

Deciphering the Dynamics: A Self-Report Correlational Investigation into Workplace Stress, Procrastination, and Job Satisfaction amongst Employees at Academic Institution

Received: June 13, 2024

Revised: June 27, 2024

Accepted: June 28, 2024

Li-Wei Wei

General Education, Chinese International College, Dhurakij Pundit University

Bangkok, Thailand

liwei.wei@dpu.ac.th

Abstract

The study leverages a robust empirical framework, analyzing data from a meticulously curated cohort of 217 Chinese nationality teachers employed at a private university specializing in science and technology. The research sample, characterized by a balanced gender distribution and diverse educational attainment, provides a comprehensive foundation for examining the multifaceted impacts of stress on occupational outcomes. Employing validated instruments such as the Job Stress Scale, Procrastination at Work Scale (PAWS), and the Overall Job Satisfaction measure, this study elucidates the nuanced gender-specific and educational level-based patterns in stress, procrastination, and job satisfaction. The findings reveal significant gender disparities, with males reporting lower job stress but higher procrastination and lower job satisfaction compared to their female counterparts, who exhibit elevated stress yet maintain higher job satisfaction and lower procrastination. Furthermore, the study delineates the correlation between educational attainment and the observed variables, highlighting that higher educational levels correlate with increased job stress but improved procrastination management and sustained high job satisfaction. Through rigorous statistical analyses, including Pearson correlation and regression models, the research substantiates the inverse relationship between workplace stress and both procrastination behavior and job satisfaction, reinforcing the imperative for tailored organizational interventions. This investigation not only contributes to the existing body of knowledge but also underscores the critical need for gender-sensitive and educational level-specific strategies to mitigate workplace stress and enhance job satisfaction, thereby fostering a healthier and more productive academic workforce.

Keywords: Workplace Stress, Procrastination Behavior, Job Satisfaction, Chinese Employees

1. Introduction

1.1 Background of the Study

Workplace stress constitutes a pervasive issue that significantly impinges upon employees' performance. From a psychological standpoint, stress influences employees' mental states, impacting their productivity and efficiency at work. Research delineates divergent perspectives on the correlation between work stress and employee performance. One school of thought posits a positive relationship, where stress acts as a motivational force driving enhanced

performance (Antara, 2020). Conversely, an opposing view underscores the detrimental effects of stress, indicating that excessive stress burdens employees, thereby diminishing their work efficiency (Bashir, 2017; Cheng et al., 2019). An intermediate perspective suggests a non-linear, inverted U-shaped relationship, where moderate stress levels optimize performance, while both low and high stress levels impair it (Demand-control-Social support model of work stress, 2014). Notwithstanding these theoretical paradigms, empirical data remain inconclusive, necessitating further scholarly inquiry (Jones & Boye, 1992).

Moreover, workplace stress adversely affects employees' mental health and occupational satisfaction (Pawar, 2019). Chronic exposure to stressors, such as high job demands, low control, and inadequate social support, precipitates a spectrum of mental health issues, including anxiety, depression, and burnout (Liu et al., 2024; Garcia et al., 2016). The demand–control–support (DCS) model explicates how high-stress environments exacerbate these psychological conditions, impairing cognitive and emotional functioning (Demand-control-Social support model of work stress, 2023). Furthermore, stress induces procrastination, a maladaptive behavior characterized by the postponement of tasks, which compounds stress and undermines performance (Metin, 2022). Procrastination's adverse effects are manifold, encompassing increased stress, diminished job satisfaction, and impaired occupational performance (Nyberg, 2021). Therefore, understanding the intricate interplay between stress, procrastination, and mental health is imperative for devising efficacious stress management strategies (Sun, 2014). Altogether, the deleterious impact of workplace stress on employees is multifaceted, affecting performance, mental health, and occupational satisfaction. Addressing these issues requires a holistic approach that incorporates workload management, organizational support, and mental health resources (Stufano et al., 2022). Employers must foster a conducive work environment that mitigates stressors and promotes employee well-being, thereby enhancing overall productivity and job satisfaction (Suparman, 2024). Through continued research and practical interventions, it is possible to mitigate the adverse effects of workplace stress and cultivate a healthier, more productive workforce (Pisanti et al., 2018).

1.2 Problem Statement, Research Gap and Values

The pervasive issue of workplace stress presents a multifaceted challenge, significantly impinging upon employees' productivity and psychological well-being (McKee et al., 1992). Despite divergent theoretical perspectives—ranging from stress as a motivational catalyst to its role as a detrimental burden—the empirical evidence remains inconclusive, revealing a critical research gap (Klehe & Hooft, 2018). The demand–control–support (DCS) model highlights how high-stress environments exacerbate mental health issues, including anxiety, depression, and burnout, which in turn impair cognitive and emotional functioning (Liu et al., 2024; Wei & Song, 2024; Demand-control-Social support model of work stress, 2014;). Procrastination, a maladaptive response to stress, further compounds these adverse effects by perpetuating a cycle of stress and diminished performance (Metin, 2022; Nyberg, 2021). This complex interplay underscores the necessity for a holistic approach to stress management, incorporating workload management, organizational support, and robust mental health resources (Pawar, 2019). Addressing these issues is paramount to enhancing overall productivity and job satisfaction (Riyanto et al., 2021). Through rigorous scholarly inquiry and

practical interventions, it is imperative to develop strategies that mitigate the deleterious impact of workplace stress, thereby fostering a healthier, more resilient workforce (Sinambela, 2020; Zhang, 2023).

1.3 Research Objectives

In light of the prevailing issue of workplace stress and its multifaceted impact on employees' performance and well-being, this study endeavors to elucidate the intricate relationships between stress, procrastination behavior, and job satisfaction among organizational employees. Specifically, the objectives of this research are threefold:

1) To ascertain the general level and state of workplace stress, procrastination behavior, and job satisfaction among Chinese academic institutional employees according to the demographic variables (gender and educational levels)

2) To explore the correlations among workplace stress, procrastination behavior, and job satisfaction within this demographic

Correspondingly, the research questions formulated to guide this investigation are as follows:

1) What are the general levels and states of workplace stress, procrastination behavior, and job satisfaction among Chinese organizational employees based on the demographic variables (gender and educational levels)?

2) What are the correlations among workplace stress, procrastination behavior, and job satisfaction among Chinese academic institutional employees?

