

## Relation of Occupational Stress and Job Satisfaction: A Study of Secondary School Heads in Khyber Pakhtunkhwa, Pakistan

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### Abstract

*This paper examines the relationship between occupational stress and job satisfaction among secondary-school-heads in the province of Khyber Pakhtunkhwa. A sample of only 402 secondary-school-heads (Male n = 260, Female n = 142) was selected with the help of multistage sampling technique. A descriptive and correlative design was employed. Two standardized tools were employed i.e., “Occupational Stress Index (OSI) and “Minnesota Satisfaction Questionnaire (MSQ) for seeking the responses. Pearson’s correlation and linear regression were employed to analyze data statistically. The findings exposed a strong inverse relation between occupational stress and job satisfaction. Furthermore, a substantial negative correlation between all the subscales of occupational stress and overall job satisfaction is also present. Eight subscales of occupational stress, i.e., role ambiguity, responsibility for persons, under participation, unreasonable group & political pressure, low status, strenuous working conditions, peer group relations, and unprofitability were found significant predictors and have negative effect on job satisfaction. So, the researchers recommend focusing reduction in the level of occupational stress among secondary-school-heads. Elementary and Secondary Education Department should have collaboration with policy makers to formulate rewarding and effective strategies for stress reduction for secondary school heads to have high spirit for yielding good outcomes.*

### Key Words:

Relationship;  
Occupational  
Stress; Job  
Satisfaction;  
Secondary-  
School-Heads

### Introduction

Effective leadership has long been considered an imperative to ensure successful performance of schools by introducing a vivacious environment, providing adequate resources, and creating good relations and students’ performance (Kythreotis, Pashiaridis, & Kyriakides, 2010; Marzano, Waters, & McNulty,

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2005). Social changes have transformed school into a more dynamic and complex institution from the non-dynamic unidirectional format in past. A good leader mobilizes resources to achieve the objectives of the collective interests; takes decisions to achieve societal goals; extracts, produces and distributes channels for the promotion of learners' prosperity in the organization. Due to the importance of leadership in the community, head teachers can provide effective leadership for the attainment of educational goals. It is imperative to modify and improve the performance of the school heads and recognize specific leadership behaviors and practices that have positive effects on institutional as well as students' performance (Pashiardis, 2011).

A principal of the school must use emotional as well as general intelligence to accomplish these responsibilities to meet effectively the mandates of state and fulfil the mission of the schools successfully (Marzano, Waters, & McNulty, 2005). Therefore, effective leadership is widely accepted as being a fundamental element of an organization and playing a vital role in ensuring individuals' prosperity and organizational productivity. Without effective leadership, an organization cannot succeed in getting right way of success and leaders are unable to perform their duties effectively until they are emotionally intelligent, competent, satisfied and secured in a working place. Leaders having problems may create numerous disagreeable and unpleasant results for organization and its workforces which pessimistically and undesirably affect the overall performance of an organization. Therefore, occupational stress and job satisfaction are the most dominant variables as they are directly associated with employees' prosperity and institutional productivity.

## **Occupational Stress**

The US National Institute for Occupational Health and Safety describes in its publication entitled "Stress at work" (1999) that occupational stress as the hazardous emotional and physical reactions occurring when the demands and necessities of employment may not contest the competences, necessities and resources of employees (cited in Reddy & Poornima, 2012). Based on this definition, occupational stress is unending conditions brought about by circumstance in the working environment that tangle adversely influence on individual's employment progress and their general prosperity (Yahaya, 2009). A number of research studies have investigated various reasons for occupational stress in various organizations i.e., work over-burden, clashes amongst laborers and administration, role ambiguity, troublesome interpersonal relationships, role over-burden, client contact, social support, job independence and locus of control were referred to as main reasons of stress.

Sutherland and Cooper (2000) made five groupings of possible wellsprings of psychosocial and occupational stress. Numerous potential stressors contained five situations that may contribute to stress i.e., home-grown, family and needs, marital

issues, and conflicts amongst employment and family necessities. Stressors always perceived in the literature are; time pressure and workload, investigation, educational change, administration styles, re-association and reformation, and insufficient sources (Winefield et al., 2003). Willis (2005) lists stressors as egotism, hate, anxiety, guilt feelings, jealousy, over sensitivity, distress, anger, terror, disappointment, longing for endorsement, death of a life partner, divorce, personal injury or sickness, marriage, pregnancy, sex challenges, gain of a new family member, budgetary commitments, issue with in-laws, issue with supervisor, change in work conditions, change in schools and minor infringement of the law. The distinctive reasons for stress at work consist of mistreatment, harassment, feeling feeble and uninvolved in choosing one's own particular commitments, demands of constant unreasonable performance, ineffective correspondence and conflict resolution, instability of employer, lengthy working hours, spending of much time out of family and home, political issues among employees, a feeling that one's remuneration is incomparable with ones obligations, obligations and pressure aggravating life-adjustment (Chapman, 2007).

Research revealed that occupational stress has numerous adverse effects on employees' mental, physical and behavioral responses. According to Cooper and Williams (1996), three changes that may reveal that one is experiencing stress: The first change is modified appearance which makes the individual exhausted, anxious and upset. The second change is modified propensities or habits which makes the individual eating more or less, drinking more alcohol, smoking more cigarettes. The third change is modified behavior which makes the individual ill-tampered, aggressive, violent, and poorly concentrated. The employee's reaction to work stress may be physical, mental or both (Santos & Cox, 2000). Physiological reactions to stress are regarded as 'fight or flight' reaction. The fight reaction refers to the body reaction to adjust by responding. Continuous high levels of occupational stress can bring about genuine wellbeing conditions embracing hypertension, cancer and mental diseases, for example, downheartedness or downfall (Palmer, Cooper, & Thomas, 2003). Butt (2009) expresses that stress pressures adversely on the organization as well as individual's mental and physical conditions which bring about summary performance, non-attendance, accidents, dishonest conduct, discontentment and sickness. Among numerous occupational antagonistic impacts of work stress are employment dissatisfaction, poor social relationships, decreased profitability, non-attendance; high staff turnover; unfavorable personal effects are nervousness, depression, and burnout (Gershon, Lin, & Li, 2002).

## **Model of Occupational Stress**

### **The Person – Environment Fit Model**

This model was introduced by French, Rose, and Blackmore (2002). It is one of

the most primitive supported conceptual models regarding job stress. It is a comprehensive idea that essentially consists of one's compatibility with numerous frameworks in the occupational environment (Schneider, 2001). P-E fit alludes to a match between an employee's capabilities and the necessities of occupation. The key evidence of the theory is that stress emerges from the fit or consistency with the individual and environment and not from the individual or the environment disjointedly (French, Rose, & Blackmore, 2002). It proposes that unsatisfactory fit may contribute to physiological stress or mental stress or both. People are more successful, powerful, more fulfilled and more dedicated to their employments when their own characteristics match the characteristics of their situational surroundings. Research about the person-environment has been condemned fundamentally for lack of conceptualization of the fitting environment element (Schneider, 2001).

