ORIGINAL CONTRIBUTION

# Impact of Work Stress on Surgeons Job Satisfaction with the Moderating Effect of Social Support: An Empirical Study from the Surgeons of Private Hospitals

Dr. Jehanzaib Khan [1], Dr. Imran Manzoor [2], Dr. Rizwan Khan Lodhi [3], Ayesha Manzoor [4*]

[1] Senior Registrar, Jinnah Hospital, Lahore, Pakistan

[2] Associate Professor, Continental Medical College, Lahore, Pakistan

[3] Continental Medical College, Lahore, Pakistan

[4] Assistant Professor, Department of Psychology, University of Central Punjab, Lahore, Pakistan

**Abstract**— The purpose of this research is to investigate the relationship between work-life balance and workplace anxiety on job satisfaction experienced by surgeons. Further, the objective of this study is to investigate the moderating role of social capital among the observed variables. The researchers used quantitative methodology to conduct this research. The population of this research consists of surgeons working in private hospitals in Lahore. The researchers collected data from 495 respondents through an adopted structured questionnaire. The researchers used a simple random method to select the respondents. The findings of current research indicated that both dimensions of work stress, i.e., work-life balance and workplace anxiety, on job satisfaction. Further, the findings indicated that social capital has a moderating effect on work-life balance and job satisfaction. Lastly, the outcomes revealed that social capital has a moderating effect on workplace anxiety and job satisfaction. The study findings recommended that top-level managers have the potential to boost surgeons' satisfaction by implementing stress management practices in the workplace and offering social support. It is possible that in the future, research will support organizational citizenship behavior as a mediator between the stress of work and the level of job satisfaction experienced by surgeons.

**Index Terms**— Job satisfaction of surgeons, Work anxiety, Work life balance, Social support, Private hospitals
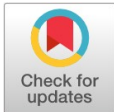
## Introduction

The concept of human stress pertains to the physiological and psychological responses of the body to external pressures, irrespective of their valence. Occupational stress poses a significant threat to the health of surgeons in both developed and developing nations (Zheng et al., 2022). There are various aspects in the workplace that are referred to as job stressors that make occupations stress in the medical field. Additional sources of stress at work include problems with the acts of a supervisor, arguments with colleagues and junior workers, disagreements with management standards, and disagreements with junior surgeons. Disagreements in these areas may also lead to stress. The level of satisfaction that surgeons derives from their work has been the subject of more research than any other aspect of organizational behaviour (X. Li et al., 2022).

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*Email: ayeshakasif1@gmail.com

Most people find purpose and fulfilment in their occupation, which plays a significant role in their lives. The workplace and working life in general offer opportunities to apply organisational psychology to address a variety of challenges. Workplace wellbeing encompasses a wide range of factors that contribute to the mental and physical health of surgeons. These include engagement, job satisfaction, quality of life, human factors, the physical workplace, performance assessment, motivation, and leadership (Charoensukmongkol & Phungsoon-thorn, 2022). On the other hand, job satisfaction serves as an achievement indicator within the framework of actions related to career development. When a surgeon report having positive thoughts about their work and the range of tasks they are required to do, that surgeons is regarded to have a high degree of job satisfaction. It is possible that dissatisfaction with one's employment is the key factor that predicts a decline in surgeons' performance. This dissatisfaction may lead to actions such as absenteeism and the formation of plans to quit one's present employer (Anwar, Burfat, & Abro,2021; Sigursteinsdottir & Karlsdottir, 2022).

According to research conducted in the medical field, stress is not only bad for one's stomach but also lowers one's general effectiveness. The inability to meet basic demands may lead to job-related stress; prolonged stress can develop to worry, which in turn can lead to tension. The residual impact of stress is something that can be felt, observed, and assessed on both a physiological and psychological level, and it is eventually related with psychosomatic diseases (C. Li et al., 2022).

Previous studies have looked at the correlation between workplace stress and satisfaction on the job, but the current study took a fresh perspective by analysing the issue in a novel setting. In a broad sense, stress and anxiety are nothing more than simple hormonal and physiological responses to what is believed to be a threat to one's safety or an external risk. These emotions should begin to dissipate when the stressful event in question has concluded or after the "stressor" in question has been eliminated (Huang et al., 2022). In today's environment, anxiety is a problem that affects a significant number of people. Although while worry and stress are normal and unavoidable aspects of life, there are occasions when they may have a significant negative impact on a person's mental health, quality of life, and the level of work satisfaction they feel in their employment. Anxiety in the workplace is a learned reaction to stress and may be induced by a wide variety of reasons; nevertheless, some instances of workplace anxiety are more severe and debilitating than others (Dodanwala et al., 2022).