By addressing these questions, this research aims to contribute to the body of knowledge on workplace stress and its consequences, offering insights for developing effective stress management strategies and fostering a conducive work environment that enhances employee well-being and organizational productivity.

2. Literature Review

2.1 Notions of Workplace Stress, Procrastination Behavior, and Job Satisfaction

Workplace stress, a multifaceted phenomenon, arises when occupational demands exceed an individual's coping capacity, resulting in adverse physical and psychological responses. This stress can manifest as acute or chronic, with chronic stress being more prevalent in contemporary work settings. The transactional model of stress, which emphasizes the dynamic interaction between the individual and their work environment, provides a comprehensive framework for understanding workplace stress (Macdonald, 2018; Peterson, 2018). Additionally, stressors are categorized into work content and work context factors. Work content stressors include excessive workload, time pressure, role ambiguity, and lack of control over job-related decisions (Peterson, 2018). Work context stressors encompass poor interpersonal relationships, lack of managerial or colleague support, limited career development opportunities, and unsupportive organizational culture (Chandler, Berg, & Barry, 2018). Additional exacerbating factors include work-life imbalance, discrimination, and exposure to unpleasant or hazardous conditions (Mayhew, 2018; Cobb, 2022).

The impact of workplace stress on individuals and organizations is profound. Prolonged exposure to stress can lead to serious health problems such as cardiovascular diseases, musculoskeletal disorders, anxiety, depression, and burnout (Sharma, Cooper, & Pestonjee, 2021). Stress impairs cognitive function, leading to reduced productivity, increased absenteeism, and higher risks of accidents and errors (Weinberg, Sutherland, & Cooper, 2015). Organizational consequences include lower morale, increased turnover, and potential legal liabilities (Cooper, 2013). Managing and preventing workplace stress necessitates a proactive and holistic approach that addresses both individual and organizational factors. Employers must create supportive work environments that promote well-being and resilience through stress management training, employee assistance programs, and policies fostering work-life balance and open communication (Cobb, 2022). Individuals should develop effective coping strategies, such as time management, relaxation techniques, and seeking social support (Weinberg, Sutherland, & Cooper, 2015).

Procrastination, fundamentally defined as the voluntary postponement of tasks or the failure to meet deadlines despite awareness of potential adverse outcomes, epitomizes a significant lapse in self-regulation and time management. This behavior, often construed as self-defeating, manifests across various life domains, encompassing educational, professional, and personal contexts (Ferrari, Johnson, & McCown, 2013). The intricate nature of procrastination is further delineated through its classification into decisional, arousal, and avoidant types. Decisional procrastination pertains to delayed decision-making, arousal procrastination is linked to the emotional overwhelm that hampers task initiation, while avoidant procrastination involves evading tasks perceived as daunting (Schouwenburg, 1995). The determinants of procrastination are rooted in personal attributes, such as low conscientiousness and high neuroticism, coupled with situational influences like environmental distractions and unclear task instructions (Hen & Goroshit, 2018; Çakmak, 2023). Consequently, procrastination begets a plethora of negative repercussions, including diminished academic and professional performance, heightened stress, and impaired well-being (Sirois, 2022). Interventions targeting procrastination encompass time management strategies, acceptance-based behavior therapies, and cognitive restructuring, yet no singular approach has emerged as universally efficacious, underscoring the complexity of this behavior (Ferrari, Johnson, & McCown, 2014). Continued scholarly exploration is imperative to refine our understanding of procrastination and to devise nuanced, effective interventions tailored to mitigate its pervasive impacts on both individual and societal levels (Simpson, 2008; Bakhtiar & Kasim, 2017).

Job satisfaction is a multifaceted construct that encapsulates an employee's affective and cognitive appraisal of their work environment, responsibilities, and experiences (Spector, 2022). This construct is pivotal for both employee well-being and organizational success. Job satisfaction is deeply influenced by factors such as company culture, work-life balance, career development opportunities, job security, and recognition (Huang, 2020; Sinha, 2020). Employees who feel appreciated, supported by colleagues and management, and have a sense of purpose exhibit higher levels of job satisfaction. This satisfaction is divided into cognitive (evaluative) and affective (emotional) components. Cognitive satisfaction involves an objective evaluation of job facets like pay and promotion opportunities, while affective satisfaction reflects the emotional pleasure derived from the job (Locke, 2011). Edwin A. Locke's definition underscores the emotional state resulting from job appraisal (Locke, 2011). Moreover, job satisfaction can be assessed at both global and facet levels, with common facets including appreciation, communication, coworker relationships, and promotion opportunities

(Oshagbemi, 2013). Improving job satisfaction, through strategies such as recognition programs, flexible working hours, and career advancement opportunities, leads to increased productivity, reduced turnover, and a positive work environment (Geydar, 2020; Fahed-Sreih, 2020). In conclusion, job satisfaction is a complex, dynamic concept encompassing cognitive evaluations and affective emotions towards one's job, significantly affecting employee performance and organizational health (Witte, 2004; Carroll, 1973).

2.2 Research Framework among Current Research Variables

In this study, the theoretical framework integrates three pivotal constructs: workplace stress, procrastination, and occupational satisfaction. The transactional model of stress serves as the foundation for understanding workplace stress, positing that stress arises from the interaction between individual perceptions and environmental demands (Haque, 2022; McGregor & Caputi, 2022). This model is instrumental in elucidating how employees appraise stressors and their capacity to cope, influencing their psychological and physiological responses (Schonfeld & Chang, 2017). The demand–control–support (DCS) model further refines this understanding by highlighting the interplay between job demands, control over work, and social support in shaping stress outcomes (Theorell, 2020; Elgmark-Andersson, Larsen, & Ramstrand, 2017). Procrastination, characterized as the voluntary delay of intended tasks, is examined through the lens of self-regulation theory, which explains procrastination as a failure in self-control mechanisms (Pietrzak & Tokarz, 2016). This behavior is linked to immediate stress relief but ultimately exacerbates stress and hampers performance (Eleni Spyridaki & Galanakis, 2022). The intricate dynamics between procrastination and stress necessitate a comprehensive exploration of their bidirectional relationship (Sutton, 2020). Occupational satisfaction is grounded in the job characteristics model which posits that job satisfaction derives from meaningful work, autonomy, and feedback (Schonfeld & Chang, 2017). This model underscores the importance of job design in fostering satisfaction and mitigating stress (Haque, 2022; McGregor & Caputi, 2022). Integrating these theoretical perspectives, this research aims to elucidate the complex interrelationships among workplace stress, procrastination, and job satisfaction, thereby providing a nuanced understanding of how these variables interact to influence employee well-being and performance (Pietrzak & Tokarz, 2016; Sutton, 2020). The synthesis of these theories offers a robust framework for developing targeted interventions to enhance workplace environments and employee outcomes (Theorell, 2020; Elgmark-Andersson, Larsen, & Ramstrand, 2017). This approach allows for a thorough investigation into the intricate mechanisms that underlie occupational stress, procrastination, and job satisfaction, facilitating the development of comprehensive strategies to improve both individual and organizational outcomes (Eleni Spyridaki & Galanakis, 2022). By adopting a multidimensional perspective, this study seeks to contribute to the existing literature on occupational health psychology and inform practical interventions aimed at optimizing workplace dynamics and employee well-being (Schonfeld & Chang, 2017).