### **The Job Characteristics Model**

Job Characteristics Model emphasizes on the crucial aspects of job characteristics. For example, expertise assortment (what number of various aptitudes are required) task identity (how well usual functionalities are linked to overall work goals), task significance (how important the employment is), autonomy (how free the individual is to deal with their own working), and feedback (the amount of reward, commendation, or remarks the employee receives). These characteristics are endorsed to contribute to Critical Psychological States' of experienced importance, experienced obligation with respect to results, and information of employment outcomes. These characteristics may be positive or negative values. Positive attributes boost the mental states contributing to scholarly and behavioral outcomes e.g. satisfaction, inspiration, low level of absenteeism, sufficiency, productivity, advancement, turnover and so on. In conjunction with the model, Hackman & Oldham designed the Job Diagnostic Survey, a questionnaire for determining one's occupation, the outcomes of which propose five principal sorts of employment redesign: development of working units; joining assignments; making feedback techniques; making a client centered structure; and employment advancement (Hackman & Oldham, 1976).

### **Effort Reward Imbalance Model (ERI)**

Like DCS, ERI model was introduced with aim to focus on cardiovascular disorders. The main idea of Effort Reward Imbalance (ERI) is one of reciprocity, or work as a component of a social change process. Echoing the balance orientation of the P-E fit model where a misfit between an individual's capabilities and the essentials of his employment causes strain, the important

supposition of ERI is that efforts at work ought to be compensated by appropriate compensation, and a discrepancy between these will contribute to upsetting and distressing occurrences (French, Rose, & Blackmore, 2002). A condition which is specifically to be anticipated when an individual gets low rewards because of high efforts. Rewards are referred to career opportunities, money, respects and security. Effort is composed of two components i.e., intrinsic efforts and extrinsic inspirations. Intrinsic efforts take place from the personal motivation of an individual e.g., a need for control and over commitment (an inclination to make exceptional efforts or be dedicated on unpractical objectives). Extrinsic inspirations, or external pressures i.e., workload. ERI does not give a comprehensive redesign theory, yet like the DCS model, it supposes primary design principles in the light of essential interventions only, i.e. reasonable reward for effort, constructive criticism frameworks, and additional rewards and advancement prospects and so forth (Kompier, 2003).

### **Job Demand-Control Model**

The Job Demands-Control Model was designed by Karasek (1979) based upon the supposition that the relationship between employment demands and employment control will describe strain consequences. Job demand is defined as the independent variable that gauges stressors, for example, workload demands. Job control was initially conceptualized under the expression job decision latitude and characterized it as the control that the working personnel has completed tasks and their execution during their functioning day. Karasek (1979) opines, when employment demands are high than employment control strain will result. Job Demand-Control Model classifies jobs into four kinds in the light of various blends of demands and control. The primary sort called "active" and happens when the workforces have high demands and high control in the meantime. Alternately, the second sort called "passive" and takes place when the workforces encounter little demands and they do not need high control. The third sort called "relaxed" and takes place when the workers encounter little demands and they have high control. The fourth kind which is the most stressful and upsetting situation called "Job strain" and occurs when the workforces experience too high demands while they have little control to deal with over-burden, conflict, ambiguities and stress (Karasek, 1979).

### **Job-Demands-Resources Model**

Job-Demands-Resources Model is one of prominent models of occupational stress and it is linked to the Burnout Model (Schusbroeck and Merritt, 1997). According to Maslach, Schaufeli, and Leiter (2001), continuous stress is emotionally depleting and eventually prompts to a condition of 'burnout'. Burnout

has been conceptualized as a mental disorder created because of interminable interpersonal stressors at work. It is described by three key measurements. Firstly, burnout is described by uncontrollable exhaustion, secondly by emotions of cynicism and separation from the employment, lastly by a feeling of incapability and lack of accomplishment. The exhaustion component denotes the stress dimension of burnout, that the cynicism component describes the interpersonal context of burnout, and that the incapability and lack of accomplishment components describe the self-evaluation.

This model suggests that the two processes are responsible for the development of burnout. Firstly, intense employment demands prompt to consistent straining of the individual and, ultimately to emotional exhaustion. Secondly, inadequate resources accessible to the workers confounds the fulfillment of employment demands which then contribute to withdrawal behaviors and finally to discontinuation of work. The Job-Demands-Resources Model accepts that despite the fact that workers in various associations might be gone up against with various working conditions, the characteristics of these working conditions can be ordered into two classifications— job resources and job demands. Job resources may be characterized as similar parts of one's employment (physical, mental, social or organizational) but those parts are useful in accomplishing work objectives, diminishing employment demands, or animating self-improvement and development (Bakker, Llorens, Schaufeli, & Salanova, 2006).

### **Transactional Theory of Stress and Coping**

This theory was presented by Lazarus and Folkman (1984). This model stresses the progressing and the mutual collaboration between the employee and the working environment. In view of this theory, stress is not occurred in the individual or condition independently, however in the connection between the condition people's appraisal of the working conditions and ceaseless attempts to manage issues that develop (Cooper, Dewe, & O'Driscoll, 2001). In this theory, two processes distinguish between processes related to individual and the environment. In the first process of “cognitive appraisal”, one relates the significance of the effect of a specific experience to the environment and prosperity of the individual. This includes evaluation of potential stressors as undermining and representing some sort of risk to the person. Cognitive appraisal is proposed to assume a vital role in the coping process. As the working environment is continuously changing, individuals observe diverse distressing circumstances in various ways and differ their utilization of adapting techniques crosswise over upsetting circumstances. This implies that flexible stress appraisal encourages flexible coping responses (Cheng & Cheung, 2005). The second process "coping" accomplishes certain internal and external requirements that are

subjected to measure as stimulating and surpassing one's resources by changing cognitive and behavioral efforts (Lazarus and Folkman, 1984). Folkman and Moskowitz (2004) has characterized coping as the thoughts and behaviors utilized by people to control both the internal as well as external demands of conditions which are assessed as unpleasant.

Stress and problems emerge when a man assesses the demands of a circumstance as going to surpass existing resources and to be a risk his/her prosperity, demanding an adjustment in individual working to return balance (Lazarus, 1966). Fickova (2002) expressed that affectivity (positive and negative) indicates that which coping technique to be operated at the time of the upsetting and distressing circumstances. If feelings were rigorous, they modify the nature of the data processing approach and understanding to the individual that something isn't right. Furthermore, if feelings were of low strength, they indicate that all is going well. Folkman and Lazarus (1991) summarized the process in this model. A potentially distressing occasion will produce the primary appraisal process in which a man assesses the degree of danger in connection to his/her prosperity. When an occasion is seen as aggressive or a challenging, the secondary appraisal process gives a worldwide assessment of the individual's coping resources and capability to deal with the risk and challenge. Coping responses begin after the cognitive appraisals and the stress consequences of this potentially upsetting occasion depend on the competency of one's cognitive appraisals and coping processes (Cheng & Cheung, 2005). The transactional theory and adapting system is the most suitable on account of its flexibility and mental enquiry about convictions, perspectives and practices related stress. Besides, the transactional model has a few qualities; it clarifies adapting in steps, underlines the significance of thinking, recognition, and assurance of controllability, accentuates the role of ceaseless stressors or day by day disturbances as being more essential than every so often life occasions; tracks into account the association amongst individual and environment; and has a feedback system in the form of assessment or appraisal (Sharma & Romas, 2012).

