

Organizational stress and job performance: Coping strategies as a mediator

Fawad Riaz Jahangiri¹, Senior Managing Consultant, Abacus Consulting Technology, Islamabad.
email. fawad_j@hotmail.com

Dr. Roomana Zeb² roomazeb@uop.edu.pk, University of Peshawar, Peshawar.

Dr. Saima Arzeen³ saimaarzeenmehar@uop.edu.pk University of Peshawar, Peshawar.

Correspondence concerning this article should be addressed to Dr. Roomana Zeb,
roomazeb@uop.edu.pk

Received: March, 12, 2022

Accepted: April, 08, 2022

Published: April, 29, 2022

Abstract: The literature suggests that managers and team members often experience job-related stress during software implementation projects. The purpose of this research was to investigate how coping strategies mediate the relationship between organizational stress and job performance. The study utilized a random sampling technique to gather data from various industries in Pakistan. Participants who had worked on SAP software implementation projects were invited to complete a web-based online questionnaire. The sample consisted of 120 individuals, including 40 project managers and 80 team members from different sectors within the IT field. The age of the participants ranged from 22 to 45 years, and their educational backgrounds varied from graduate to postgraduate levels, with some having professional certifications such as Chartered Accountancy and SAP Certification. The online survey included three scales: the Job Stress scale (Maslach & Jackson, 1981), the Brief COPE scale (Carter et al., 1989), and the Job Performance scale (Goodman & Syvanteck, 1999). These scales have been validated and deemed suitable for the target population. The findings of the study revealed a negative correlation between job stress and job performance. Additionally, coping strategies were found to mediate the relationship between job stress and job performance, displaying two negative but curvilinear associations.

Keywords: Organizational stress, coping strategies, Job performance, Software implementation projects

Introduction

With the increasing demands of job requirements, organizational stress has become a prevalent issue in workplaces. Research suggests that excessive job stress negatively impacts the physical and emotional well-being of employees, leading to decreased productivity and job satisfaction (Rao & Chandraiah, 2012). Kapoor and Khanka (2013) state that stress responses are triggered by unfamiliar or threatening factors at work, often stemming from a fear of failure. Considering the diverse work environments across organizations, stress is almost inevitable in various projects (Dar, Akmal, Naseem, & Khan, 2011).

Kamau and Nzuve (2015), state that stress occurs due to a perceived threat, not necessarily linked to actual circumstances. Since different individuals find certain situations more stressful than others (Ratnawat&Jha, 2014), reactions to stressful situations are always personalized and can lead to varied emotional, perceptual, and behavioral changes among employees within the same organization. Same is the case with IT projects that are implemented to enhance business functions and improve decision-making processes within organizations. One such problem is faced in *Enterprise Resource Planning (ERP) Systems in organizations*. ERP systems are comprehensive packaged information systems that are designed to integrate business processes and functions across an entire enterprise in real-time. The implementation of an ERP system is typically carried out as a project divided into various phases (Haddara, 2014). Bingi, Sharma, and Godla (1999) state that the successful implementation of an ERP solution, such as SAP, require the commitment of top management, the re-engineering of existing business processes, and the integration of the ERP solution with other information systems, which makes it very demanding.

IT project managers often face significant stress levels when dealing with challenging deadlines, budgetary constraints, and high expectations from business users. This situation creates immense pressure on both the employees and the management. A few studies have specifically focused on work-related stress experienced by project managers (Gällstedt, 2003; Haynes & Love, 2004), which arises from conflicting demands such as completing projects within designated timeframes and budgets, while ensuring quality and meeting stakeholder expectations (Richmond & Skitmore, 2006). Gällstedt (2003) investigated work-related stress among IT project managers and team members. The study revealed that both project managers and team members initially have high aspirations for project implementation. However, adverse situations such as project closure, changing priorities, and insufficient resources lead to stress among employees, consequently reducing their productivity.

Work-related stress poses a significant challenge for organizations as it diminishes productivity, increases absenteeism, and contributes to various employee issues such as alcoholism, drug abuse, high blood pressure, and heart diseases (Meneze, 2005). Seibt et al. (2008) suggest that although stress is prevalent among employees, it can be reduced by improving the work environment and enhancing compensation and rewards within companies. *Transactional model of job stress* explains (Ganster & Rosen, 2013) that stress arises from the interaction between the individual and the environment, rather than solely from the individual or the environment. According to this transactional model, individuals assess potential stressors and evaluate their ability to cope with them. The model proposes that when faced with a challenging situation, individuals engage in a cognitive process to assess the level of threat and evaluate the coping resources available to them. Moreover, the theory suggests that people typically employ various strategies when confronted with stressful situations (Aitken & Crawford, 2007). This theory has been widely utilized as a foundation for research in specific areas related to coping and stress.