2.3 Correlational Studies and Hypotheses

The extant literature on the empirical correlations between workplace stress and personal procrastination elucidates a complex interplay of personal and environmental factors influencing employee behavior. Procrastination, defined as the intentional deferment of tasks, often manifests through engagement in unrelated activities, thereby detrimentally impacting individual well-being, team dynamics, and organizational productivity (Bäulke, Daumiller, & Dresel, 2019; Moslemi, Ghomi, & Mohammadi, 2020). Scholarly investigations reveal two predominant theoretical frameworks: trait-based and situation-based procrastination. Trait-

based procrastination attributes the propensity to delay tasks to inherent personality traits such as neuroticism and deficient self-regulation (Bäulke et al., 2019; Moslemi et al., 2020), whereas situation-based procrastination posits that external stressors, including excessive workload and suboptimal job design, precipitate procrastination (Westman, Hobfoll, Chen, Davidson, & Laski, 2004; Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). Central to this discourse is the Conservation of Resources (COR) theory, which conceptualizes procrastination as a resource-conservation strategy under perceived resource threat or loss (Hobfoll, 2005; Yıldırım, 2022). Empirical evidence differentiates hindrance stressors, perceived as insurmountable, which exacerbate procrastination, from challenge stressors, viewed as opportunities for growth, which mitigate procrastination (Kang & Jang, 2019; Abbas & Raja, 2018). Furthermore, neuroticism is consistently identified as a predictor of procrastination (Moslemi et al., 2020; Chenery & Monaghan, 2023), whereas conscientiousness serves as a mitigating factor, particularly in response to challenge stressors (Bäulke et al., 2019; Moslemi et al., 2020). The review underscores the necessity for further empirical studies employing experimental methodologies to establish causal links and broaden the scope across diverse industries (Halbesleben et al., 2014; Moake, 2017). Understanding the multifaceted nature of procrastination within the workplace is imperative for devising effective management strategies to enhance employee performance and organizational efficiency (Westman et al., 2004; Halbesleben et al., 2014). Based on the review of the extant literature on the empirical correlations between workplace stress and personal procrastination, the researcher proposes the following research hypothesis:

Research Hypothesis 1: Workplace stress is positively correlated with employees' procrastination behavior

On the other hand, research unequivocally elucidates the intricate dynamics between workplace stress and job satisfaction. Workplace stress, characterized by an imbalance between job demands and an individual's coping capacity, encompasses excessive workloads, time pressures, interpersonal conflicts, and organizational changes (Hole, 2018; Kavuran & Camcib, 2023). These stressors not only impair employees' psychological and physiological well-being but also diminish job satisfaction, which is the affective orientation an employee has towards their work (Kim & Ahn, 2019; Baker & Alshehri, 2020). Empirical evidence consistently demonstrates a negative correlation between job stress and job satisfaction. High levels of stress correlate with decreased job satisfaction, as stressed employees often exhibit lower utilization of their skills and experience, thereby undermining organizational performance (Khalatbari, Ghorbanshiroudi, & Firouzbakhsh, 2013; Kim & Ahn, 2019). This negative relationship is supported by studies revealing that stress-induced burnout significantly reduces job satisfaction and overall productivity (Hassani, Sedaqat, & Kazemzadehbeytali, 2017; Kim & Ahn, 2019). Conversely, job satisfaction functions as a critical buffer against stress, fostering a supportive work environment that enhances employee morale, motivation, and engagement (Kavuran & Camcib, 2023; Hussain, Iqbal, & Rehman, 2023). This duality underscores the necessity for organizations to mitigate stressors through strategic interventions, such as fostering a supportive culture and providing adequate resources, to bolster job satisfaction and, consequently, enhance organizational performance (Hussain et al., 2023; Kavuran & Camcib, 2023). Hence, The researcher presents the second research hypothesis derived from an extensive and meticulous review of the existing literature:

Research Hypothesis 2: A significant negative correlation exists between workplace stress and employees' job satisfaction

Last but not least, procrastination, often characterized as a behavioral tendency to delay task performance or decision-making, is linked to heightened workplace anxiety and stress. Empirical evidence substantiates that employees who procrastinate experience elevated tension and report diminished job satisfaction (Pollack & Herres, 2020; Sudhir, Petwal, & Mehrotra, 2021). For instance, studies indicate that procrastinating individuals seek immediate gratification, leading to task accumulation and increased anxiety, which adversely affects job satisfaction (Pollack & Herres, 2020; Sudhir et al., 2021). The concept of delay of gratification, the voluntary postponement of immediate rewards for long-term benefits, inversely correlates with procrastination (Mohsin & Ayub, 2014; Liu & Wang, 2021). Research indicates that individuals capable of delaying gratification exhibit lower levels of stress and greater job satisfaction (Liu & Wang, 2021; Zang & Feng, 2023). Despite the plethora of studies linking academic procrastination with stress, there is a dearth of research focusing on procrastination within workplace settings (Wei et al., 2023; Chung, 2018; Mohsin & Ayub, 2014). Notably, workplace stress is identified as excessive demands placed on employees, exceeding their coping resources, which inversely affects job satisfaction (Kumcagiz, Ersanli, & Alakus, 2014; Baker & Alshehri, 2020). Cross-cultural studies highlight an inverse relationship between job-related stress and satisfaction, emphasizing the necessity for further research in diverse cultural contexts, such as Pakistani high school teachers (Mohsin & Ayub, 2014; Wilson, 2021). This study aims to bridge this research gap, providing valuable insights into the dynamics of procrastination, delay of gratification, and their impact on job satisfaction, ultimately informing strategies to enhance teacher time management and occupational well-being (Mohsin & Ayub, 2014; Rajbhandari, 2023). Given the robust evidence within the extant literature that elucidates a significant inverse relationship between procrastination and job satisfaction, the researcher proposes the third research hypothesis as follows:

Research Hypothesis 3: Procrastination behavior exhibits a negative correlation with employees' job satisfaction

3. Methodology

3.1 Research Sample

In this empirical investigation, a precisely curated cohort of 217 Chinese nationality teachers (N=217), employed at a private university specializing in science and technology within China, was examined. The sample encompassed a balanced gender distribution, comprising 102 males (N=102, 47%) and 115 females (N=115, 53%). Educationally, the cohort included 55 participants (N=55, 25.3%) holding a B.A degree, 95 participants (N=95, 43.8%) with an M.A degree, and 67 participants (N=67, 30.9%) with a Ph.D. degree. The demographic data of the study participants has been systematically delineated and is comprehensively encapsulated within Table 1 presented below. This tabulation offers a detailed enumeration of the pertinent demographic characteristics of the participant cohort, thereby providing a foundational context for the ensuing analytical discourse.

Table 1

Demographic Characteristics of Current Research Samples

Variable	Categories	Frequency (N)	Percentage (%)
Gender	Male	102	47.0
	Female	115	53.0
Educational Levels	B.A. degree	55	25.3
	M.A. degree	95	43.8
	Ph.D. degree	67	30.9

3.2 Research Instrument, Validity, and Reliability

The research employed three validated instruments to measure workplace stress, procrastination, and job satisfaction among employees at an academic institution. The first instrument, the Job Stress Scale (Parker & DeCotiis, 1983), comprises 13 items distributed across two dimensions: time stress (8 items) and job anxiety (5 items). The instrument demonstrated high reliability, with Cronbach's alpha values of 0.86 for time stress and 0.74 for job anxiety. The exploratory factor analysis revealed two factors accounting for 77.5% of the variance, signifying the robust factorial validity of the instrument. The corrected item-total score correlations ranged from 0.61 to 0.79 for time stress and from 0.61 to 0.75 for job anxiety, further substantiating the internal consistency of the scale.

The second instrument, the Procrastination at Work Scale (PAWS), developed and validated by Metin (2022), measures procrastination through 12 items rated on a five-point Likert scale ranging from 1 (never) to 5 (always). The PAWS exhibits excellent reliability, with an overall Cronbach's alpha of 0.91. The scale assesses two dimensions: soldiering (6 items) and cyberslacking (6 items), with Cronbach's alpha values of 0.90 and 0.86, respectively. This high internal consistency confirms the reliability of the scale in measuring procrastination behaviors at work. The third instrument, the Overall Job Satisfaction measure, originally developed by Brayfield and Rothe (1951) and later adapted, consists of 18 items on a five-point Likert scale. Reliability assessments of the measure have yielded coefficient alpha values ranging from 0.88 to 0.91, while the six-item version's reliability ranged from 0.83 to 0.90. The instrument's validity is supported by positive correlations with job facets, autonomy, distributive justice, and other organizational variables, and negative correlations with family-work conflict and role ambiguity. Confirmatory factor analysis further distinguishes this measure from related constructs, affirming its empirical validity. The delineation of the research instruments employed in the present study has been comprehensively depicted in Table 2.

Table 2
Breakthrough of the Research Instruments for the Current Study

Instrument	Researcher	Dimensions	Items	Reliability	Validity
Job Stress Scale (JSS)	Parker & DeCotiis, (1983)	Time Stress, Job Anxiety	13	0.86 (Time Stress), 0.74 (Job Anxiety)	EFA: Two factors, 77.5% variance; substantial relationships with organizational stressors
Procrastination at Work Scale (PAWS)	Metin (2022)	Soldiering, Cyberslacking	12	0.91 (Overall), 0.90 (Soldiering), 0.86 (Cyberslacking)	High internal consistency; validated through sample B
Overall Job Satisfaction (OJS)	Brayfield & Rothe (1951)	One-dimensional	18	0.88-0.91 (18-item), 0.83-0.90 (6-item)	Correlates with job facets, autonomy, and other variables; distinct from related constructs

3.3 Research Procedure

The research procedure commenced in January 2024 with the adoption and adaptation of three validated scales, subsequently reorganized into a comprehensive electronic questionnaire. By February 2024, this instrument was meticulously compiled, the questionnaire link generated, and all preparations completed. In March 2024, the questionnaire link was strategically disseminated to the Research and Development (R&D) department of a private university specializing in science and technology within China. The data collection phase yielded 234 questionnaire responses, of which 17 were deemed invalid due to incomplete items, resulting in 217 ($N=217$, 92.7% collected rate) valid questionnaires available for subsequent data analysis. This methodical approach ensured a robust data collection framework, underpinning the rigor and reliability essential for the subsequent analytical phases of this empirical investigation. Through this structured process, we aim to derive nuanced insights into the interrelations of workplace stress, procrastination, and job satisfaction, contributing to the broader discourse on occupational well-being within academic institutions.