## **Job Satisfaction**

The idea of job satisfaction was initially introduced from the Hawthorne investigations of the late 1920s and early 1930s by Elton Mayo at the Hawthorne plant of the Western Electric Company in Chicago. The results indicate that employees' feelings may affect their employment practices. Social associations and emotional components are one of the essential drivers of employment gratification and workers' efficiency (Sharma & Romas, 2012). The term job satisfaction implies the demeanors and feelings that individuals possess about their employment. Positive and promising mentalities towards the employment

reflects job satisfaction. Undesirable and negative demeanors towards the employment show job disappointment (Armstrong, 2006). In view of Wang and Tran (2015), job satisfaction can be understood as an emotional state of human beings that reflects the positive and pleasant feelings of a person when he or she appreciates his or her own job well. Robbins, Judge, and Sanghi (2009) defines the job satisfaction as a positive feeling about one's employment resulting from an assessment of its characteristics. Job satisfaction is also defined as an agreeable enthusiastic case originating from the occupation appraisal, its depicts viable reaction to one's occupation and the attitudes, the important attributes of job satisfaction that are commonly measured by organizations through rating scale, worker's response to their work (Kumari & Pandey, 2011).

Job satisfaction comprises of emotional, cognitive and behavioral components. The emotional component alludes to emotions with respect to the job, such as weariness, tension, or excitement. The cognitive component alludes to convictions with respect to one's employment, for instance, feeling that one's occupation is rationally demanding and testing. Finally, the behavioral component is composed of individuals' activities in connection to their work, which may consist of being late, remaining late, or putting on a show to be sick with a specific end goal to maintain a strategic distance from work. Satisfaction at work may impact proficiency, profitability, non-appearance, turnover, aims to resign and lastly employee's prosperity (Usop, Askandar, Kadlong, & Usop, 2013). Unsatisfied people leave organizations while contented workers are in better wellbeing and have longer future. Job dissatisfaction has been related to side effects like uneasiness, depression, and poor physical and mental wellbeing which influence worker turnover, absenteeism, responsibility and commitment. Finally, job satisfaction in the working environment influences people's private lives which thus affect turnover and other important business-related demeanors and conduct. Job satisfaction is considered as a main turnover predictor and can affect students' discernment of service excellence presented by the organization. However, academics may displease with their employment and even intend to leave the job due to certain reasons i.e., high stress, poor communication with colleagues, lack of advancement opportunities, no recognition etc (Ucho, Mkavga, & Onyish, 2012).

In modern competitive market, every organization wishes to achieve better performance through efficiency and productivity. However, the achievement of this dream needs highly satisfied employees as they try to expand more struggle to performance and work harder to attain the required outcomes. Likewise, the overall organizational performance depends on successful and resourceful individual performance (Owusu, 2014). Investigating the impact of job satisfaction on performance, Cummings (1970) concluded that satisfaction contributes to better performance, performance contributes to satisfaction and reward contributes to both performance and satisfaction. Currall, Towler, Judge,



and Kohn (2005) found that the organizational productivity and efficiency depends on the performance of its workforce and that's why highly level of job satisfaction is required for excellent performance of workforce. Job satisfaction helps in ensuring more efficient workforce and more organizational achievements. Those employees who enjoy their job are thought to have a high standard of work life as compared to those workforces who are displeased and their demands are not satisfied fulfilled. Every employee in workplace has to perform a fundamental role for the advancement of organization and therefore, understanding employees' job satisfaction is crucial for the transformation of performance and organizational productivity (Nyanga, Mudhovozi, Chireshe, & Maungnidze, 2012).

## **Models and Theories of Job Satisfaction**

### **Herzberg's Two-Factor Theory**

Hertzberg, Maunser, and Snyderman (1959) two factor theory is also known as Motivator Hygiene Theory. It describes that satisfaction as well as dissatisfaction are instigated through multiple factors such as hygiene and motivational factors. Motivational factors deal with those employment facets of individuals' satisfaction. These factors are considered to be intrinsic. Hygiene factors consist workplace facets such as managerial practices, organizational procedures, compensation, and other working conditions (Asondariya, 2008). Motivational factors are linked with real work performance, or the job content which cause higher motivation and job satisfaction. These factors expect the employees to ensure better achievements. Herzberg's theory proposes that Maslow's higher-order needs are same to Herzberg's satisfier variables while Maslow's lower-order needs are same to Herzberg's hygiene factors. Motivation variables are linked with higher-order needs and comprise of the chance to satisfy in the employment, recognition of achievement, thought-provoking work and advancement opportunities, professional commitment, and the work itself-if the work is exciting and interesting (Amos et al., 2008). Although the presence of intrinsic motivators subsidizes to employment gratification but their absence may not contribute to employment dissatisfaction (Perrachione, Petersen, & Rosser, 2008).

To ensure employees' inspiration and job satisfaction, Herzberg and his associates ensured that emphasis should be given on those variables which are associated with the working nature and its productivity directly accomplished from the work, for example, work itself, recognition, accomplishment, accountability, and self-improvement (Hertzberg, Maunser, & Snyderman, 1959). Herzberg's theory offers a clarification to why workforce still need inspiration when gone up against with high pay rates and incredible working conditions. The

last two components just represent hygiene factors, which retain dissatisfaction under control. As per Herzberg, motivation originates from the job itself. In this manner, it is vital for administrators to investigate the way of the occupations they ask their workers to perform. Herzberg's thought is that if you want a worker to perform excellently and perform a good job, he ought to have a good job to commence with. Thus, keeping in mind the end goal to enhance work attitudes, efficiency and productivity, organizations must go to both factors and not accept that an increase in fulfillment contributes to a significant abatement in dissatisfaction. Consequently, Herzberg's work suggests that nearly anybody will react positively to a job with profoundly motivating variables (Berghe, 2011).

### **Lock's Value Theory**

According to value theory, behavior is an outcome of the people's conscious aims and goals. Locke expresses that when goals of the workers set by themselves or by managers are satisfying and achievable, then their commitment and productivity will increase which contribute to boost the level of their job fulfillment (Badenhorst, George, & Louw, 2003). Successful achievement of the proposed goals ensures a pleasant and gratifying emotional state (which is called job satisfaction) with respect to the individual. Surpassing set goals expands fulfillment. Greater the goal-success a worker has achieved, the higher will be his/her job satisfaction (Latham & Locke, 2002). Locke (1969) demonstrated that employment dissatisfaction is the extent of the perceived contradiction between the expected and the actual outcomes. Various factors influence the fulfillment of goal-directed performance. These factors are; effort, organizational support, individual capabilities and individual characteristics. Hansson, Hasanen, and Hellgren (2011) expressed that providing organizational support (through administrator) and participation opportunities for employees in setting goals effect job satisfaction positively. They further added that compensating employees for good outcomes, giving feedback and recognizing their performance, supervisors' support and having low levels of goal-conflict and goal-stress have been observed to have positive correlation with job satisfaction. If an individual like instructor feels that he can develop and meet his job challenges by the pursuance and accomplishment of objectives that are imperative and to them, he builds up a feeling of achievement in the work environment (Latham & Locke, 2002).