Coping mechanisms utilized by the employees can counteract the effect of stress. For instance, Mikkelsen, Øgaard, Lindøe, and Olsen (2002) considers coping as a positive response which decrease the intensity of stress. They identified three levels of interventions that individuals can employ to cope with stress: stress reduction (primary), stress management (secondary), and interventions at the organizational level (tertiary). Additionally, they distinguished between two types of coping strategies: adaptive and maladaptive. Meyer (2001) asserts that adaptive coping strategies contribute to a positive mindset and yield better outcomes, while maladaptive coping strategies can lead to flawed decision-making (Smith, Passos, & Isaacs, 2010, May 20-22).

As the literature supports that job stress affects job performance, job performance can be defined as utilization of available resources within given constraints to accomplish assigned tasks (Jamal, 2016). Kazmi, Amjad, and Khan (2008) believe that job performance is primarily influenced by skills, effort,

and working conditions. Ratnawat and Jha (2014) have identified various factors that can be influenced by stress, such as productivity, job satisfaction/morale, absenteeism, decision-making abilities, accuracy, creativity, attention to personal appearance, organizational skills, courtesy, cooperation, initiative, reliability, alertness, perseverance, and tardiness. Considering these variables, it is essential to understand how to manage and control them in order to maintain a calm and focused state and perform to the best of one's ability. Further, researchers have proposed four types of relationships between job stress and job performance; 1) a negative linear relationship, 2) a positive linear relationship, 3) a curvilinear or U-shaped relationship, and 4) a zero relationship. In case of a curvilinear relationship, stress positively influences job performance up to a certain tolerable level, but exceeding that limit has a negative impact on employees' performance (Manzoor, Awan, & Mariam, 2012).

To summarize, most of the research on job stress and its impact on job performance has been conducted in Western countries (Baba, Jamal, & Tourigny, 1998; Maslach, 2003). Given the limited research on job stress and its influence on the performance of both organizations and individuals in the workplace in Pakistan was deemed necessary (Dar et al., 2011). The high failure rate of projects is a significant concern for organizations in today's world. It is crucial to understand which coping strategies IT personnel can utilize to reduce stress and ensure project success. Coping strategies have also been examined by researchers as mediators between job stress and job performance. Iqbal (2013) explored the relationship between workplace stress and organizational performance, confirming a negative relationship between these variables. The study further observed that stress coping strategies partially mediate the relationship between workplace stress and organizational performance. This understanding can assist IT personnel in managing stress effectively.

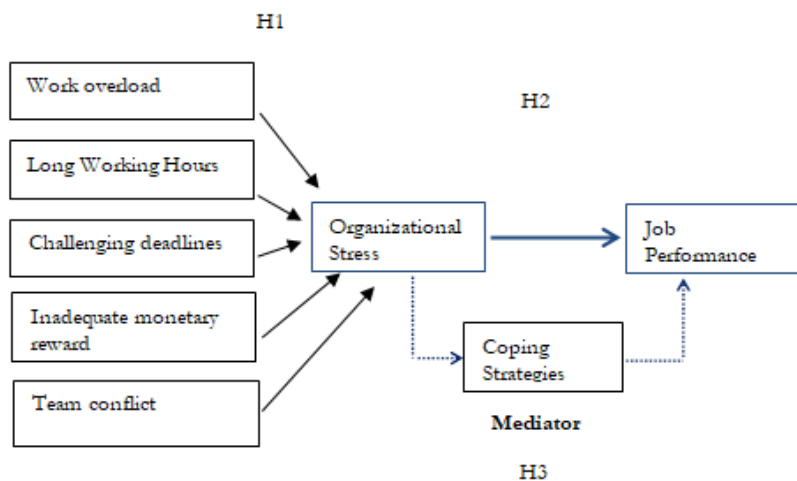
Main Objectives

The objectives of the study are given below:

1. To determine the relationship between organizational stress and job performance of IT managers and team members working on software implementation projects
2. To explore the mediating role of coping strategies between organizational stress and job performance.