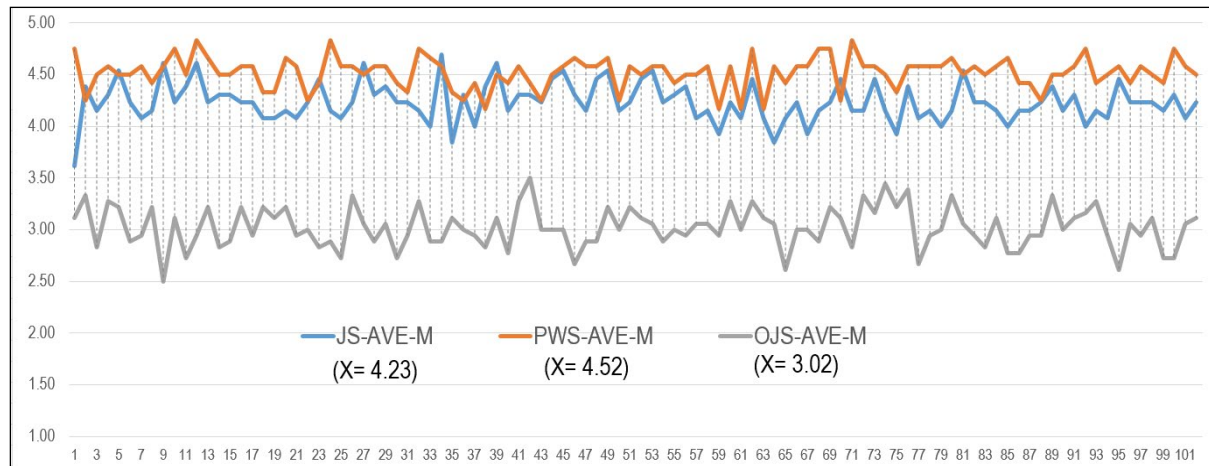
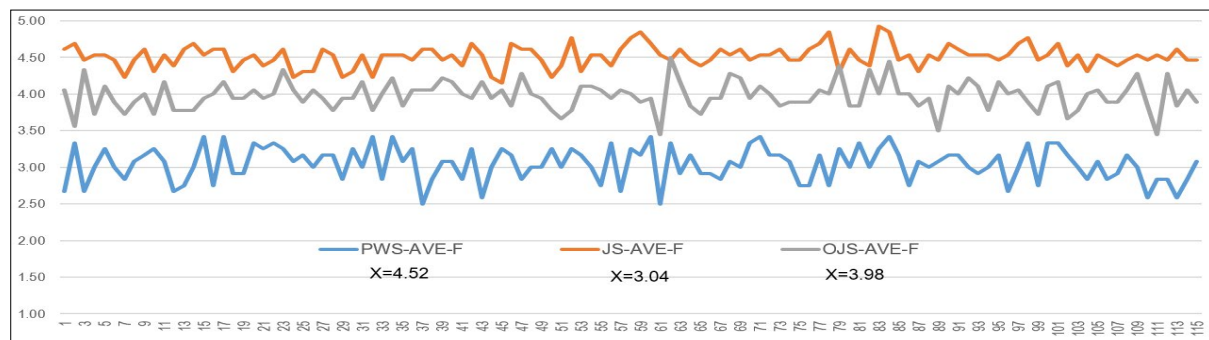
4. Results

4.1 Job Stress, Procrastination Behavior, Job Satisfaction: Gender Disparity Perspective

This section elucidates the empirical findings pertaining to workplace stress, procrastination behaviors, and job satisfaction among male and female employees within an academic institution, analyzed by gender as indicated in Table 3, Figure 1 & 2. The study engaged 217 participants, divided into 102 males and 115 females. The overall mean values for job stress, procrastination, and job satisfaction revealed significant gender disparities. Males reported an average job stress level of $X=4.23$ ($SD=.81$), procrastination at $X=4.52$ ($SD=.70$), and job satisfaction at $X=3.02$ ($SD=.59$). In contrast, females demonstrated higher job stress ($X=4.52$, $SD=.78$) but lower procrastination ($X=3.04$, $SD=.76$) and higher job satisfaction ($X=3.98$, $SD=.60$). The male cohort exhibited a propensity towards elevated procrastination behaviors, juxtaposed with moderate job satisfaction levels. Females, however, experienced higher job stress levels concomitant with substantial job satisfaction and comparatively minimal procrastination. These findings indicate a potential inverse relationship between procrastination and job satisfaction among the female demographic, suggesting that increased job stress does not necessarily correlate with diminished job satisfaction. The aggregated data provides a nuanced understanding of the psychological and behavioral dynamics within academic institutions, delineating gender-specific patterns that necessitate tailored organizational interventions to mitigate stress and enhance job satisfaction.

Table 3*Male vs. Female toward Job Stress, Procrastination Behavior, and Job Satisfaction*

Gender	Ave. Job Stress (X)	Ave. Procrastination (X)	Ave. Job Satisfaction (X)
Male	4.23 (High)	4.52 (Extremely High)	3.02 (Medium Low)
Female	4.52 (Extremely High)	3.04 (Medium Low)	3.98 (High)

**Figure 1***Means of Male Participants' Job Stress, Procrastination and Job Satisfaction (N=104)***Figure 2***Means of Female Participants' Job Stress, Procrastination and Job Satisfaction (N=115)*

4.2 Job Stress, Procrastination Behavior, Job Satisfaction: Educational Level Perspective

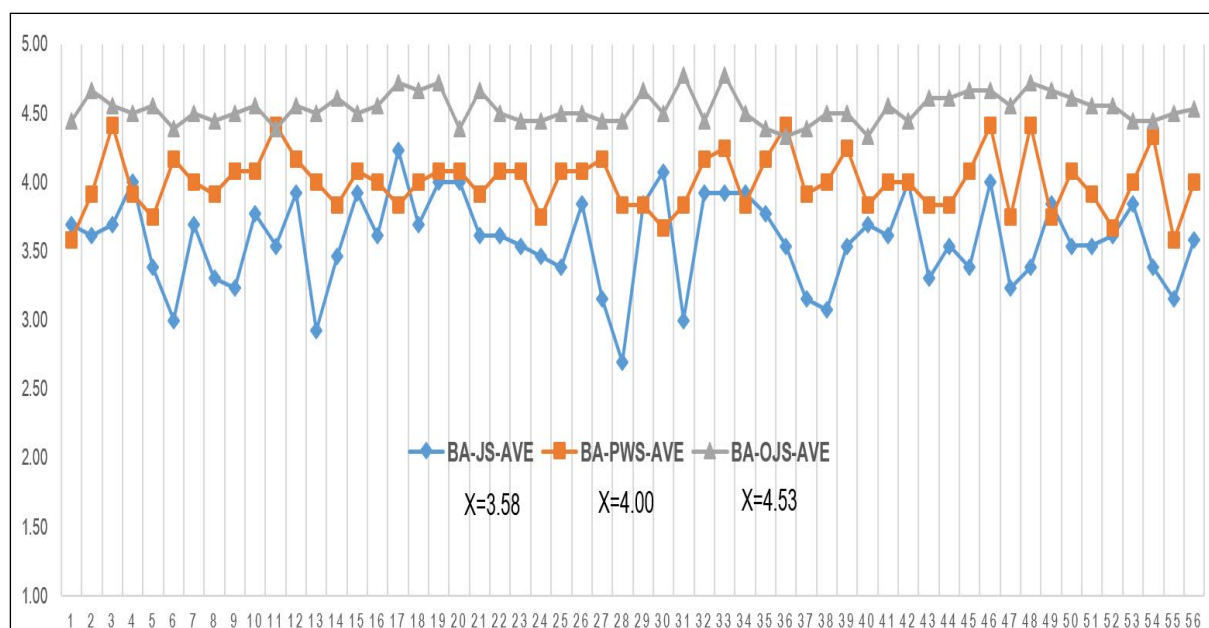
On the other hand, the findings reveal distinct trends in workplace stress, procrastination behavior, and job satisfaction across employees with varying educational levels within a Chinese academic institution as presented in Table 4, Figure 3, 4 & 5. Among those holding a Bachelor's degree (BA) (N=55), the average job stress level is moderately high (X=3.58, SD=.87), while procrastination behavior is notably pronounced (X=4.00, SD=.76). Conversely, job satisfaction is relatively elevated (X=4.53, SD=.91). For employees with a Master's degree (MA) (N=95), job stress exhibits a substantial increase (X=4.27, SD=.72), coupled with a considerable decrease in procrastination (X=2.99, SD=.65), and consistently high job satisfaction (X=4.50, SD=.64). In contrast, Ph.D. holders (N=67) experience the highest job stress levels (X=4.48, SD=.85), coupled with moderate procrastination (X=3.00, SD=.58) and

