responsibilities, physical environment in Guru Nanak Dev University. Hence each of these scales was separately correlated with independent variable of self efficacy. Only significant correlations are depicted. The results revealed significant negative correlation between role insufficiency and self-efficacy (r= -.219) at 0.05 level of significance. Negative but significant correlation (at 0.01 level) was also found between role ambiguity and self-efficacy (r= -.364).

The results indicate that people with higher self efficacy perceive lower levels of stress due to role insufficiency and role ambiguity. Similar finding of significant but negative correlation between occupational stress and self efficacy has also been reported by Omolara (2008).

In order to find out the whether self-efficacy is a predictor of role insufficiency and role ambiguity in Panjab University and Guru Nanak Dev University regression analysis was done. The results are being presented vide Table no 4-6.

Table 3: Regression Equation for the Criterion Variable Role Insufficiency incase of in Panjab University (N=131)

Ind Var	Corr Coeff.	Reg Coeff.	ß Coeff.	R	Multi R2	F	df
SE	-.371**	-.371**	-.670	.371	.138	20.60**	1,129

* Significant at .05 level; ** Significant at .01 level

In case of Panjab University regression method was used to find whether self-efficacy was a significant predictor of criterion variable of role insufficiency. A glance at table revealed that significant portion of variance (13.8%) for the prediction of role insufficiency in sample of academic faculty members of Panjab University was explained by self-efficacy.

Table 4: Regression Equation for the Criterion Variable Role Ambiguity incase of in Panjab University (N=131)

Ind Var	Corr Coeff.	Reg Coeff.	ß Coeff.	R	Multi R2	F	df
SE	-.364**	-.428**	-.762	.428	.183	28.93**	1,129

* Significant at .05 level; ** Significant at .01 level

Regression analysis was used to find whether self-efficacy was a significant predictor of criterion variable of role ambiguity in Panjab University. The above table revealed that significant portion of variance (18.3%) for the prediction of role ambiguity in sample of academic faculty members of Panjab University was explained by self-efficacy.

Table 5: Stepwise Regression Equation for the Criterion Variable Role Insufficiency incase of in Guru Nanak Dev University (N=112)

Ind Var	Corr Coeff.	Reg Coeff.	ß Coeff.	R	Multi R2	F	df
SE	-.219*	-.219**	-.404	.219a	.048	5.557*	1,110

* Significant at .05 level; ** Significant at .01 level

In case of Guru Nanak Dev University regression analysis was used to find whether self-efficacy was a significant predictor of criterion variable of role insufficiency. The above table revealed that self-efficacy (ß=-.404) emerged as significant predictor and accounted for 4.8% variance in role insufficiency.

Table 6: Stepwise Regression Equation for the Criterion Variable Role Ambiguity incase of in Guru Nanak Dev University (N=112)

Ind Var	Corr Coeff.	Reg Coeff.	ß Coeff.	R	Multi R2	F	df
SE	-.364**	-.700**	-4.102	.364	.113	16.82**	1,110

* Significant at .05 level; ** Significant at .01 level

Regression analysis was used to find whether self-efficacy was a significant predictor of criterion variable of role ambiguity in Guru Nanak Dev University. The above table revealed that significant portion of variance (13.3%) for the prediction of role ambiguity in sample of academic faculty members of Guru Nanak Dev was explained by self-efficacy.

The results revealed that self-efficacy emerged as a powerful predictor of stress caused due to role insufficiency and role ambiguity in both Panjab University and Guru Nanak Dev University.

DISCUSSION

The result of regression analysis indicated that self-efficacy is a potent predictor of stress due to role insufficiency and role ambiguity in both the universities. The magnitude of the relationship between the independent variable of self-efficacy and in predicting stress due to role insufficiency and role ambiguity of academic faculty of Panjab University is reflected by the value of coefficient of multiple regression (.138) and (.183) respectively. Thus it can be said that 13.8% variance in role insufficiency is due to self-efficacy and 18.3% variance in role ambiguity is due to self-efficacy. Similar findings was found incase of Guru Nanak Dev University also with 4.8% variance in role insufficiency and 13.3% variance in role ambiguity is due to self-efficacy. The significant F-ratios further indicate that the predictive capacity of self-efficacy could not be due to chance factor.

The result of correlational analysis in Table 1 and Table 2 shows that self-efficacy have negative relationship with role insufficiency and role ambiguity. It means that self-efficacy scores are inversely correlated with role insufficiency and role ambiguity. The results of the study also correspond with findings reported by Hogan et al. (2006).

A strong sense of efficacy enhances human accomplishment and personal well-being in many ways including the ability to cope with stress. People with a low sense of efficacy on the other hand may have the tendency to look at things as if they are tougher than they really are, a belief that fosters stress, depression and a myopic vision of how best to tackle problems. Supporting the positive impact of self-efficacy on stress Leiter (1992) indicated that individuals with high self-efficacy tend to use active coping strategies, whereas those with low self-efficacy tend to employ avoidance strategies and have a greater tendency to worry about job-related stressors. As indicated in Table 1, self-efficacy has a very high negative correlation with occupational stress. And as pointed out by Bandura (2000) people with high confidence in their capabilities handle stress related factors effectively and approach difficult task as challenges to be mastered rather than as threats to be avoided.

IMPLICATIONS OF FINDINGS

The results of present study have various implications. The enhancement of self-efficacy will help the academic faculty members to deal with work place stress due to role insufficiency and role ambiguity. Self-efficacy can be enhanced through vicarious experience, verbal persuasion, active domain and anxiety management.

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