Figure 1

A Modified version of Iqbal (2013) Research model. Independent variable (organizational stress); dependent variable (job performance); coping strategies acting as a mediator



Hypotheses

Based on the above model, the following hypotheses were formulated:

H1: Long working hours, work load, challenging deadlines, team conflict, and inadequate monetary rewards bear a significant correlation with job stress.

H 2: There is a significant negative correlation between organizational stress and job performance.

H 3: Coping strategies mediate between organizational stress and job performance

Method

Sample

The study targeted project managers and project team members working in organizations across the country that had implemented SAP software. The target population consisted of 350 project-based employees from 42 selected organizations involved in SAP implementations within Pakistan.

Due to the lesser number of females in these organizations, the data was solely gathered from male participants. A total of 120 participants between 22 to 45 years of age were selected for the study, including 40 project managers and 80 project-related employees from various industries in Pakistan. The participants were chosen from organizations that had implemented SAP software, representing sectors such as Oil and Gas, Food and Beverages, Chemicals, Engineering and Technology, Utilities, Textiles, Education, Pharmaceuticals, Steels, and Public sector organizations like Accountant General of Pakistan Revenue, Auditor General of Pakistan, and Higher Education Commission. The selection process involved creating a list of 85 organizations where SAP was implemented, assigning them numbers, and using a Lottery Method to randomly select 42 companies from the list. The researcher then contacted each selected company and invited Project Managers and Team members to participate in the study. Those who volunteered and were provided with a briefing about the study's objectives and procedures were included in the final sample. The sample consisted of 40 Project Managers and 80 Team members, totaling 120 participants.

Instruments

Job Stress Scale

The Job Stress Scale (Maslach & Jackson, 1981) is a 5-point scale, ranging from Strongly Disagree (rated as 1) to Strongly Agree (rated as 5). It comprises of 34 items, with 22 items derived from Maslach Burnout Inventory (MBI). 12 of the items specifically address sources of work-related stress (e.g., long working hours, work overload, challenging deadlines, team conflict, and inadequate monetary rewards). A higher score on this scale indicates a higher level of perceived stress. The Job Stress Scale demonstrated good internal consistency with a computed alpha reliability of 0.83 for the present sample. For the present study after computing item total correlation, 10 items were dropped from the scale due to lesser correlations (item no 10-17, and item 27 &28). The present research made use of 24 of the items from job stress scale.

Brief COPE

A modified version of the COPE Inventory (Carver, 1997), referred to as Brief COPE, was utilized in this study. It consists of 60 items with 13 sub-scales scales. Previous research has demonstrated the validity of Brief COPE, with consistent findings reported by various researchers (Aitken & Crawford, 2007; Fillion, Kovacs, Gagnon, & Endler, 2002). In the present study, a tailored version of Brief COPE was employed, featuring 28 questions across 14 subscales, to assess respondents' coping strategies and

their impact on job stress and job performance. The Brief COPE exhibited good internal consistency, with an estimated alpha reliability of 0.85 for the current sample.

Job Performance Scale

The third scale comprises 12 items aimed at assessing the performance of employees within an organization. It is a 5-point rating scale, where a rating of 1 corresponded to "Strongly Disagree" and a rating of 5 corresponded to "Strongly Agree." Among these items, nine were adapted from the Job Performance Scale developed by Goodman and Svyantek (1999), which originally consisted of 25 items and encompassed three dimensions of job performance: Contextual Performance, Conscientiousness, and Task Performance. To maintain brevity while ensuring relevance to the present study, items specifically measuring Task Performance were included. The reliability and validity of the Job Performance scale have been established for University Teachers by Yusoff, Ali, and Khan (2014), demonstrating its suitability for assessing job performance within Pakistani organizations. The computed alpha reliability for the Job Performance Scale in the current sample was 0.81. Additionally, three more items were incorporated into the scale based on self-evaluations regarding employees' annual assessments within an industrial setting. A higher score on this scale indicates a greater level of job performance.

Procedure

The participants were reached out to via email and social media platforms. The Questionnaire was accompanied by a cover note in the email, clearly explaining the purpose of the research study in a transparent manner. Instructions were provided for the respondents to fill out and submit the online Questionnaire. Additionally, the contact details of the researcher were shared to encourage the respondents to reach out if they had any questions, queries, or concerns. A total of 120 Questionnaires were distributed among the randomly selected employees, including project managers and employees involved in SAP implementation projects. Through two follow-ups, a total of 97 completed questionnaires (33 from project managers and 64 from team members) were received within the specified timeframe, resulting in a response rate of 81 percent.