### **Job Characteristic Model**

This model was proposed by Hackman and Oldham (1976) and is generally used to know how certain job characteristics influence on job outcomes and job satisfaction. The model determines five main job features i.e., task identity, task

significance, autonomy, skill variety, and feedback which have influences on three basic mental conditions such as experienced meaningfulness, experienced responsibility regarding results, and information of genuine outcomes and thus impacting the outcomes such as job satisfaction, motivation, non-attendance etc. There are five principal characteristics which can be intertwined to sketch a Motivating Potential Score (MPS) for work used as an index anticipated how an occupation has to influence a workers' states of mind and practices. A meta-investigation gives some support to the reasonability of the Job Characteristics Model (Asondariya, 2008).

### **Dispositional Theory**

Dispositional Theory is the prominent theory of job satisfaction. It is a remarkable comprehensive theory that proposes that individuals have intrinsic dispositions enabling them to incline toward a particular level of fulfillment, irrespective to their job. This approach turned into a striking clarification of job satisfaction because of the confirmation that job satisfaction tends to adopt stability after some time and pervades across professions and employments. Also, research uncovers that identical twins have similar levels of employment satisfaction (Asondariya, 2008). Judge (1998) proposed an exceptional model "Center Self-Evaluations Model" that decreased the extent of the Dispositional Theory. Judge guaranteed four main self-evaluations that indicate one's disposition towards job satisfaction i.e., locus of control, self-esteem, general self-efficacy, and neuroticism. This model indicates that higher level of general self-efficacy (the belief in one's own competence) and self-esteem (the worth one gives to himself) contribute to higher job fulfillment (Asondariya, 2008).

### **Vroom Expectancy Model**

Vroom's hypothesis depends on the principle that employees; efforts will contribute to performance while the performance might contribute to rewards (Vroom, 1964). Rewards might be positive or negative. According to Vroom, the more positive the reward is, the more probable the worker will be profoundly energetic and inspired. On the other hand, the more negative the reward, the less expected the worker will exceptionally be inspired. Expectancy theory proposes that work motivation is dependent upon the perceived relationship between performance and outcomes and individuals adjust their behavior in light of their calculation of expected outcomes. Vroom conceives that the source of inspiration in Expectancy Theory is a multiplicative function of valence, instrumentality and anticipation (Stecher & Rosse, 2007). However, Vroom further proposed that individuals intentionally picked a specific course of action based upon

judgements, attitudes and convictions as an outcome of their desires to promote happiness and keep away from torment.

Expectancy theory depends on four suppositions: firstly, employees connect with associations with some hopes about their demands, inspirations, and past experiences which impact how people respond to the association. Secondly, an individual's behavior is a consequence of cognizant choice i.e., individuals can select those practices and behaviors suggested by their own expectancy calculations. Thirdly, individuals need diverse things from the association (e.g., handsome compensation, professional stability, progression, and challenge). Fourthly, individuals will select among choices in order to improve outcomes for them personally (Vroom, 1964). Based on these suppositions, the expectancy theory has three main elements i.e., expectancy, instrumentality, and valence. An individual is inspired to the extent that he or she trusts that (a) effort will bring about satisfactory performance (expectancy), (b) performance will be remunerated (instrumentality), and (c) the value rewards is exceedingly positive (valence) (Lunenburg, 2011).

### **Review of Past Relevant Research Studies**

Manzoor et al. (2011) carried out a research study to determine the association between job stress and job satisfaction of the universities teachers. A sample of 155 faculty members was used for this study. The responses of the respondents were collected through self-developed questionnaire. The findings revealed that 13.5% faculty members were highly pleased with their employment and only 2.5% were highly stressed. On the other hand, majority of the faculty members were averagely gratified with respect to each variable of job stress and job satisfaction.

Kayastha and Kayastha (2012) carried out an empirical study to explore the association between occupational stress and job satisfaction among Teachers working in higher secondary schools of Nepal. The findings revealed that the reliability of both instruments was greater than 0.82. The results revealed that there was a substantial relationship between job stress, job stressors and job satisfaction.

Raza (2012) investigated to examine overall faculty stress level; identify weights of various variables of job satisfaction; differentiate overall faculty job satisfaction level; and investigate relationship between occupational stress and job satisfaction. Two questionnaires were used to achieve the research objectives through obtaining the responses from universities teachers in Punjab. The outcomes of the study discovered that majority of the teachers did not perceive occupational stress as a major issue in university atmosphere. They recognize administrative variables as exceptionally contributing components in

employment fulfillment. In last, no significant relationship was established between occupational stress and job satisfaction.

Iqbal and Waseem (2012) completed a research study to investigate the influence of stress on job satisfaction and also to explore the variables responsible for creating job stress of employees. A total sample of 134 employees was selected through cluster sampling technique. Data was collected from the participants through questionnaires. The study outcomes explored an inverse association between job satisfaction and job stress. Employees having more job stress had low level of job fulfillment.

Rehman et al. (2012) carried out a study to examine the effect of job stress on employee job satisfaction. Only 150 employees were selected as sample from the private colleges of Pakistan. Required information from the respondents was collected through questionnaires. The findings revealed that stress was not positively correlated to employee's job satisfaction which contradict the outcomes of the prior study that workload, physical environment negatively affect the employees' job satisfaction.

David (2014) assessed the influences of occupational stress on job performance of primary-school-teachers. The findings exposed that employer related factors meaningfully influence job performance of teachers. Personal related factors were additionally found to have substantial effect on the employment related stress factors. Lastly, the investigation found that all the independent factors are fitted in a multiple linear regression model.

Siddique and Farooqi (2014) carried out a study to investigate the association between motivation, occupational stress and job satisfaction among university teachers in Gujrat City. Only 171 university teachers were selected as sample randomly. Information from the teachers was collected through questionnaires. Descriptive statistics, Correlation, reliability and Regression Analysis were applied for analyzing the data. The results showed that there was no substantial association between occupational stress and job satisfaction. Secondly, it was also found that there was positive association between job satisfaction and motivation.

Hans, Mubeen, Khan, and Al-Saadi (2014) made an endeavor to identify the work stress and job satisfaction among headmaster of bilingual school in Muscat, Sultanate of Oman. It was a descriptive study and a sample of 40 headmasters was selected randomly for the study. Result demonstrated that the headmasters were more expected to encounter stress at work and had a high degree of job satisfaction in their challenging work.

