Occupational Stress Resilience among University Teachers and their Work Performance

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Abstract: This study attempts to test the relationship between professional stress tolerance and the productivity of university professors. The evaluation criteria used in this study are 1. Work Stress Questionnaire (JSQ) of Töres, (1988), 2. Work Resilience Questionnaire (WRQ) of Winwood et al., (2013) and, 3. Work Performance Questionnaire (WPQ) of Koopmans, (2014). The regression analysis has been applied to predict the relationship among the research variables of this study. In addition, the t-test is also used to analyze the gender-based differences and differences in work stress and work resilience of university academicians. The results depicted that female university teachers faced more work stress compared to male university teachers, and male university teachers had a higher mean score regarding work resilience than female university teachers. Furthermore, obtained the results of the research explained that level of flexibility and supposed work efficiency are positively correlated. The significant prognosticator of work performance was occupational stress resilience. However, work performance was not predicted by work stress.

Key Words: Occupational Stress, Resilience, Job Performance, University Teachers

Introduction

Teaching has been perceived as a profession that is not only noble but also the breeding ground of all other professions, which to one degree or another, find their roots within it (Danish et al., 2010; Hanif, 2004) and consider a cornerstone of progress. Nowadays, education is becoming a field where teachers are low-paid employees and students are customers, just like other industries, which seriously damages teachers' mental health and causes work pressure. Globalization and the global financial crisis have intensified work pressure, and almost every country, occupation, and category of workers and family are affected. The company is, therefore, an important topic in all workplaces. When the Commonwealth Workers' Safety, Rehabilitation and Compensation Commission launched several research projects, it formally defined the concept of increased occupational stress. These institutions recognized that the percentage increase in work-related trauma is higher than any other organization. The destructive physical and emotive reactions which happen when job necessities do not contest the workers' services, capital, or desires, which are critical to illness and even injury, can be defined as work stress (Rehman, 2008). The proportion of all universities in the world shows that occupational stress is common and increasing in universities (Jacobs & Winslow, 2004). In a stress study at seven universities in New Zealand, Boyd and Wiley (1994) stated that in their academic illustration, most of the researchers frequently or nearly at all times considered the job traumatic, and 80% of their
assignment was considered stressful. In addition to this, 46% of people expect them to increase their assignments in the future. Likewise, a study by the University teachers association in the United Kingdom (AUT, 1990; Cross & Carroll, 1990) found that 49% of university faculty and staff have reported stressful activities in recent years, and 77% have reported increased work-related stress.

Moreover, a major chunk of employees report that stress in the workplace causes a decrease in productivity, so reducing the cause of stress is desirable, but it is also important that employees can manage stress. Increasing flexibility seems to be an option to reduce and manage stress during working hours. Flexibility, adaptability and coping are the basic traits of a personality that help to generate the resilience within the personality of individuals (Block, 1961). Research on the flexibility in children of schizophrenic mothers (Garmezy, 1971) and some follow-up studies confirm that rigidity is not uncommon (Luthans, Vogelgesang & Lester, 2006). An organizational study by Luthans, Youssef, and Avolio (2007) discussed the classical view of resilience in which people positively practice skills and develop characteristics to defend themselves from the undesirable connotations linked with their complementary connections (Luthar et al., 2000; Masten, 2007; Richardson, 2002). Further, the skills and assets are distinct as shielding aspects; the situation has been exposed so that various natural, emotional, communal and ecological protection issues will subsidize rigidity (Meredith et al., 2011; O'Dougherty Wright et al., 2013).

Moreover, springiness programs unsurprisingly focus on psychosocial characteristics that are considered developmentally vulnerable; some of the most obvious are self-efficacy, confidence, societal capital, and intellectual valuation/handling. So, employees need to acquire those kinds of skills which support them in skill development and take them from a stressful environment. However, some invite the sense of development programs to strengthen the resilience; naturally developed self-efficacy, which focuses on psychosocial characteristics which reduce the vulnerability and help individuals to become confident, societal capital, and intellectual handlers of stressful environments discussed previously (Rutter, 1987).

In this contemporary study, researchers evaluated the occupational resilience among university teachers and its effect on their level of work performance. Through this, researchers attempted to cover the space in the previous works regarding occupational stress and resilience, which impacted the work performance of university teachers. In this research, it was hypothesized that occupational stress would significantly negatively correlate with the level of work performance, and occupational stress and resilience would significantly predict the work performance of university teachers.