Results

To analyze the data, bivariate analysis, curvilinear analysis, and mediation analysis were carried out. The results are presented in the following tables:

Table 1

Descriptive statistics of the scales

| Scale | No of items | Mean | SD | S | K | Coefficient alpha |
|-----------------|-------------|-------|-------|------|------|-------------------|
| Job Stress | 24 | 70.82 | 11.02 | .00 | .60 | .83 |
| Job Performance | 12 | 49.14 | 4.97 | -.35 | 2.10 | .85 |

| | | | | | | |
|-------------------|----|-------|-------|------|-----|-----|
| Coping Strategies | 28 | 92.03 | 12.12 | -.85 | 1.9 | .81 |
|-------------------|----|-------|-------|------|-----|-----|

Table 1 shows the high internal consistency for all the three scales used in the study that is coefficient alpha is greater than .70 for all the scales.

Table 2

Correlation between Job Stress total score and subscales scores with and Job Performance Scale(N=97)

| Scales | r | p* |
|-----------------------------|-------|------|
| Job Stress Total | -.20 | ..02 |
| Work Overload | -.23* | .01 |
| Long Working Hours | -.22* | .01 |
| Challenging Deadlines | .06 | .25 |
| Inadequate Monetary Rewards | .18* | .03 |
| Team Conflicts | -.11 | .13 |

*One tailed

Table 2 shows that though total score on job stress scale show a significant negative correlation with job performance, while,work overload and long working hours have a significant negative correlation with scores on Job Performance Scale. On the other hand, inadequate monetary rewards show significant positive correlation with job performance. However, scores on challenging deadlines and team conflict scales show non-significant correlation with job performance.

Figure 2

Curvilinear Relationship between Job Stress and Job Performance

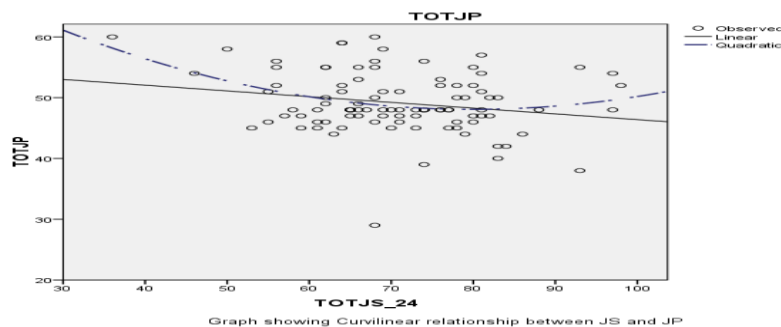


Table 3

Mediation Analyses of coping strategies as a Mediator of organizational stress and job performance (N=97)

| Effect | Estimate | St. Error | 95%CI | | T | P |
|-----------------|----------|-----------|-------|-----|-----|---|
| | | | LL | UL | | |
| Indirect effect | OS→CS→JP | .1323 | .03 | .26 | .50 | |

Organizational stress and job performance: Coping strategies as a mediator

| | | | | | | | |
|---------------|----------------|------|-----|-----|-----|------|------|
| Direct effect | ORG stress→JP | -.29 | .04 | .18 | .37 | 2.1 | .000 |
| Total effect | ORG STRESS →CS | .63 | .06 | .37 | .75 | 5.86 | .000 |

Note. OS= organizational stress ; CS= coping strategies ; JP= job performance .

The results presented in Table 5 provide insights from the mediation analysis investigating the mediating role of coping strategies (CS) between Organizational stress (OS) and job performance (JP). The findings reveal a statistically significant positive impact on the utilization of cognitive strategies ($\beta = 0.6368$, $p = 0.000$), indicating that higher levels of organizational stress were associated with an increase in the implementation of cognitive strategies. Additionally, cognitive strategies displayed a significant positive effect on job performance ($\beta = 0.4530$, $p = 0.000$), suggesting that the utilization of these strategies positively influenced job performance.

Furthermore, the direct effect analysis indicated a significant negative relationship between organizational stress and job performance ($\beta = -0.2917$, $p = 0.000$), indicating that higher levels of organizational stress were linked to decreased job performance. Additionally, the indirect effect analysis revealed that coping strategies partially mediated the relationship between organizational stress and job performance, with an estimated indirect effect of 0.1323 (Boot SE = 0.0385, 95% Boot CI [0.0358, 0.1167]).