Riaz et al. (2016) conducted a study to examine the relationship between job stress and employees' job satisfaction in the Nursing Sector of DHQ Hospital of Okara. It was quantitative and descriptive study. In this study, two variables were disused i.e., independent variable such as job stress and dependent variable i.e., job satisfaction. A sample of 100 nurses of DHQ Hospital of Okara was used for

this study. The findings revealed that job stress has a positive impact on employees' job satisfaction.

Laxman (2017) conducted a study to examine the job satisfaction and occupational stress among permanent and temporary school teachers. The findings revealed that the level of job satisfaction of permanent teachers was high than temporary teachers while temporary teachers were found more stressful than permanent teachers. Furthermore, there was negative correlation between occupational stress and job satisfaction among the teachers.

## **Purpose of the Study**

This paper investigated the association between occupational stress and job satisfaction of secondary-school-heads in the province of Khyber Pakhtunkhwa.

## **Research Hypothesis**

**H<sub>0</sub>1.** There is no significant correlation between occupational stress and job satisfaction among secondary-school-heads.

**H<sub>0</sub>2.** There is no significant correlation between the subscales of occupational stress and overall job satisfaction among secondary-school-heads.

**H<sub>0</sub>3.** There is no significant effect of each subscale of occupational stress on job satisfaction among Secondary-School-Heads.

## **Methods and Materials**

### **Population**

This research was conducted in Khyber Pakhtunkhwa which is located in the northwestern region of the country. It is divided into seven divisions and 25 districts. It was formerly known as North-West Frontier Province (NWFP). The study in hand was conducted in 10 out of 25 districts namely, Abbottabad, Bannu, Charssada, Hangu, Karak, Kohat, Lakki Marwat, Nowshera, Malakand and Peshawar.

In educational research, it is imperative to ensure an accurate depiction of the population of the subjects or elements under investigation i.e., persons, objects, organizations etc. Population refers to the entire group of individuals to which the investigator generalizes the results. In current study, all the secondary-school-heads of public sector in Khyber Pakhtunkhwa formed the study population. According to EMIS (2015), there were total 2108 functional secondary schools in Khyber Pakhtunkhwa comprised of 1386 boys and 722 girls' schools which consist of 2108 secondary-school-heads (males  $n = 1386$ ; females  $n = 722$ ).

## Sample and Sampling Techniques

Multi-stage sampling technique is extensively practiced in educational research globally as it is more systematic, convenient and trustworthy. Multistage sampling is used when the population is widely scattered and adequate resources are not available. Different sampling techniques may be used for selecting sample at each stage according to the nature of the population such as simple random sampling, stratified sampling etc. Population of the current study was widely distributed and was impossible to take sample randomly.

So, multistage sampling technique was employed for choosing sample. At 1<sup>st</sup> stage 10 (40%) out of 25 districts such as Abbottabad, Bannu, Hangu, Charssada, Karak, Kohat, Lakki Marwat, Nowshera, Malakand and Peshawar were carefully chosen randomly. At 2<sup>nd</sup> stage, 60% Boys and 60% Girls secondary schools were selected with the help of stratified sampling. At 3<sup>rd</sup> stage, 75% male and 75% female secondary-school-heads were selected randomly from the said selected secondary schools. Consequently, the sample included 402 secondary-school-heads (Male  $n=260$ , Female  $n=142$ ).

**Table 1. Population and Sample Size of the Study**

Districts	No. of Schools				No. of Heads			
	Total		Sample		Total		Sample	
	Male	Female	Male	Female	Male	Female	Male	Female
Karak	56	26	37	16	37	16	28	12
Peshawar	85	55	51	33	51	33	38	25
Kohat	47	27	28	16	28	16	21	12
Bannu	59	40	35	24	35	24	26	18
Abbottabad	69	45	41	27	41	27	31	20
Nowshera	66	29	40	17	40	17	30	13
Hangu	26	09	16	05	16	05	12	04
Lakki Marwat	56	21	34	13	34	13	26	10
Charssadda	61	33	37	20	37	20	28	15
Malakand	45	29	27	17	27	17	20	13
Total	570	314	346	188	346	188	260	142

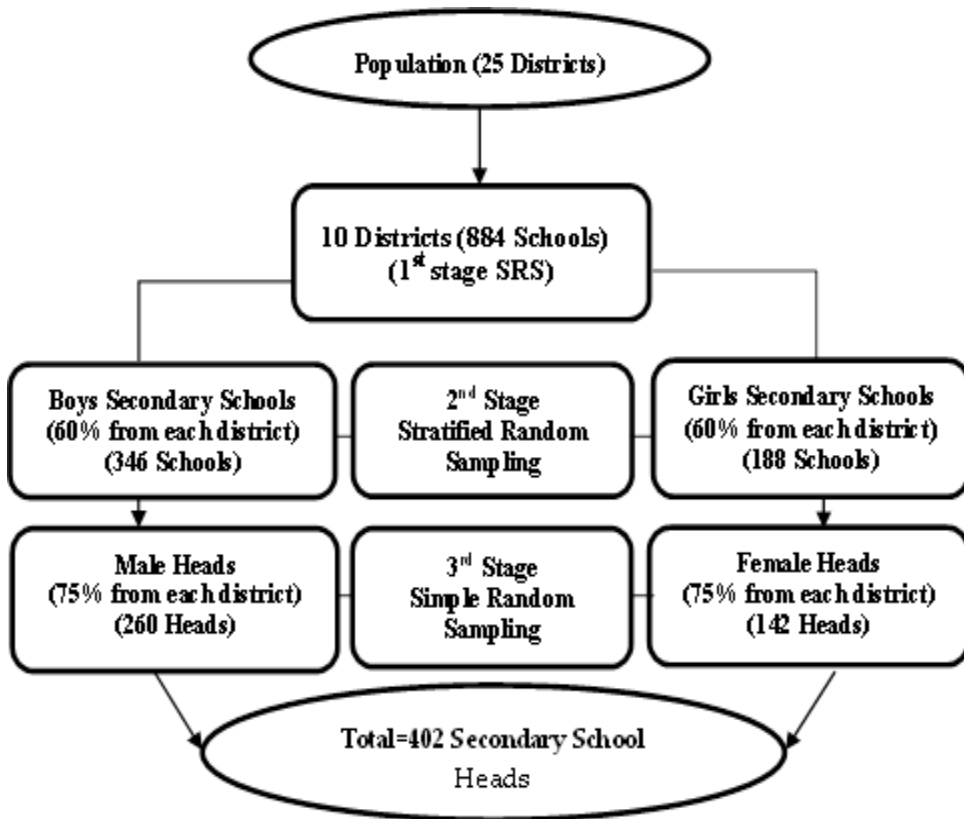


Figure 1. Multi-Stage Sampling Technique.

### Research Design

The current study was a descriptive, quantitative and correlative. A correlational descriptive survey design was used. A correlational design is a kind of research design which is involved in gathering information about two or more variables for each subject in the sample and also calculating a correlation coefficient between the variables. It is very useful and worthwhile for studying problems in education. The purpose of such design is to explore relationships among the variables through the application of correlational statistics. In order to gather the required data from the respondents, a survey design was practiced based on the fact that population of the study was extensively disseminated and it was impossible to collect information through other research tools.