Anxiety in the workplace is distinct from stress in the workplace because it goes beyond the body's normal reaction to stress. Although the majority of individuals feel some amount of stress in their jobs, workplace anxiety goes beyond even that. There are a variety of potential causes for anxiety. However, in our research, researchers analyze the level of stress and work life balance effect on satisfaction of surgeons with the moderating role of social support which was not discussed before. Research on job satisfaction and stress management can help surgeons to understand the factors that motivate them to perform well in their jobs. When surgeons are satisfied with their jobs, they are more likely to be motivated to work hard and perform well. Additionally, effective stress management strategies can help reduce the negative impact of stress on motivation and job performance.

**Objectives of the study**

- To examine the effect of work life stress on surgeon's job Satisfaction
- To examine the effect of workplace stress on surgeon's job Satisfaction
- To evaluate the moderating effect of social support between work life stress and surgeon's job Satisfaction
- To evaluate the moderating effect of social support between workplace stress and surgeon's job Satisfaction

**Literature Review**

**Job satisfaction and work life stress**

The results of the vast majority of research that has been carried out in recent times to study the connection between work satisfaction and levels of job stress have shown that higher levels of job stress are connected with lower levels of job satisfaction. In research that was carried out by Niebuhr et al. (2022), the author looked at the relationship between social integration (also known as social support from coworkers) and job satisfaction as well as loyalty to the business. One hundred eighty-nine doctors responded to the surveys after they had been employed for six months and again after they had been employed for a year. According to the findings, surgeons who felt as if they had a greater degree of social integration reported better levels of work satisfaction as well as loyalty to the organization.

Further, Pancer et al. (2000) conducted a survey using a cross-sectional methodology in order to investigate the link between work stress and job satisfaction. They came to the conclusion that a decrease in work satisfaction was linked to an increase in occupational stress. Leveck and Jones (1996) conducted study in the early 1990s to determine how work stress and job satisfaction influenced the length of time staff surgeons remained on the job, hence impacting the quality of treatment. Three hundred fifty-eight registered surgeons from different acute care hospitals took part in the study. One of their results showed that people who said they felt a lot of stress at work also said they were less happy with their jobs overall. In a similar vein, AbuAlRub (2004) found support for comparable findings when they

investigated a model of work satisfaction. The sample included a total of 308 Taiwanese doctors who worked at a single hospital. The findings demonstrated that (1) a drop in job satisfaction occurred simultaneously with an increase in respondents' levels of stress and (2) a rise in job satisfaction occurred concurrently with an increase in respondents' levels of social support from supervisors and co-workers. Thus, based on above discussion it is hypothesized that:

**H1:** There is a significant effect of work-life stress on Job Satisfaction.

**H2:** There is a significant effect of workplace Stress on Job Satisfaction.

### Social support and job satisfaction

According to the research, social integration (in the form of social support from coworkers) is linked with satisfaction on the. Among 157 registered doctors working in a private hospital in Australia, Bartram et al. (2004) performed research to examine the impact of social support on job satisfaction and workplace stress. Respondents' workplace stress was reduced, and their job satisfaction was raised when they got social support from their superiors and coworkers. Mrayyan (2005) looked at what causes nurse dissatisfaction in Jordan. One of the causes of nurse burnout in Jordan was identified as a lack of support from nursing management and hospital managers. Further researchers analyzed the satisfaction and retention rates of doctors in Jordan, both in public and private hospitals, and found no significant difference between the two. She found that compared to doctors working in private hospitals, those at public hospitals were less satisfied with their professions and more likely to declare a desire to quit the profession. In addition, a sample of 464 Jordanian hospital doctors was surveyed by Hamaideh (2011) to characterize their social support. In order to get an accurate reading on the level of social support, an assessment of socially helpful behaviours was used. They observed that doctors appreciated assistance as a form of social support the highest, followed by emotional support as the next most valued form.