**Literature Review**

Workplace stress has a negative impact on individual employees and the entire organization. Numerous researchers discussed (Bell, Rajendran & Theiler, 2012; Carlson, Kacmar & Williams, 2000; Chen & Kao, 2011; Demerouti, Bakker & Bulters, 2004; Halperm, 2005; Mark & Smith, 2012; Mauno, Kinnunen, & Ruokolainen, 2006; Rice, Frone & Mcfarline, 1992; Tytherleigh et al., 2005) consequences of pressure on work presentation of individuals and also reported a decline in employees productivity due to this; interestingly, this problem is becoming more and more serious among young workers: about six out of ten young workers reported the job performance decline. So, reducing stress is considered a desirable source of enhancing work performance. However, it is also essential for the employees to deal with their level of self-stressed. Increasing flexibility seems to be an option in stress management. However, personality rigidity (Garmezy, 1971) damages the concept of flexibility, adaptability and coping strategies associated with stress management (Block & Block, 2014). However, Luthans, Vogelgesang, and Lester (2006) explain that rigidity is not a common habit in the personality of many workers.

Subsequently, the investigation on the topic has extended significantly. In various additional circumstances, for example, wellbeing (McAllister & McKinnon, 2009), instruction (Jennings et al., 2013), community plan research (Luthar & Cicchetti, 2000), including the work on ecological resilience has been studied. More than an era of exploration has confirmed the significance of place of work sustainability for employee comfort and productivity.
Many investigations have established the relationship between flexibility and low-to-medium productivity (Krush et al., 2013; Luthans et al., 2006; Luthans et al., 2007).

Robertson et al.’s (2015) research by the company tracks the influence of training on workplace rigidity, showing that personal resilience can be improved through training and is a valuable tool for gaining more than just mental health and subjective development. Initial efforts have shown that workplace adaptability training can help individuals better manage strain, be happier, and be more efficient; therefore, some companies are conducting flexible training to achieve these results. However, there is still a need to examine the relationship between flexibility and productivity to improve the workforce’s advantage from flexible training under various circumstances. By studying how flexibility improves productivity, and the potential arbitrary between the two significant confident features of professional happiness: occupation gratification and labour assignation in these relationships (Christian, Garza & Slaughter, 2011).

Further, the Labor obligations focus on the corporeal, emotional, and intellectual participation of workers within their work and working environment (Christian et al., 2011). The obligation constructed the likeness of work commitment, job fulfilment, understanding of the issues, and doubts about the distinctive nature of obligation (Newman & Harrison, 2008). This helps to evaluate and understand the probable arbitrating effect between job fulfillments, work commitments and work doubts simultaneously. Sometimes, the aforementioned components are considered as the potential sources of stress in the field of education, especially higher education which affects the teachers working in this field. Previous literature reported that in higher education, the work performance of teachers is affected by stress, time and behaviour and having a low level of defence mechanism to eradicate these issues (Dua 1994; Hussain & Malik, 2022). Considering the particular nature of stress (Lazarus, 1990), there is even less research on employees’ perceptions of personal and organizational characteristics.

Motovidlo and Packard, Manning (1986) found in their research that events that are determined to cause stress can cause depression, which can lead to a decline in work productivity interaction and cognitive/motivational characteristics. Mahan et al. (2010) showed that persistent and intermittent stressors are positively and threateningly related to anxiety and depression. They also stated that when teachers are under constant pressure in the work environment, anxiety will increase, which will affect their academic performance. Work stressors can negatively affect employees’ health, job satisfaction, productivity, and commitment. Moreover, Flaherty and Pappas (2000) defined labour productivity as covering four dimensions; 1) overall services, 2) human services, 3) maintenance, and 4) executive services. In contrast, Robbins et al. (2008) discussed other interacting factors like skills, effort, work environment, etc. Abilities embrace the understanding, skills, and abilities of employees; energy is the level of work motivation displayed by employees; the types of working situations are the point to which these conditions are adjusted to increase workers' productivity.

Theory of Work Performance

The administrative distinction hinges on your aptitude to affect possessions such as fiscal capital, association, and personnel. However, current concepts do not provide a basis for predicting the personal skills of workers (Blumberg & Pringle, 1982). They did not only recommend the ability to accomplish things but also the willingness and skills to accomplish the things which can be used to predict personal productivity. Further, they named this theory of work productivity through the three-dimensional research proposed in their research work and comprehensively defined performance as the physical and cognitive abilities that stimulate people to work effectively at the workplace with the help of their skills, experience, intelligence, and health and determination. The ability to complete any job will increase the willingness to complete the job. Will can be related to the consequences of job satisfaction, character, contribution to work, interpersonal relationships, and opportunities for conscience.