## **Research Instrumentation**

Two standardized tools i.e., Occupational Stress Index (OSI) and Minnesota Satisfaction Questionnaire (MSQ) were used for soliciting information from the participants after taking proper approval from the authors. Occupational Stress Index (OSI) is originally designed and standardized by Shrivatsava and Singh (1981). OSI is a widely acceptable scale for measuring job stress. MSQ developed by Weiss et al (1977) was employed to gauge job satisfaction of secondary-school-heads after taking proper approval from the authors. MSQ is worldwide well recognized research tool for determining employees' level of job satisfaction.

## **Pilot Testing**

The pilot study contributes to test the attainability of the proposed main study, to recognize potential issues with the proposed design, to help improvement or refinement of the information gathering instruments, and to give the researchers experience with the proposed participants, the proposed setting and the proposed methodology. Occupational Stress Index (OSI) and Minnesota Satisfaction Questionnaire (MSQ) were standardized instruments holding exceedingly validity as well as reliability and is extensively employed throughout the world for research purposes. It was thought to pilot test these tools based on culture and social context of populace zone. Therefore, pilot testing was carried out in 25 public secondary schools to eliminate obscurities and confusions in the tools. The researchers distributed OSI and MSQ among 25 secondary school heads (Male  $n=15$ ; Female  $n=10$ ) and their responses were recorded. After analysis, it was come to light that OSI and MSQ were also found highly validated in the respective population area.

## **Validity and Reliability**

Validity and reliability are the fundamental characteristics of a measuring instrument that a researcher has to be apprehensive during in proposing research design, evaluation and analysis of the study. So, validity is imperative for the authentic results of a research study. Therefore, research is meaningless with valid instruments. Hence, validity is essential for quantitative and qualitative research. Content validity is concerned with whether the instrument "covers the domain or items that it purports to cover". The validity of quantitative information may be enhanced via cautious sampling, reasonable instrumentation and proper statistical analysis of the information. So, apart from pilot testing, validity and reliability were also confirmed although these standardized tools were highly reliable and validated. So, validity of OSI and MSQ was

confirmed by a board of the following four specialists possessing doctorate degrees in the relevant field having remarkable experience.

- Dr. Nabi Bux Jumani (AIOU Islamabad, Pakistan)
- Dr. Muhammad Ajmal (AIOU Islamabad, Pakistan)
- Dr. Safdar Rehman Ghazi (UST Bannu, Pakistan)
- Dr. Naveed Sultana (AIOU Islamabad, Pakistan)

In addition, the reliability of these standardized instruments was computed by means of Cronbach's Alpha. The Average Reliability Coefficients of OSI and MSQ were calculated and found 0.872 and 0.860 respectively. The subscale wise reliability is described in detail as under:

**Table 2. Cronbach's Alpha Reliability of the Subscales of Occupational Stress Index (OSI)**

<b>Sub-Scales of OSI</b>	<b>No. of Questions</b>	<b>Cronbach's Alpha (<math>\alpha</math>)</b>
Role Ambiguity	4	.846
Role Overload	6	.887
Role Conflict	5	.896
Under participation	4	.869
Powerlessness	3	.986
Unreasonable Group & Political Pressure	4	.788
Peer Group Relations	4	.854
Responsibility for Persons	3	.844
Low status	3	.877
Intrinsic Impoverishment	4	.786
Unprofitability	2	.998
Strenuous Working Conditions	4	.838
Mean	3.83	.872

**Table 3. Cronbach's Alpha Reliability of the Subscales of Minnesota Satisfaction Questionnaire (MSQ)**

<b>Subscales of MSQ</b>	<b>No. of Questions</b>	<b>Cronbach's Alpha (<math>\alpha</math>)</b>
Ability Utilization	4	.897
Advancement	4	.919
Activeness	4	.795
Social Service	4	.867
Achievement	4	.823

Co-workers	4	.813
Authority	4	.783
Independence	4	.896
Responsibility	4	.917
Creativity	4	.929
Recognition	4	.836
Moral Values	4	.914
Compensation	4	.923
Variety	4	.886
Social Statuses	4	.764
Working Conditions	4	.891
School Policies & Practices	4	.837
Security	4	.788
Supervision (Technical)	4	.927
Supervision (HR)	4	.869
Mean	4	.860

### **Data Collection and Analysis**

Before the commencement of research study, it was approved by the Advance Studies & Research Board (ASRB) of Kohat University (Pakistan). After the approval of the study from ASRB, it was imperative to seek the permission from the Director of Education Department Khyber Pakhtunkhwa, Pakistan. So, after getting formal permission from the Director, process of data collection was begun on 15<sup>th</sup> September 2016 and completed on 15<sup>th</sup> February 2017. Data was collected by the personal visits of researchers. However, data was also collected through mail in case of far-flung areas. Due to follow-up study, 100% responses were received successfully. Statistical Analysis was done through SPSS. Demographic characteristics were presented through simple percentage. Statistical tools i.e., mean, standard deviation, Pearson's bivariate correlation and multiple regression were performed for the analysis of the data.

### **Results**

#### **Demographic Characteristics**

In this study, 402 secondary school heads (male  $n = 260$ , female  $n = 142$ ) participated on the request of researchers through formal permission. The statistical analysis indicates that 64.68% secondary school heads were males and 35.32% were females. In case of age, 6.71% secondary school heads were in age group 30-34 years, 12.19% were in age group 35-39 years, 18.90% were in age

group 40-44 years and 62.19% were in age group 45 years & above. In term of service length, 46.77% heads had (01-04) years, 25.62% had (05-09) years, 17.16% had (10-14) years, and 10.45% had 15 years & above. In terms of academic educational level, 46 (11.44%) were bachelor degree holders, 341 (84.83%) were Master degree holders, 12 (02.99%) were M.Phil. degree holders and 03 (00.75%) were PhD degree holders. In case of professional qualification, 221 (54.98%) were bachelor (Edu) degree holders, 168 (41.79%) were Master (Edu) degree holders, 11 (02.74%) 02 (00.50%) were M.Phil. (Edu) degree holders and 03 (00.75%) were PhD (Edu) degree holders. With respect to locality, 90(22.39%) heads belonged to urban localities while 312(77.61%) heads belonged to rural localities.