### Moderating role of social support

Several studies have examined how social support influences the correlation between doctor's stress and job satisfaction (Chen et al., 2022; Saher, Masih, & Raju, 2021). Hendrix et al. (1988) evaluated the impact of social support on stress, strain, and health among a sample of 2010 people from 23 different professions. Stress at work was characterized as being unsatisfied with one's job or task or being bored while at work. Overall mental health was less affected by occupational stress and pressure when they had social support. That is, when stress and work pressure grew, the mental health of the patients who reported high levels of social support did not worsen. Eighty university clerical workers were surveyed by Sargent and Terry (2000) to see whether social support was a factor in how stressed out they were by their jobs. Four key findings emerged: (1) support had a positive effect on job satisfaction and performance; (2) supervisor support mitigated the negative effects of job strain on job satisfaction and depersonalization; (3) support from coworkers and nonwork sources mitigated the impact of high strain on job performance; and (4) individuals who reported high levels of dissociation also reported higher levels of job stress. Moreover, contradictory results have been recorded. A survey of 602 doctors was undertaken by Ko and Yom (2003) to examine the role social support plays in the stress-satisfaction connection at work. According to the findings, social support had no role in mitigating the harmful impact of work stress on job satisfaction. Due to the significance and relevance of the subject, there is a need for more study on the moderating effects of social support on the stress–satisfaction connection. The following hypotheses were examined in this study: Doctors who report high levels of social support from their superiors are more likely to report high levels of job satisfaction despite increases in stress on the job, and doctors who report high levels of social support from their peers are more likely to report high levels of job satisfaction despite increases in stress on the job.

**H3:** There is a significant moderating effect of social support between work life stress and surgeon's job Satisfaction.

**H4:** there is a significant moderating effect of social support between workplace stress and surgeon's job Satisfaction.
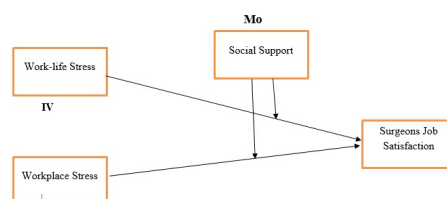
### Research model



Fig. 1. Research model

**Research methodology**

This study was conducted through a cross-sectional survey using quantitative research design. The researchers used positivism philosophy to conduct this research. The unit of analysis of this study was surgeons of private hospitals. The population of this research consisted of all of Pakistan's private sector hospitals' physicians and surgeons. The researchers selected private hospital surgeons due to the easy accessibility of the data. The sample of the study consisted of 440 surgeons' which was derived through item to rate theory. The researchers used probability sampling techniques to collect the data from respondents. More specifically, the researchers used simple random sampling to target the respondents. The researchers selected Lahore (Pakistan) region to select the respondents as most of the hospitals are operating in Lahore region. The questionnaire was divided into three sections: the first section provided background information on the study and reassured respondents that their responses would be kept private; the second section included measurement tools for the variables of the study; and the third section included inquiries about the respondents' general backgrounds. The second component consisted of 44 questions in the form of a Likert scale ranging from 1 to 5 (where 1=Strongly Disagree, and 5=Strongly Agree) that were used to gather data from the target respondents. The authors conducted personal visits to a total of 500 respondents. Most of the respondents was surgeons of private medical hospitals. Researchers used structural equational modeling for test of hypothesis. The researchers used SPSS and PLS-SEM for data analysis. The researchers used adopted scales of all observed variables and these scales are suggested by researchers.

**Results and Analysis**

According to the findings of current results, the construct reliability of all the items of variables is more than 0.70. The values of (Rho A) and C-a in table 1 are also higher than the 0.70 limit. All of the AVEs were between 0.52 and 0.71, which shows that the constructs are reliable and that the measurement models are converging. The discriminant validity of the measurement model was then calculated, as shown in Table 2.