These findings highlight the importance of cognitive strategies as a coping mechanism for individuals experiencing organizational stress. Moreover, the results emphasize the negative impact of organizational stress on job performance, which can be partially alleviated through the implementation of effective coping strategies.

Discussion

As occupational stress carries substantial costs for both employees and their employers (Yap, & Thong, 2013), the primary aim of this research was to investigate association between job stress and job performance as well as the role of coping strategies as a mediator between organizational stress and job performance. The study focused on the stressors faced by Information Technology (IT) project managers and their team members in their work environments. It aimed to examine the impact of these stressors and the coping techniques employed by IT personnel. Five variables were identified to assess the influence of stressors such as long working hours, work overload, challenging deadlines, inadequate monetary rewards, and team conflict on job performance.

Hypothesis 1 suggested a negative relationship between the five job stressors and job performance, and Pearson correlation analysis was conducted to explore this relationship. Table 2 presents the results, indicating a significant negative correlation between job stress and job performance and as well as, work overload and long working hours with job performance. However, team conflict exhibited a non-significant negative correlation with job stress. Surprisingly, challenging deadlines did not demonstrate any significant relationship with job performance. Additionally, contrary to the study's assumption, inadequate monetary rewards showed a positive relationship with job performance.

The negative impact of work overload and long working hours can be explained through the "Ego depletion theory," which suggests that constantly making numerous decisions depletes our self-regulation abilities (Cherry, 2019). When individuals are constantly occupied with job demands due to work overload and long working hours, they feel drained and their performance deteriorates. A study conducted by Ali and Farooqi (2014) on Public sector universities in Gujranwala also found that

workload affects job satisfaction, which, in turn, influences job performance. Similarly, Banerjee and Mehta (2016) and Inegbedion, Inegbedion, Peter, & Harry (2020) concluded that work overload contributes to job dissatisfaction.

Team conflict also showed a negative correlation with job performance but that is not significant. Although due to the sign of correlation it is evident no one appreciates conflict among the team but it may not be much affecting job performance due to personality differences of individuals. It depends on the nature of the task as well as the personality of the individuals, if the task is to be done independently, team conflict may not affect the job performance. Similarly some individuals can better tolerate team conflict that is why it does not prove to be influencing job performance much.

Challenging deadlines did not show any significant relationship with job stress. This may be attributed towards the fact that in non-punctual cultures, the deadlines are not considered seriously. Meyer (2015) has developed a cultural map which encompasses the most to the least punctual cultures. India is shown to be one of the least punctual cultures, whereas, Germany among the top punctual ones. As Pakistan and India are thought to share many common characteristics, the same can be applied to Pakistan as well. According to Meyer (2015) industrialized Western cultures value deadlines whereas, non-industrialized cultures doesn't. This reasoning can be applied to the results of the present study, that is, challenging deadlines does not prove to be a variable which affects the performance of individuals as mostly a deadline does not mean to be a deadline in a non-punctual culture like Pakistan.

The study also hypothesized that irregular and inadequate monetary rewards would be negatively correlated with job performance. However, contrary to our initial assumption, the results indicate a significant positive correlation between these two variables. To explore this unexpected outcome, the items of the scales were carefully examined. It was discovered that four statements within the inadequate monetary reward sub-scale reflected a general opinion about the value of financial incentives, rather than specifically addressing how effectively these incentives were utilized within the respondents' organizations (Items 26, 27, 30, 31). This discrepancy may be the primary reason behind the unexpected result of a positive correlation between inadequate monetary rewards and job performance.

The overall findings of the study can be explained by referring to Herzberg's theory (as cited in Khanka, 2003). According to Herzberg (as cited in Khanka, 2003), an individual's performance can be attributed to both hygiene factors and motivators. Hygiene factors, also known as maintenance factors, are associated with job dissatisfaction and include variables such as company policy and administration, supervision, interpersonal relations, working conditions, salary, status, and security. The absence or insufficiency of these factors leads to job dissatisfaction. On the other hand, motivators are distinct from hygiene factors and contribute to job satisfaction. These motivators encompass elements like achievement, recognition, the nature of the work itself, responsibility, advancement, and personal growth.

In the present study, the job stress variables appear to align primarily with the hygiene factors outlined in Herzberg's theory. Work overload, long working hours, and challenging deadlines can be categorized under the working conditions aspect of Herzberg's theory. Inadequate monetary rewards are linked to the salary factor, while team conflict relates to interpersonal relations. Therefore, dissatisfaction with these variables generates stress in individuals, ultimately affecting their performance. Supporting the findings of the current study, Jamal's (2016) research on employees in a large multinational organization in Malaysia and Pakistan also confirms the relationship between job performance and four job stressors: work overload, ambiguity, conflict, and resource inadequacy. Jamal's findings revealed a negative correlation between overall job performance and these job stressors.