Even if a person has the ability and desires to work, the environment they work in has a colossal role to play. Environmental factors determine the excellence of the work completed. Furthermore,
they proposed numerous characteristics that managers should pay attention to increase the potential of creativity and emphasized that managers have the responsibility to perform and create a working environment. This includes evaluating the company's technical abilities to improve the use of production systems, selecting employees who may have an impact on colleagues, mentoring systems, and expanding employee engagement by delegating more tasks to employees. It is also used in other fields from time to time, including research and development (R&D). Its practice in bookkeeping is quite restricted, partially due to the complexity of the regulatory agency's rationale and the scope and timeliness of the investigation.

Methods and Materials
This research employed a correlational study design to find the association among the variables to understand the teacher's workload, flexibility, and productivity level. A total of 150 university teachers (male =75, female=75) were selected from four public sector universities by employing the multistage random sampling technique. But, the final analysis of the data was based on 120 university teachers as researchers removed the questionnaires during the screening and cleaning of data which followed the concept of single patterns or had missing values. During the sampling process, the researchers followed some inclusion and exclusion criteria to select the teachers for this study; i.e. the teachers from the age group of 25-60 were selected, and those teachers were selected who were permanent faculty members and working for the last one year. The researcher excluded all those teachers who were visiting teachers and teachers having less than one year of teaching experience in concerned universities. Assistant teachers and associated teachers were also excluded from the respondents' list.

Measures
In this research study, the researcher adopted three standard tools to measure the work strain, workplace role resilience and work performance of university teachers. The detail of these tools are as below;

**Work Strain Questionnaire (WSQ)**
The work stress of university teachers was evaluated by employing the work strain questionnaire developed by Tores (1988). The WSQ had 17 items based on a five-point scale with three major components, i.e. 1. Request tension consisted of five items (1, 2, 3, 4, and 5), 2. The pressure regulator consisted of six items (6, 7, 8, 9, 10, and 11) and 3. Social support consisted of six items (12, 13, 14, 15, 16, and 17). The Cronbach's Alpha of request tension was 0.79, pressure regulator had 0.67, and social support had 0.85 Cronbach alpha values, respectively.

**Workplace Resilience Questionnaire (WRQ)**
The workplace resilience questionnaire (WRQ) by Winwood et al. (2013) was employed to evaluate the workplace resilience of university teachers. WRQ had 20 items and was assessed by using a seven-point Likert scale with a Cronbach Alpha value of 0.84. The questions included; "If I need to, I can change my mood at work," "My work helps me achieve my goals in life," "I have established several dependable methods to cope with the pressure of difficult actions," etc.

**The Individual Work Performance Questionnaire (IWPQ)**
The researchers used an individual work performance questionnaire (IWPQ) to measure university teachers' work performance, which the Koopmans developed (2014). The IWPQ was based on 18 items with three dimensions, i.e. 1. Task performance (1, 2, 3, 4, and 5), 2. Contextual performance (6, 7, 8, 9, 10, 11, 12 and 13) and, 3. Counterproductive behaviour (14, 15, 16, 17 and 18). The questions were evaluated with a scale having five-point from "rarely" to "always" for actions and services related to the situation, from "never" to "always" for counterproductive work behaviours. The researcher adapted the questionnaire, changed the measure, and used a scale level from strongly agree (SA) to strongly disagree (SDA). This questionnaire was already used locally by Hussain, Javid and Irshad (2020) to measure the female nurses' work performance who were working in public hospitals of Lahore and was used by Hussain and Malik (2022) to measure the academicians' work
performance who were working in Bahauddin Zakariya University, Multan.

Data Analysis and Discussion

SPSS was employed to analyze the collected data from university teachers. The analysis was based on both descriptive and inferential analysis. The descriptive data analysis was based on gender, education, marital status, and designations of the university teachers.

Descriptive Analysis

Table 1. Demographic Characteristics of University Teachers (n = 120)

| Characteristics      | f  | %  |
|----------------------|----|----|
| **Gender**           |    |    |
| Female               | 82 | 68.3|
| Male                 | 38 | 31.7|
| **Education**        |    |    |
| M. Phil              | 96 | 80  |
| PhD                  | 24 | 20  |
| **Marital Status**   |    |    |
| Unmarried            | 49 | 40.83|
| Married              | 71 | 56.17|
| **Designation**      |    |    |
| Lecturer             | 92 | 76.7|
| Assistant Professor  | 13 | 10.8|
| Associate Professor  | 03 | 2.5 |
| Professor            | 12 | 10  |

The table further illustrates the gender of the university teachers participating in this research study. 68.3% of respondents were female, and 31.7% were male teachers participating in the current research study. 80% of the teachers had M. Phil qualification, and 20% were PhD by qualification.