Table I
Cronbach's alpha, composite reliability and Average Variance Extracted (AVE)

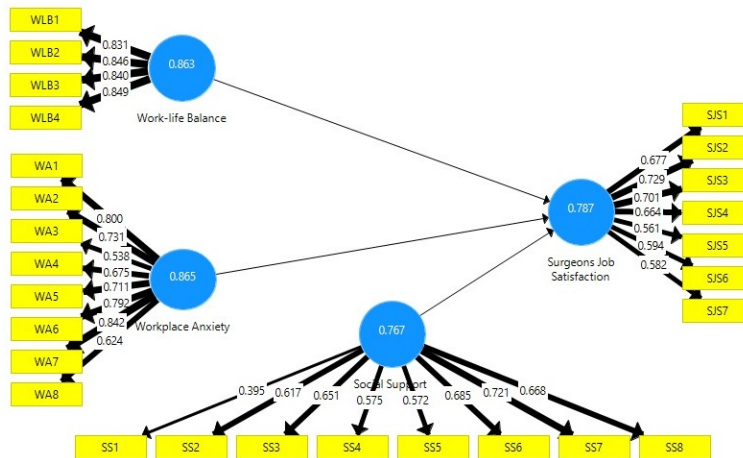|  | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| Surgeons Job Satisfaction | 0.79 | 0.81 | 0.83 | 0.62 |
| Social Support | 0.77 | 0.79 | 0.83 | 0.58 |
| Work-life Balance | 0.86 | 0.87 | 0.91 | 0.71 |
| Workplace Anxiety | 0.86 | 0.88 | 0.89 | 0.52 |



Fig. 2. Reliability analysis

The results of the HTMT, which serve as a measurement of discriminant validity, are shown in Table 2. According to the data, the values are in a range from 0.32 to 0.66, which suggests that the discriminant validity is present (Farooq et al., 2018).

Table II
Discriminant Validity_HTMT

|  | Surgeons Job Satisfaction | Social Support | Work-life Balance | Workplace Anxiety |
|---|---|---|---|---|
| Surgeons Job Satisfaction |  |  |  |  |
| Social Support | 0.43 |  |  |  |
| Work-life Balance | 0.66 | 0.36 |  |  |
| Workplace Anxiety | 0.44 | 0.62 | 0.32 |  |

## Structural model

The predicted structural relationships between variables were tested by the researchers through structural equational modeling. The results of our study indicate that work-life Balance has significant and positive effect on surgeon's job satisfaction ($\beta$= 0.52, $t$= 23.53, and $p$=.000), which provides evidence in favour of the first hypothesis (H1). Our research demonstrates that there is a negative relationship between high levels of workplace anxiety and surgeons Job Satisfaction ($\beta$ = -0.09, $t$ = 2.80, and $p$ =.020). The results of our study indicate that social support has direct effect on surgeons Job Satisfaction ($\beta$= 0.45 $t$= 2.42, and $p$=.040). So H3 is supported.

Furthermore, the findings support the fourth hypothesis, which claimed that social support had a significant and positive moderating effect between work life balance and job satisfaction. Further, the findings support the fifth hypothesis, which claimed that social support had a significant and positive moderating effect between workplace anxiety and job satisfaction. Table 3 and Figure 1 exhibit the structural mediating models' conclusions. Lastly, the results indicated that social support has moderating effect between all observed variables.

Table III
Structural equation model

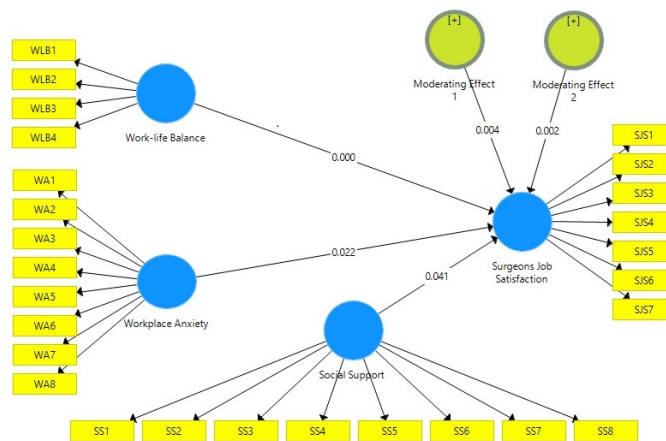|  | Original Sample (O) | t-Statistics (\|O/STDEV\|) | p-Values |
|---|---|---|---|
| Work-life Balance → Surgeons Job Satisfaction | 0.518 | 11.74 | 0.000 |
| Workplace Anxiety → Surgeons Job Satisfaction | -0.095 | 5.645 | 0.022 |
| Social Support → Surgeons Job Satisfaction | 0.053 | 2.86 | 0.041 |
| Moderating Effect 1 → Surgeons Job Satisfaction | 0.051 | 2.617 | 0.004 |
| Moderating Effect 2 → Surgeons Job Satisfaction | 0.079 | 2.623 | 0.002 |