sustained high job satisfaction ($X=4.48$, $SD=.69$). The data delineates a pattern wherein higher educational attainment correlates with increased job stress and a nuanced impact on procrastination and job satisfaction. Specifically, job stress intensifies with higher education levels, reflecting perhaps the augmented responsibilities and expectations associated with advanced academic roles. Procrastination is inversely related to educational attainment, suggesting improved time management skills among more educated employees. Job satisfaction, however, remains consistently high across all educational levels, indicating a pervasive sense of fulfillment despite varying stress and procrastination levels.

Table 4

Educational Levels toward Job Stress, Procrastination Behavior, and Job Satisfaction

Education	Ave. Job Stress (X)	Ave. Procrastination (X)	Ave. Job Satisfaction (X)
BA	3.58 (Medium High)	4.00 (High)	4.53 (Extremely High)
MA	4.27 (Extremely High)	2.99 (Medium Low)	4.50 (Extremely High)
Ph.D.	4.48 (Extremely High)	3.00 (Medium)	4.48 (Extremely High)

**Figure 3**

BA-Holder Participants' Job Stress, Procrastination and Job Satisfaction (N=55)

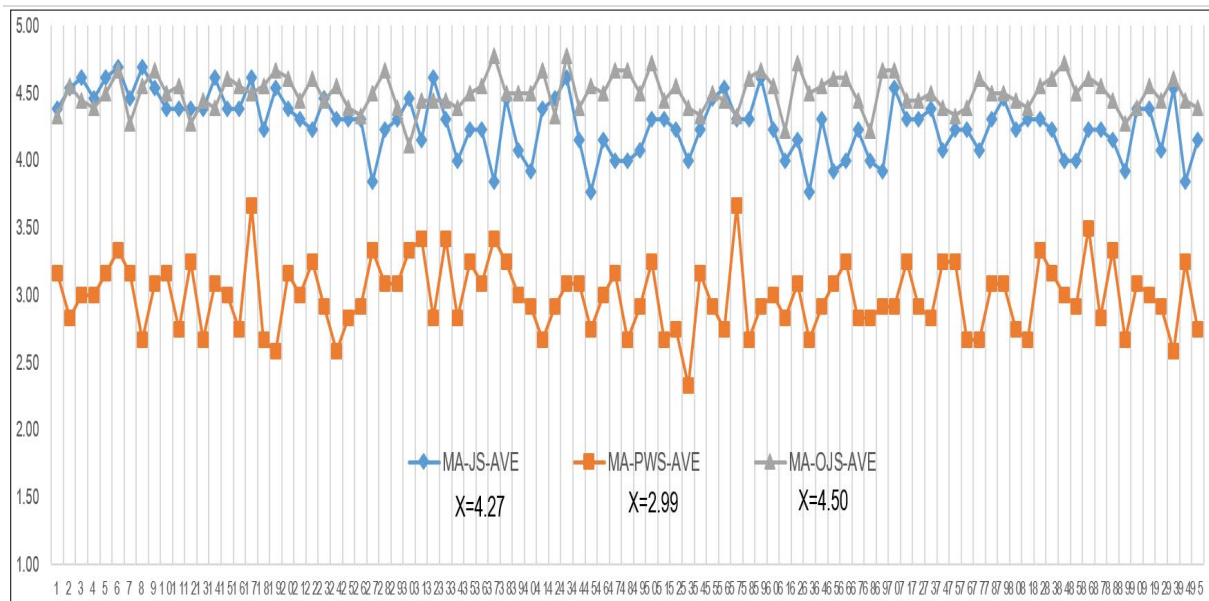


Figure 4
MA-Holder Participants' Job Stress, Procrastination and Job Satisfaction (N=95)