**Table 4. Descriptive Statistics of Demographic Information of Secondary School Heads (n=402)**

<b>Variables</b>	<b>Categories</b>	<b>n (%)</b>
<b>Gender</b>	Male	260 (64.68%)
	Female	142 (35.32%)
<b>Age</b>	Age Groups	
	30 – 34	27 (06.715%)
	35 – 39	49 (12.19%)
	40 – 44	76 (18.90%)
	45 & Above	250 (62.19%)
<b>Experience</b>	Experience in Years	
	01 – 04	188 (46.77%)
	05 – 09	103 (25.62%)
	10 – 14	69 (17.16%)
	15 & above	42 (10.45%)
<b>Academic Qualification</b>	Qualification	
	B.A	46 (11.44%)
	M.A	341 (84.83%)
	M.Phil	12 (02.99%)
	Ph.D	03 (00.75%)
<b>Professional Qualification</b>	Qualification	
	Bachelor of Education	221 (54.98%)
	Master of Education	168 (41.79%)
	M.Phil (Education)	11 (02.74%)
	Ph.D (Education)	02 (00.50%)
<b>Locality</b>	Urban	90 (22.39%)
	Rural	312 (77.61%)

## **Inferential Statistics/Hypotheses Testing**

**Hypothesis 1:** *There is no significant correlation between occupational stress and job satisfaction among secondary-school-heads.*

**Table 5. Pearson's Product-Moment Correlation (r) Between the Occupational Stress and Job Satisfaction**

<b>Variables</b>	<b>OS</b>	<b>JS</b>
OS	1.00	-.766**
JS	-.766**	1.00

\*\* Correlation is significant at the 0.01 level (2-tailed).  
Key: OS= Occupational Stress; JS= Job Satisfaction

A Pearson's correlation was employed to find out a relationship between occupational stress and job satisfaction among secondary school heads. The value of  $r$  was measured to be  $-0.766^*$  which explicitly indicates a substantial ( $p=.000 < 0.01$ ) strong negative relationship between occupational stress and job satisfaction. It shows that lower the job satisfaction of secondary school heads then greater will be their occupational stress and so on. Thus, the hypothesis was rejected.

**Hypothesis 2:** *There is no significant correlation between the sub-scales of occupational stress and overall job satisfaction of overall secondary-school-heads.*

**Table 6. Pearson’s Product-Moment Correlation (r) Between the Sub-Scales of Occupational Stress and Overall Job Satisfaction among Secondary-School-Heads**

Variables	ROL	RA	RC	UGPP	RP	UP	P	PGR	II	LS	SWC	U	JS
ROL	1.00												
RA	.195**	1.00											
RC	.482**	.325**	1.00										
UGPP	.543**	.173**	.496**	1.00									
RP	.191**	.086	-.041	.081	1.00								
UP	.426**	.193**	.607**	.448**	.019	1.00							
P	.415**	.265**	.283**	.323**	.076	.323**	1.00						
PGR	.229**	.296**	.248**	.137**	.169**	.328**	.319**	1.00					
II	.169**	.261**	.196**	.085	.117*	.288**	.239**	.842**	1.00				
LS	.432**	.290**	.299**	.337**	.079	.345**	.946**	.330**	.259**	1.00			
SWC	.515**	.258**	.588**	.510**	.095	.491**	.270**	.186**	.144**	.292**	1.00		
U	.471**	.144**	.425**	.465**	.091	.296**	.236**	.125*	.107*	.241**	.420**	1.00	
JS	-.518**	-.372**	-.545**	-.500**	-.203**	-.561**	-.440**	-.446**	-.389**	-.474**	-.529**	-.475**	1.00

\*\* Correlation is significant at the 0.01 level (2-tailed); \* Correlation is significant at the 0.05 level (2-tailed).

Correlation Strength:  $r \geq 0.70$  = Strong;  $0.30 \leq r \leq 0.69$  = Moderate;  $0.01 \leq r \leq 0.29$  = Weak

Key: ROL=Role Overload; RA= Role Ambiguity; RC=Role Conflict; UGPP=Unreasonable Group & Political Pressure; RP=Responsibility for Persons; UP=Under Participation; P=Powerlessness; PGR=Peer Group Relations; II=Intrinsic Improvishment; LS=Low Status; SWC=Strenuous Working Conditions; U=Unprofitability; JS=Job Satisfaction

Table 6 portrays the correlation between the subscales of occupational stress and job satisfaction among secondary school heads. Pearson's product moment correlation analysis showed that there is significant moderate negative correlation between eleven subscales of occupational stress and job satisfaction except responsibility for person i.e., role overload ( $r = -0.518, p < 0.01$ ), role ambiguity ( $r = -0.372, p < 0.01$ ), role conflict ( $r = -0.545, p < 0.01$ ), unreasonable group & political pressure ( $r = -0.500, p < 0.01$ ), under participation ( $r = -0.561, p < 0.01$ ), powerlessness ( $r = -0.440, p < 0.01$ ), peer group relation ( $r = -0.446, p < 0.01$ ), intrinsic improvishment ( $r = -0.389, p < 0.01$ ), low status ( $r = -0.474, p < 0.01$ ), strenuous working conditions ( $r = -0.529, p < 0.01$ ), and unprofitability ( $r = -0.475, p < 0.01$ ). Conversely, weak correlation was found between responsibility for persons ( $r = -0.203, p < 0.01$ ) and job satisfaction. Hence, the null hypothesis "there might be no significant correlation between the sub-scales of occupational stress and job satisfaction among secondary-school-heads." was rejected. It clearly indicates that higher the level of occupational stress lower will be the job satisfaction.

**Hypothesis 3:** *There is no significant effect of each subscale of occupational stress on job satisfaction among secondary school Heads*

**Table 7. Multiple Linear Regression to Analyse the Contribution of each Independent Variable (Dimensions of Occupational Stress) in Predicting the Dependent Variable (Job Satisfaction) among Secondary School Heads (n=402)**

Job Satisfaction (Dependent Variable)									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square	F	Sig.	
	B	Std. Error	$\beta$						
Independent Variables	(Constant)	4.796	.079		61.069	.000	0.598	48.266	0.000*
	ROL	-.024	.022	-.048	-1.087	.278			
	RA	-.052	.016	-.114*	-3.175	.002			
	RC	-.035	.019	-.088	-1.823	.069			
	UGPP	-.045	.019	-.102*	-2.378	.018			
	RP	-.034	.011	-.106*	-3.141	.002			
	UP	-.075	.017	-.195*	-4.466	.000			
	P	.041	.049	.084	0.842	.400			
	PGR	-.062	.029	-.134*	-2.142	.033			
	II	-.035	.030	-.070	-1.172	.242			
	LS	-.103	.047	-.226*	-2.217	.027			
	SWC	-.048	.019	-.112*	-2.559	.011			
	U	-.064	.014	-.178*	-4.567	.000			

Dependent Variable: Job Satisfaction  
 Independent Variables: ROL=Role Overload; RA= Role Ambiguity; RC=Role Conflict; UGPP=Unreasonable Group & Political Pressure; RP=Responsibility for Persons; UP=Under Participation; P=Powerlessness; PGR=Peer Group Relations; II=Intrinsic Improvishment; LS=Low Status; SWC=Strenuous Working Conditions; U=Unprofitability