The second research hypothesis about negative correlation between job stress and job performance was also confirmed. Sari, Storyna, Intan, Sinaga, Gunawan, Asrol, & Redi, (2021) also reported a negative relationship between the two constructs. These researchers argue that when stress occurs, it affects the performance of employees negatively, whereas lowering the stress level enhances the performance suggesting that both these variables are inversely proportional to each other. On the other hand, the curvilinear/U-shaped relationship between job stress and performance is at present probably the most popular mode (Ajayi, Samuel, 2018; Usmani, Chaudhy, & Jawwad, 2022). The underlying assumption of this viewpoint is that the individuals who experience low stress at the job are not as activated to improve their performance as compared to those who are having moderate level of stress. The researchers believe that a moderate amount of stress activates an individual to direct his/her energies towards better job performance. In other words, a moderate amount of stress is considered optimal for job performance.

As several earlier studies demonstrate existence of curvilinear relationship between job stress and job performance (Jamal, 2016), the data were subjected for further analysis to explore if there is a curvilinear relationship between job stress and job performance. The results of the present study presented in figure 2 indicate that job stress scores are negatively associated with job performance, that is, $b = -0.8$, $SE = 0.37$, $t = -2.28$, $p = 0.02$, and there is a significant quadratic effect, (TOTJSsq) $b = 0.005$, $SE = 0.003$, $t = 2.04$, $p < 0.05$, $R^2 = 0.08$, $F(df) = 4.33$, $p = 0.01$. Hence, the study demonstrates a significant curvilinear relationship between job stress and job performance. This finding suggests that an optimum amount of job stress is required to motivate individuals to focus and work on the tasks but as it keeps on increasing it negatively affect job performance. Sometimes an insignificant correlation or regression is due to this curvilinear relationship between the variable (Boafo, 2018). As it goes from negative to positive, it does not show a significant result until certain transformations are applied on the data. In the present research, the total score of job stress did not show a significant relationship with job performance which shows the evidence for the curvilinear relation between the two variables. It means there must be some optimum amount of job stress which energizes the person for work. However, when the level of stress exceeds this limit, it becomes a hindrance in job performance.

Hypothesis 3 proposed that coping strategies play a mediating role between organizational stress and job performance. The study employed mediation analysis using Hayes' SPSS Process Macro and Model 4 (Rockwood & Hayes, 2017) to explore the mediating role of coping strategies between organizational stress and job performance (see table 4). The analysis revealed that organizational stress significantly influences the use of cognitive strategies, which, in turn, positively affects job performance. Furthermore, there is a significant direct negative impact of organizational stress on job performance. The indirect effect analysis showed that coping strategies partially mediate the association between organizational stress and job performance. It is evident that individuals employ diverse mechanisms to alleviate stress in challenging situations, thereby counteracting job stress and potentially improving job performance. In summary, the research findings indicate that coping strategies significantly impact job performance and play a mediating role in the relationship between job stress and job performance. To conclude, the study identified several important findings: first, work overload and long working hours negatively affected job performance, while inadequate monetary rewards displayed a positive correlation. Second, coping strategies were found to mediate the relationship between organizational stress and job performance, offering assistance in stress reduction. Lastly, the participants in the study, who were IT personnel, predominantly utilized adaptive coping strategies as observed from the research data.

These findings provide strong support for the hypothesized relationship (H2). These findings are also consistent with previous studies. For example, Yücel (2019) found that coping strategies partially

mediated the relationship between occupational stress and job performance. Specifically, problem-focused coping strategies, such as active problem-solving and planning, were found to positively influence job performance. On the other hand, emotion-focused coping strategies, such as seeking emotional support and venting, were found to have a negative impact on job performance. Similarly, Lu and Lin (2020) also found that coping strategies partially mediated the relationship between occupational stress and job performance. Specifically, adaptive coping strategies, such as problem-solving and seeking social support, were found to enhance job performance, while maladaptive coping strategies, such as avoidance and wishful thinking, were found to hinder job performance.