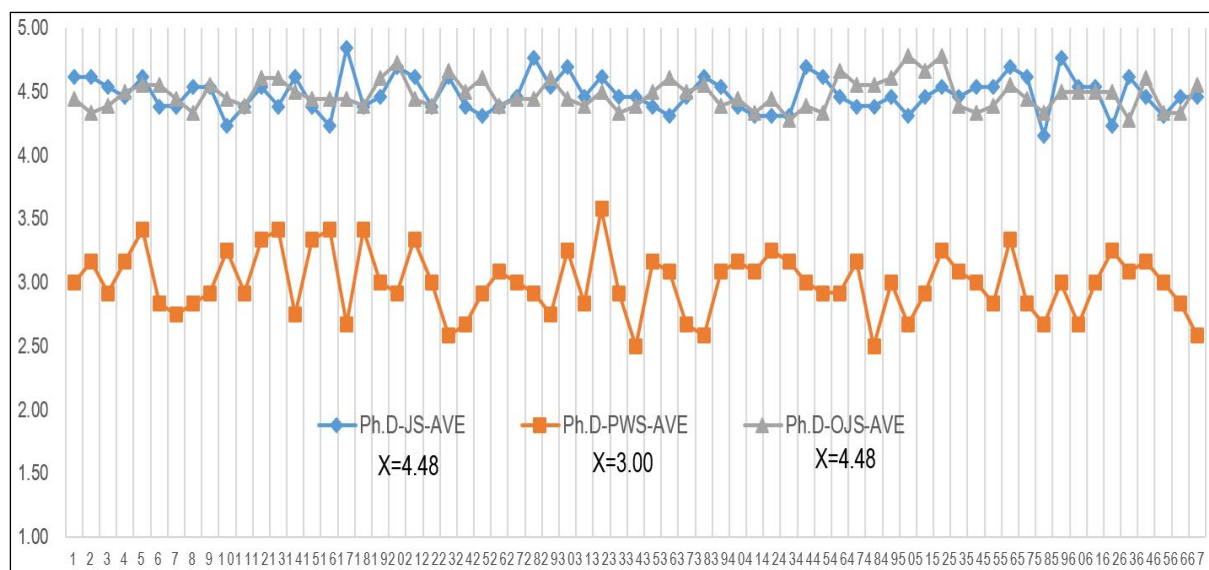


Figure 5
Ph.D.-Holder Participants' Job Stress, Procrastination and Job Satisfaction (N=67)

4.3 Interplay of Correlations among Job Stress, Procrastination Behavior, Job Satisfaction

The present study examined the correlations among workplace stress, procrastination behavior, and job satisfaction within the context of Chinese academic institutional employees. The results, derived from Pearson correlation coefficients, underscore significant interrelationships among the variables of interest as shown in Table 5. Notably, a positive correlation of moderate strength ($r = .660$, $p < .01$) was observed between procrastination behavior and job satisfaction, indicating that increased procrastination behavior is associated with heightened job satisfaction. Conversely, workplace stress exhibited a robust negative correlation with both procrastination behavior ($r = -.906$, $p < .01$) and job satisfaction ($r = -.629$,

<.01). These findings suggest that as workplace stress intensifies, both procrastination behavior and job satisfaction diminish. The inverse relationship between workplace stress and job satisfaction underscores the detrimental impact of stress on employees' overall job contentment, reinforcing the necessity for institutional interventions aimed at mitigating stressors. The data elucidates the complex dynamics underpinning employee behaviors and perceptions within academic environments, providing a nuanced understanding that can inform organizational strategies to foster a more supportive and productive work atmosphere.

Table 5

Interplay of the Correlations among Three Variables (N=217)

	Mean	Std. Deviation	N
Job Stress	4.3663	.20681	217
Procrastination	3.7103	.75950	217
Overall Job Satisfaction	3.5257	.54813	217

		Job Stress	Procrastination	Overall Job Satisfaction
Job Stress	Pearson Correlation	-	.660**	-.629**
	Sig. (2-tailed)			
Procrastination	Pearson Correlation	.660**	-	
	Sig. (2-tailed)	.000		
Overall Job Satisfaction	Pearson Correlation	-.629**	-.906**	-
	Sig. (2-tailed)	.000	.000	

** Correlation is significant at the 0.01 level (2-tailed)

4.4 Examination of the Research Hypotheses

The correlation analysis, detailed in the descriptive statistics, reveals significant findings. The Pearson correlation between job satisfaction (JS) and workplace stress (WPS) is 0.660, significant at the 0.01 level, affirming Hypothesis 1 that workplace stress positively correlates with employees' procrastination behavior. Moreover, the Pearson correlation between job satisfaction (JS) and overall job satisfaction (OJS) is -0.629, significant at the 0.01 level, confirming Hypothesis 2, which posits a significant negative correlation between workplace stress and employees' job satisfaction. Furthermore, Hypothesis 3, which suggests a negative correlation between procrastination behavior and job satisfaction, is substantiated by the Pearson correlation between PWS and OJS, recorded at -0.906 and significant at the 0.01 level.

The linear regression analysis further elucidates these relationships, offering predictive insights. The model summary for predicting overall job satisfaction, with job stress and procrastination as predictors, shows an R Square of .824, indicating that approximately 82.4% of the variance in overall job satisfaction is accounted for by these predictors. The ANOVA results confirm the model's significance ($F=496.452$, $p < 0.001$). The coefficients table reveals that both job stress ($\beta=.285$, $p < 0.001$) and procrastination ($\beta=-.381$, $p < 0.001$) are significant predictors of overall job satisfaction, reinforcing Hypotheses 1 and 3. A separate regression analysis predicts job stress with procrastination as the sole predictor, yielding an R Square of .549, signifying that 54.9% of the variance in job stress is explained by procrastination behavior. The ANOVA results again indicate a significant model ($F=262.129$, $p < 0.001$), and the coefficients table highlights that procrastination is a significant predictor of job stress ($\beta=-.680$, $p < 0.001$), thereby validating Hypothesis 2. Table 6, 7 and 8 comprehensively

enumerates the results of the empirical test conducted on the research hypotheses. This summary table systematically delineates the findings, providing a clear and concise overview of the hypothesis testing outcomes. The table serves as an integral component of our research, encapsulating critical data that substantiates the theoretical framework and empirical inquiries posited in this study.

Table 6

Summary of Linear Regression Analysis (OJS-P-WPS)

		Adjusted R		Std. Error of the Estimate	
R	R Square	Square			
.907 ^a	.824	.821		.23188	
a. Predictors: (Constant), Procrastination, Job Stress					
ANOVA ^a					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	53.389	2	26.694	496.452	.000 ^b
Residual	11.507	214	.054		
Total	64.896	216			
Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.580	.670		5.347	.000
Procrastination	-.381	.092	-.381	-4.134	.000
Job Stress	.285	.101	.285	2.835	.000

a. Dependent Variable: Overall Job Satisfaction

b. Predictors: (Constant), Procrastination, Job Stress

Table 7

Summary of Linear Regression Analysis (OJS-P-WPS)