Most teachers (56.17%) from selected universities were married, and 40.83% of study participants were single. Furthermore, 76.7% lecturers, 10.8% assistant professors, 2.5% associate professors and 10% professors participated in this contemporary study.

Table 2. Independent Samples t-test to evaluate the Difference in Work Stress of Female and Male Universities Teachers

| Variables                  | Gender         | N  | M    | SD   | t    | df  | p   |
|----------------------------|----------------|----|------|------|------|-----|-----|
| Work Stress of universities teachers | Female        | 82 | 32.21| 4.981| 4.696| 118 | .000|
|                             | Male           | 38 | 27.74| 4.554|      |     |     |

The difference in the work stress of university female and male teachers was evaluated with the help of the independent sample t-test. The results of independent sample test indicated a significant difference in female teachers ($M = 32.21, SD = 4.981$) and male universities teachers ($M = 27.74, SD = 4.554$), while, $t (120) = 4.696$, and two-tailed sig. $(p) = .000$. The magnitude of the difference was (mean difference = 4.470, and 95% CI = 2.585 to 6.356), and the eta square was .16, which shows a large effect size of work stress. The results depicted that the female university teachers faced more work stress compared to male university teachers.
Table 3. Independent Samples T-test to Evaluate the Variance in Work Resilience of Female and Male Universities Teachers

| Variables                   | Gender   | N  | M    | SD   | t     | df | p  |
|-----------------------------|----------|----|------|------|-------|----|----|
| Work Resilience of universities teachers | Female   | 82 | 83.51| 21.759| -1.394| 118| .16|
|                             | Male     | 38 | 89.47| 21.868|        |    |    |

The difference in work resilience between female and male university teachers was evaluated with the help of the independent sample t-test. The results determined a significant difference in mean score of female university teachers (M = 83.51, SD = 21.759), and male teachers (M = 89.47, SD = 21.868) regarding work resilience, whereas the t (120) = -1.394, and p = .16 which is not significant. The difference in the score of female and male teachers was (mean difference = -5.96, 95% CI = -14.430 to 2.508) and the eta square effect size = .01, which is very small. The results show that the male teachers of the university have better work resilience as compared to the female teachers at the university. However, overall the results were not reposting a general difference in the work resilience of female and male university teachers.

Table 4. Hierarchical Regression Analysis Predicting Work Performance from Work Stress and Work Resilience

| Variables            | R²         | B         |
|----------------------|------------|-----------|
| Step 1               | .16**      |           |
| Age                  | -.10       |           |
| Gender               | .04        |           |
| Education            | .11        |           |
| Marital Status       | .19        |           |
| Monthly Income       | .05        |           |
| Work Status          | -.34***    |           |
| Step 2               | .48***     |           |
| Work Stress          | -.08       |           |
| Work Resilience      | -.57***    |           |

In this research, researchers employed hierarchical multiple regression analyses to assess the degree to which demographics, work stress, and work flexibility can predict the performance of university teachers. Preliminary analyses were conducted to check and ensure that the data was not violating the assumptions of linearity, multicollinearity, homoscedasticity and normality. Age, education, gender, monthly income, marital status, and work status were added at the first step, which explains 16% of the variance in work performance. After entry of work stress and resilience at the second step, the total variance elucidated by the model was 48%, F(8, 111) = 13.092, < .001. The two controlled measures (work stress and work resilience) described an additional 32% of the variance in work performance after controlling the age, gender, marital status, education, monthly income and work status .32, F change (8, 111) = 35.082, p < .001. Whereas, in the final model, only one control measure was significant statistically, with work resilience recording a greater beta value (beta = .57, p < .001) than the work stress (beta = -.08, p < .001).

Discussion

The teaching profession is considered one of the oldest professions in the world and evaluated as one of the most stressful professions (Rahman et al., 2020; Riaz, Jamal & Latif, 2019; Soomro, Breithenecker & Shah, 2018), because university teachers have to spend a major chunk of their time performing job-related activities. Furthermore, university teaching jobs become more challenging due to the intensification of work and working environment (Currie, Harris & Thiele, 2000; Jacobs...
In the previous literature, researchers (Beltman, Mansfield, & Price, 2011; Harris & Adams, 2007; Mansfield et al., 2012) explained the reasons and consequences for leaving the profession of teaching and determined the job stress, role conflict, and workplace pressure as important factors in teachers leaving their jobs. Some of the previous literature (Hussain, Malik, 2022; Hussain Javed & Irshad, 2020; Rahman et al., 2020) discussed work and family role as a basic component which directly affects the job performance of academicians, which strengthen the concept that role stress damages the work performance. Furthermore, inherent challenges of learning and experiencing high levels of strain and exhaustion, burnout, and rigidity may also be perceived as a component of stress that impacts the work performance and achievement (Asaloei, Wolomasi & Wearing, 2020; Fore, Martin, & Bender, 2002; Hermsen et al., 2018; Kyriacou, 1987; Mattiske, Oates & Greenwood, 1998; Robertson & Dunsmaur, 2013; Tang, Leka, & MacLennan, 2013).