Limitations and Recommendations

1. Instead of opting for an online data collection future researches can conduct the study in physical presence of the researcher.
2. Future researchers may consider employing a stratified sampling strategy to select a larger and more diverse sample that represents a wider range of industrial backgrounds.
3. The present study focused solely on companies with SAP Implementations, primarily due to the challenging nature of their work, for more comprehensive understanding, future research should encompass areas beyond SAP software implementation projects and across various industries.
4. To investigate the long-term effects of organizational stress and coping strategies on employees' mental health, utilizing a longitudinal research design would be beneficial.

References

- Aitken, A., & Crawford, L. (2007). Coping with stress: Dispositional coping strategies of project managers. *International Journal of Project Management*, 25(7), 666-673. doi: 10.1016/j.ijproman.2007.02.003
- Ajayi, Samuel (2018). Effect of Stress on Employee Performance and Job Satisfaction: A Case Study of Nigerian Banking Industry. Available at SSRN: <https://ssrn.com/abstract=3160620> or <http://dx.doi.org/10.2139/ssrn.3160620>
- Ali, S., & Farooqi, Y. A. (2014). Effect of work overload on job satisfaction, effect of job satisfaction on employee performance and employee engagement: (A case of Public Sector University of Gujranwala Division). *International Journal of Multidisciplinary Sciences and Engineering*, 5(8), 23-30.
- Baba, V. V., Jamal, M., & Tourigny, L. (1998). Work and mental health: A decade in Canadian research. *Canadian Psychology/Psychologie canadienne*, 39(1-2), 94-107. doi: <http://dx.doi.org/10.1037/h0086798>
- Banerjee, S., & Mehta, P. (2016). Determining the antecedents of job stress and their impact on job performance: A study among faculty members. *IUP Journal of Organizational Behaviour*, 15 (2), 7-24.
- Bingi, P., Sharma, M. K., & Godla, J. K. (1999). Critical issues affecting an ERP implementation. *IS Management*, 16(3), 7-14.
- Boafo, I. M. (2018). The effects of workplace respect and violence on nurses' job satisfaction in Ghana: a cross-sectional survey. *Human resources for health*, 16(1), 1-10.
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100.
- Cherry, K. (2019). What is ego depletion. Retrieved on 29.09.2019 from <https://www.verywellmind.com/ego-depletion-4175496>
- Fillion, L., Kovacs, A. H., Gagnon, P., & Endler, N. S. (2002). Validation of the shortened COPE for use with breast cancer patients undergoing radiation therapy. *Current Psychology*, 21(1), 17-34.
- Ganster, D. C., & Rosen, C. C. (2013). Work stress and employee health: A multidisciplinary review. *Journal of Management*, 39(5), 1085-1122. doi.org/10.1177/0149206313475815

- Gällstedt, M. (2003). Working conditions in projects: perceptions of stress and motivation among project team members and project managers. *International Journal of Project Management*, 21(6), 449-455.
- Goodman, S. A., & Svyantek, D. J. (1999). Person–Organization fit and contextual performance: Do shared values matter. *Journal of Vocational Behavior*, 55(2), 254-275.
- Haddara, M. (2014). ERP selection: The smart way. *Procedia Technology*, 16, 394-403. doi.org/10.1016/j.protcy.2014.10.105
- Haynes, N. S., & Love, P. E. D. (2004). Psychological adjustment and coping among construction project managers. *Construction Management and Economics*, 22(2), 129–140.
- Iqbal, M. (2013). Mediation effect of stress coping strategies between workplace stress and organizational performance: A case study of air traffic controllers of Pakistan. *European Journal of Management Sciences*, 1(1), 42-56.
- Inegbedion, H., Inegbedion, E., Peter, A., & Harry, L. (2020). Perception of workload balance and employee job satisfaction in work organisations. *Heliyon*, 6(1), e03160.
- Jamal, M. (2016). Job stress and job performance relationship in challenge-hindrance model of stress: An empirical examination in the Middle East. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 10(3), 404-418.
- Kamau, R. N., & Nzube, S. (2015). Strategies Adopted to Manage Work-Related Stress Among Employees-A Case of Kenya Power. Available at SSRN 2576763.
- Kapoor, D., & Khanka, S. (2013). Impact of stress on the performance of executives: An empirical study. *Journal of Indian Research*, 1(4), 100-104.
- Kazmi, R., Amjad, S., & Khan, D. (2008). Occupational stress and its effect on job performance a case study of medical house officers of district Abbottabad. *Journal of Ayub Medical College Abbottabad*, 20(3) 135-139
- Khanka, S. S. (2003). *Human resource management (Test and cases)*. New Delhi: S.Chand and Company Limited
- Lu, L., & Lin, H. Y. (2020). Examining the mediating role of coping strategies in the relationship between occupational stress and job performance: A case of hotel employees. *International Journal of Environmental Research and Public Health*, 17(4), 1345.
- Manzoor, A., Awan, H., & Mariam, S. (2012). Investigating the impact of work stress on job performance: A study on textile sector of Faisalabad. *Asian Journal of Business and Management Sciences*, 2(1), 20-28.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Current Directions in Psychological Science*, 12(5), 189-192. doi: 10.1111/1467-8721.01258
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99-113. doi.org/10.1002/job.4030020205
- McDonald, J. H. (2014). *Handbook of Biological Sciences* (3rd ed.). Spranky House Publishing.
- Meneze M. M, (2005). *The Impact of Stress on productivity at Education Training & Development Practices*: Sector Education and Training Authority.
- Meyer, B. (2001). Coping with severe mental illness: Relations of the Brief COPE with symptoms, functioning, and well-being. *Journal of Psychopathology and Behavioral Assessment*, 23(4), 265-277.
- Meyer, E. (2015). *The culture map (INTL ED): Breaking through the invisible boundaries of global business*. New York, NY. Public Affairs.
- Mikkelsen, A., Øgaard, T., Lindøe, P. H., & Olsen, O. E. (2002). Job characteristics and computer anxiety in the production industry. *Computers in Human Behavior*, 18(3), 223-239.
- Muse, L. A., Harris, S. G., & Feild, H. S. (2003). Has the inverted-U theory of stress and job performance had a fair test? *Human Performance*, 16(4), 349-364.