As presented in table 7, a multiple regression analysis was performed to determine the contribution of each independent variable in predicting the dependent variable. The model is statistically significant as the value of ANOVA was found to be 48.266 which is statistically significant ( $p=0.000$ ). Furthermore, the table indicates that the value of R square is 0.598 which shows that 60% of the variance in job satisfaction is significantly represented by the independent variables in the model. The results of regression analysis revealed that among the subscales of occupational stress, eight subscales were found substantial predictors and have significant negative effect on job satisfaction. Among these predictors, low status ( $\beta=-0.226$ ,  $p=.027 <0.05$ ) was found the strongest contributor followed by under participation ( $\beta=-0.195$ ,  $p=.000 <0.05$ ), unprofitability ( $\beta=-0.178$ ,  $p=.000 <0.05$ ), peer group relations ( $\beta=-0.134$ ,  $p=0.033 <0.05$ ), role ambiguity ( $\beta=-0.114$ ,  $p=.002 <0.05$ ), strenuous working conditions ( $\beta=-0.112$ ,  $p=.011 <0.05$ ), responsibility for persons ( $\beta=-0.106$ ,  $p=.002 <0.05$ ), and unreasonable group & political pressure ( $\beta=-0.102$ ,  $p=.018 <0.05$ ) in defining job satisfaction negatively. On the other hand, role overload, role conflict, powerlessness and intrinsic impoverishment have no significant effect on job satisfaction. It plainly reveals that low status, under participation, unprofitability, peer group relations, role ambiguity, strenuous working conditions, responsibility for persons, and unreasonable group & political pressure predict job satisfaction negatively among secondary-school-heads. With the increasing level of these dimensions, job satisfaction will be negatively affected

## **Discussion**

In the current study, descriptive, quantitative and correlative research design was employed to achieve the research objectives. Two standardized questionnaires were used for gathering information from the participants. Research hypotheses were tested through Pearson's product-moment correlation. After going through literature review, it was found that massive number of investigations have been done by different scholars all over the world in different context to examine the association between occupational stress and job satisfaction (Kayastha & Kayastha, 2012; Hans, Mubeen, Khan, & Al-Saadi, 2014; Anamika, 2016; Belapurkar & Jain, 2012; Bemana, Moradi, Ghasemi, Taghari, & Ghayoor, 2013; Parsa, Alizadeh, & Kasraie, 2013; Singh & Kumar, 2012; Wang, 2012; Bindu, 2007). Similarly, the study in hand was to carry out to establish the relationship between these two variables i.e., job satisfaction and occupational among secondary-school-heads in the province of Khyber Pakhtunkhwa.

The findings revealed that there is strong inverse relationship between occupational stress and job satisfaction. Furthermore, it was also found that there is significant negative correlation between all the subscales of occupational stress

and job satisfaction i.e., role ambiguity, role overload, unreasonable group & political pressure, role conflict, responsibility for persons, powerlessness, under participation, peer group relation, strenuous working conditions, low status, intrinsic impoverishment, and unprofitability. It clearly indicates that higher the level of occupational stress lower will be the job satisfaction. The results of multiple linear regression revealed that among the subscales of occupational stress, eight subscales were found significant predictors and have substantial negative effect on job satisfaction i.e., role ambiguity, unreasonable group & political pressure, low status, responsibility for persons, under participation, strenuous working conditions, peer group relations, and unprofitability. It plainly reveals that these dimensions of occupational stress predict job satisfaction among secondary school heads. With the increasing level of these dimensions, job satisfaction will be negatively affected. These outcomes are in line with past studies which reported similarly an inverse relationship between perceived occupational stress and job satisfaction (Bindu, 2007; Haberman, 2005; Iqbal & Waseem, 2012; Manzoor, Waters, & McNulty, 2011; Maxwell, 2012; Nabirye, 2010; Zangaro & Soeken, 2007). It clearly indicates that occupational stress is inversely related to job satisfaction which means that job satisfaction decreases when stress increases. Conversely, the study results are inconsistent with the outcomes of some research studies (Siddique & Farooqi, 2014; Raza, 2012; Chaudhry, 2012) in which it was found that there is no significant relationship between occupational stress and job satisfaction. Interestingly, Chandraiah, Agrawal, Marimuthu, & Manoharan (2003) and Riaz et al. (2016) found a positive relationship between stress and job satisfaction among the respondents.

## **Conclusion**

Conclusively, occupational stress and job satisfaction were found the most important variables in the employment of secondary school heads to be considered. It was found that there was a strong negative correlation between occupational stress and job satisfaction among secondary-school-heads. In addition, substantial negative correlation was found between all the sub-scales of occupational stress and overall job satisfaction. Among the subscales of occupational stress, eight subscales were found significant predictors and have significant negative effect on job satisfaction i.e., role ambiguity, responsibility for persons, unreasonable group & political pressure, under participation, low status, strenuous working conditions, peer group relations, and unprofitability. It plainly indicates that level of job satisfaction is inversely proportional to occupational stress which means that job satisfaction decreases when occupational stress increases.

## **Limitations of the Study**

Every research study has certain shortcomings, limitations, or drawbacks which may affect the outcomes of the research study. This study has a few shortcomings and limitations. The first limitation of the study is that it has been conducted in only 10 out of 25 districts of Khyber Pakhtunkhwa. There is possibility that the results may differ to some extent if the same study may be conducted in all district of Khyber Pakhtunkhwa. Therefore, gathering of information from all the district of Khyber Pakhtunkhwa with bigger sample size overcame this limitation. In this way, it will be provided a broad, comprehensive and ample representation of actual scenario. Second limitation of the study is that the problem has been investigated through only quantitative research methodology and therefore, the same problem may be investigated by applying a mix-method research methodology. In addition, the data was collected through standardized tools and there is possibility of slight difference in the findings if the data may be collected through self-developed measuring instruments. Third limitation of the study is that various demographic variables such as age, job experience, locality, academic as well as professional qualification, nature of job etc. are the important variables which may affect the outcomes of the study, but these variables were not considered in this study. Thus, if a researcher desires to conduct the same study with regard to these demographic variables, then it is probable that the results may somewhat be differed from the results of current study. So, this shortcoming may be overcome through future research study with these demographic variables.

## **Recommendations**

1. Elementary and Secondary Education Department should have collaboration with policy makers to formulate rewarding, effective and comprehensive strategies for stress reduction management of secondary-school-heads to stimulate their morale for yielding fruitful and productive outcomes. Furthermore, trainings, seminars and workshops on stress reduction management should be arranged for secondary-school-heads which can eventually lead to an improved level of job satisfaction.
2. Secondary-school-heads may be made empowered in utilizing their powers for achieving organizational goals effectively.
3. Political interference should be discouraged to reduce their occupational stress and enhance their level of job satisfaction.
4. Ministry of Education should formulate effective education policies that promote organizational productivity and employees' prosperity. Secondary-school-heads should be involved in the process of policy formulation to render promising suggestions about school overall success.

5. Effective and constructive steps may be taken by Ministry of Education for encouraging and thought-provoking working environment. Also, special financial budget may be reserved for each school so that working conditions may be improved in order to yield fruitful organizational outcomes. In addition, special handsome salaries packages should be introduced for secondary school heads to increase their level of job satisfaction.

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