In the previous indigenous literature, the main focus of researchers was to generate a debate and discuss the concept of stress and job performance. Especially Hussain and Malik (2022) discussed how stress impacted the female and male academician employed in universities differently. Mansoor et al. (2011) discussed the concept of role conflict and its association with job satisfaction, and Bashir and Ramay (2010) discussed how stress affected job performance. However, previous indigenous literature could not demonstrate how to work resilience helps in job performance and how it predicates a relationship between work stress and work performance.

This contemporary research study showed that female university teachers experience more work stress than male university teachers. This study finding was supported by the study finding of Hussain and Malik (2022), which depicted that women academician faced more work-related stress compared to the male academician of the university. Furthermore, the study's findings were consistent with the findings of Fatima and Sahizada (2012) and Rahman et al. (2020), who had previously reported a difference in work-based stress between males and females. Moreover, Rivera-Torres et al. (2013) supported the study finding by reporting that females and males have different patterns regarding work stress.

In addition to this, the study finding revealed that university male teachers had better work resilience than female teachers of the university, which helped them cope with their work-related stress and helped increase work performance. The study finding was supported by the study of Sarwar et al. (2017) by pointing out that male students are more resilient than female students, but Mwngi and Ireri (2017), in their study did not find any kind of variance in the academic resilience of female and male students. Furthermore, the findings of Polt and Iskender (2018) were consistent with this contemporary study, as Polt and Iskender (2018) did not find a substantial difference in the mean score of female and male academician regarding the resilience of work. The study finding of Kivrak and Akandere (2019) also supported the finding by reporting that males have higher resilience than females.

Additionally, regression analysis results determined that when work stress and work resilience were controlled, the prediction level of age, gender, education, marital status, and work status towards job performance was 16%. In that 16%, work status was a major predictor of job performance with 34% of variance from all the first step variables. However, when work stress resilience was not controlled in the second step, it became a major predictor of the work performance of university teachers. The results indicated that the work resilience of universities teacher predicts a stronger work performance compared to available variables like age, gender, marital status, work status, monthly income and job stress. Polat and Iskender (2018) supported these study findings, which reported a significant relationship between the work resilience of teachers with their organizational commitments, work performance, job satisfaction and organizational climate. Moreover, Van Wingerden and Poell (2019) supported the study's findings by discussing that teachers' resilience was meaningfully related to work performance. The study finding is also supported by the study findings of Liu et al. (2021) and Joseph and Johnson (2014), which indicated the resilience relationship with job performance in a positive direction and teachers'
work resilience has a positive impact on increasing their job performance.

**Conclusion**

Work Stress devastatingly distresses employees working in any sector, and it further distracts their job performance. In the previous studies, researchers have discussed the phenomena of work stress, physical and mental problems, lack of confidence and depression and their link with job burnout, job turnover intention, work performance, and work resilience and its link with organizational commitment, job satisfaction, and work performance separately. However, there was a need to develop an understanding of the reader towards the concept of work stress, work resilience and work performance collectively. This study was designed to demonstrate whether work stress impacted the male and female university teachers differently, which indicated through the results of this study that work stress exists and impacted the male and female teachers differently.

In addition, this study discussed that the work resilience existed between female and male university teachers differently, and male teachers of the university had better work resilience than female teachers of the university. In the part of regression analysis, it was found that role resilience strongly predicts work performance in a positive direction rather than the other predictor factors. This shows that the university teachers with better work resilience may have better work performance and when resilience increases, it directly improves the teachers' work performance. Likewise, when the work resilience decreases, it negatively affects work performance and decreases the work performance of university teachers. Therefore, the study findings suggested that it is important to develop resilient skills within teachers to help them cope with their work stress and improve their performance. The training should be developed to improve the work resilience of university teachers so they can upgrade their work performance. Furthermore, university teachers should be oriented and enhance the basic resilience features which help them handle stress affecting their job performance. The resource material in electronic or print media should be shared with university teachers to develop the concept of self-help skills in resilience development.
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