Fig. 3. Structural equational model results

## Discussion

The literature supports the study's results about the negative correlation between work-related stress and job satisfaction. This finding is comparable to those of (Rostami et al., 2022; Zanabazar et al., 2022). The results highlight the need for more study into stress management programmes and workplace support systems in order to increase surgeons' satisfaction. Significant favourable connections between social support and work satisfaction were found, according to the findings. In other words, physicians who experienced more social support from coworkers and bosses reported greater job satisfaction. These results are consistent with those of previous studies (Dodanwala et al., 2022).

The findings of this study highlight the importance of medical administrators paying attention to the bonds they have with their staff and contemplating ways to inspire doctors to develop relationships with one another. Historical data shows that physicians who make an effort to develop strong relationships with their colleagues are happier and more committed to their jobs (Martin et al., 2022; Ziauddin, 2010). The findings indicated that the connection between work-life balance and job anxiety was moderated by social support. This suggests that when doctors started reporting higher levels of job stress, those who had more social support from their colleagues and superiors were happier with their jobs than those who had less social support. There is a link between job strain (poor task control and excessive workload) and dissatisfaction, however Sargent and Terry (2000) argue that social support from supervisors may mitigate this effect.

**Practical and theoretical Contribution**

The study of job satisfaction and stress management among surgeons has both practical and theoretical contributions. Here are some ways in which this study can be practically and theoretically significant:

**Practical contributions**

- Improved Patient Outcomes: Surgeons who are satisfied with their jobs and have effective stress management strategies in place are likely to perform better and provide higher quality care to their patients. This can result in improved patient outcomes, including lower complication rates, faster recovery times, and increased patient satisfaction.
- Reduced Medical Errors: High levels of stress and job dissatisfaction can contribute to medical errors, which can have serious consequences for patients. By identifying effective stress management strategies and promoting job satisfaction, organizations can help reduce the likelihood of medical errors and improve patient safety.
- Improved Retention and Recruitment: Job satisfaction and stress management are important factors in retaining and attracting talented surgeons. By creating a positive work environment and promoting effective stress management strategies, organizations can improve surgeon retention and recruitment, which can help to ensure a stable and skilled workforce.

**Theoretical contributions**

- Role of Personality and Work Environment: The study of job satisfaction and stress management among surgeons can help to identify the role of personality and work environment in shaping job satisfaction and stress levels. This can provide insights into how to create a work environment that promotes job satisfaction and effective stress management.
- Effects on Professional Identity: Surgeons' professional identity can be affected by job satisfaction and stress levels. This study can provide insights into how job satisfaction and stress management strategies can be used to maintain and promote a positive professional identity.
- Stress Management Strategies: The study of stress management strategies among surgeons can provide insights into the effectiveness of various strategies, such as mindfulness and meditation, for reducing stress in high-pressure work environments. This can inform the development of training programs and interventions to promote effective stress management among surgeons.

Overall, the study of job satisfaction and stress management among surgeons has both practical and theoretical contributions. It can inform interventions and strategies to improve patient outcomes, retention, and recruitment of surgeons, as well as provide insights into the role of personality and work environment in shaping job satisfaction and stress levels.

**Conclusion**

This research aims to learn how a good work-life balance impacts surgeons' satisfaction on the workplace. The impact of social support as a moderator between work-life balance, stress at work, and job satisfaction is also examined. The results of this research reveal that when individuals have an excellent work-life balance, they are satisfied with their employment. Furthermore, the results show that surgeons' job satisfaction is inversely proportional to their levels of stress at work. Work-life balance is associated with higher rates of anxiety in the workplace and worse rates of job satisfaction among workers, although they may be somewhat mitigated by the positive benefits of social support. As a limitation, this research only gathers data from Pakistani surgeons once, and therefore cannot be used to draw any conclusions about the stress levels or the impact of social support on surgeons in Pakistan or elsewhere. Other sources of stress in the job, such as the environment and the quality of management, are also suggested. It is possible that in the future, research will support organizational citizenship behavior as a mediator between the stress of work and the level of job satisfaction experienced by surgeons.

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