- Rao, J. V., & Chandraiah, K. (2012). Occupational stress, mental health and coping among information technology professionals. *Indian Journal of Occupational and Environmental Medicine*, 16(1), 22-26. doi: 10.4103/0019-5278.99686
- Ratnawat, R. G., & Jha, P. C. (2014). Impact of job related stress on employee performance: A review and research agenda. *IOSR Journal of Business and Management*, 16(11), 01-06.
- Richmond, A., & Skitmore, M. (2006). Stress and coping: A Study of project managers in a large ICT organization. *Project Management Journal*, 37(5), 5-16.
- Rockwood, N. J., & Hayes, A. F. (2017, May). MLmed: An SPSS macro for multilevel mediation and conditional process analysis. In *Poster presented at the annual meeting of the Association of Psychological Science (APS)*, Boston, MA.
- Sari, D. L., Storyna, H., Intan, R., Sinaga, P., Gunawan, F. E., Asrol, M., & Redi, A. P. (2021, July). The effect of job stress to employee performance: Case study of manufacturing industry in Indonesia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 794, No. 1, p. 012085). IOP Publishing.
- Seibt, R., Spitzer, S., Blank, M., & Scheuch, K. (2008). Predictors of work ability in occupations with psychological stress. *Journal of Public Health*, 17(1), 9-18. doi: 10.1007/s10389-008-0194-9
- Smith, D., Passos, J. d., & Isaacs, R. (2010, May 20-22). How IT project managers cope with stress. Paper presented at the Proceedings of the 2010 Special Interest Group on Management Information System's 48th annual conference on Computer personnel research on Computer personnel research, Vancouver, BC, Canada.
- Sommerville, J., & Langford, V. (1994). Multivariate influences on the people side of projects: stress and conflict 12, 234-243. *International Journal of Project Management*, 12(4), 234-243.
- Usmani, S. Chaudhy, S. A., and Jawwad, M. (2022). An Empirical Study of the relationship between job stress and job performance: A moderating role of emotional intelligence. *Bulletin of Business and Economics*, 11(1), 85-92. <https://doi.org/10.5281/zenodo.6361293>
- Yap, K. B., & Thong, J. Y. L. (2013). The effects of job stressors on job performance: A mediated model of occupational stress and job burnout in the hotel industry in Nigeria. *Journal of Hospitality and Tourism Research*, 37(2), 240-263.
- Yusoff, R. B. M., Ali, A. M., & Khan, A. (2014). Assessing reliability and validity of job performancescale among university teachers. *Journal of Basic and Applied Scientific Research*, 4(1), 35-41.
- Yücel, İ. (2019). The mediating role of coping strategies in the relationship between occupational stress and job performance among healthcare professionals. *Business and Economics Research Journal*, 10(1), 171-189.