		Adjusted R		Std. Error of the Estimate	
R	R Square	Square			
.741 ^a	.549	.547		.31133	
a. Predictors: (Constant), Procrastination					
ANOVA ^a					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	25.407	1	25.407	262.129	.000 ^b
Residual	20.839	215	.097		
Total	46.246	216			
Coefficients ^a					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	6.349	.138		46.099	.000
Procrastination	-.647	.042	-.680	-16.190	.000

a. Dependent Variable: Job Stress

b. Predictors: (Constant), Procrastination

Table 8
Summary of the Research Hypotheses Test

Hypothesis	Relationship	Correlation Coefficient (r)	Sig. (p)	Regression Coefficients (β)	Sig. (p)
H1	Positive correlation between workplace stress and procrastination behavior	.660**	$p < .01$	-.680	$p < .001$
H2	Negative correlation between workplace stress and job satisfaction	-.629**	$p < .01$.285	$p < .001$
H3	Negative correlation between procrastination behavior and job satisfaction	-.906**	$p < .01$	-.381	$p < .001$

5. Conclusion & Discussion

The present study offers a comprehensive analysis of the intricate interplay among workplace stress, procrastination behavior, and job satisfaction within an academic institution in China, delineating significant insights based on demographic variables of gender and educational levels. The empirical findings underscore the gender disparities in stress levels, procrastination tendencies, and job satisfaction. Males reported lower job stress but higher procrastination and lower job satisfaction compared to females, who experienced elevated stress yet reported higher job satisfaction and lower procrastination. These gender-specific patterns reveal a complex dynamic, suggesting that while male employees may engage more in procrastination, it does not translate to enhanced job satisfaction, contrary to their female counterparts who, despite experiencing higher stress, maintain higher job satisfaction. This finding highlights a potential inverse relationship between procrastination and job satisfaction, particularly among females, necessitating targeted interventions to address the unique stressors and motivational factors influencing each gender (Baker & Alshehri, 2020; Badiru & Racz, 2018; Bashir, 2017).

More than that, the study elucidates the impact of educational levels on the observed variables, revealing that higher educational attainment correlates with increased job stress, albeit with improved procrastination management and sustained job satisfaction. Bachelor's degree holders exhibited moderate job stress and high procrastination but maintained relatively high job satisfaction. In contrast, employees with Master's and Ph.D. degrees reported higher stress levels with a notable reduction in procrastination, yet they sustained high job satisfaction (Chenery & Monaghan, 2023; Chaudhuri, 2022). This pattern suggests that advanced

educational qualifications may equip employees with better time management skills, reducing procrastination despite increased stress. Nevertheless, the consistent high job satisfaction across educational levels indicates that job fulfillment in academic roles may be influenced by intrinsic factors such as intellectual engagement and professional development opportunities (Eleni Spyridaki & Galanakis, 2022; Elgmark-Andersson et al., 2017). The study's conclusions reinforce the necessity for tailored organizational strategies that address the specific needs of employees based on their gender and educational background, aiming to mitigate stress and enhance job satisfaction.

6. Implications and Future Directions

The implications of this study are manifold, offering valuable insights for organizational management within academic institutions. Firstly, the observed gender disparities in job stress, procrastination, and job satisfaction necessitate the development of gender-sensitive interventions. For male employees, strategies aimed at reducing procrastination and enhancing job satisfaction are imperative, potentially through the implementation of structured time management training and motivational support programs (Chung, 2018; Cobb, 2022). Conversely, for female employees, stress reduction initiatives such as mindfulness training, stress management workshops, and fostering a supportive work environment are critical to sustaining their high levels of job satisfaction (Haque, 2022; Halbesleben et al., 2014). Addressing these gender-specific needs can contribute to a more balanced and productive workplace, enhancing overall employee well-being and organizational performance (Hen & Goroshit, 2018; Hobfoll, 2005). In terms of educational levels, the findings suggest that higher educational attainment is associated with increased job stress, necessitating the implementation of stress management and mental health support tailored to the needs of highly educated employees (Jones & Boye, 1992; Hole, 2018). Additionally, the consistent high job satisfaction across all educational levels underscores the importance of maintaining intellectually stimulating work environments and opportunities for professional growth. Institutions should consider developing mentorship programs, continuous learning opportunities, and platforms for academic collaboration to foster job satisfaction and reduce stress among employees with advanced degrees (Kang & Jang, 2019; Kavuran & Camcib, 2023).

Future research should expand on this study by exploring the underlying psychological and contextual factors contributing to the observed relationships. Longitudinal studies could provide deeper insights into how workplace stress, procrastination behavior, and job satisfaction evolve over time and the long-term effectiveness of implemented interventions (Klehe & Hooft, 2018; Kumcagiz et al., 2014). Furthermore, cross-cultural comparisons could illuminate the generalizability of these findings beyond Chinese academic institutions, offering a broader understanding of these dynamics in diverse organizational settings. Investigating additional demographic variables such as age, job tenure, and specific academic roles could also enrich the understanding of how these factors influence workplace stress, procrastination, and job satisfaction (Hussain et al., 2023; Liu & Wang, 2021). Ultimately, this study lays the groundwork for ongoing research and practical applications aimed at fostering healthier and more satisfying work environments within academic institutions (Weinberg et al., 2015; Westman et al., 2004).

Reference

- Abbas, M., & Raja, U. (2018). Challenge-hindrance stressors and job outcomes: The moderating role of conscientiousness. *Journal of Business and Psychology*, 34(2), 189-201. <https://doi.org/10.1007/s10869-018-9535-z>
- Antara, G. P. (2020). The effect of performance appraisal and work environment towards employee performance mediated by job satisfaction. *International Journal of Contemporary Research and Review*, 11(05) <https://doi.org/10.15520/ijcrr.v11i05.806>
- Attar, M., Çağlıyan, V., & Abdul-kareem, A. (2021). Evaluating the moderating role of work-life balance on the effect of job stress on job satisfaction. *Istanbul Business Research*. <https://doi.org/10.26650/ibr.2020.49.0081>
- Azahwa, V. O., & Paryontri, R. A. (2023). Work life balance: Study of the relationship between work stress and job satisfaction in employees. <https://doi.org/10.21070/ups.2512>
- Badiru, A. B., & Racz, L. (2018). *Handbook of measurements: Benchmarks for systems accuracy and precision*. CRC Press.
- Baker, O. G., & Alshehri, B. D. (2020). The relationship between job stress and job satisfaction among Saudi nurses: A cross-sectional study. *Nurse Media Journal of Nursing*, 10(3), 292-305. <https://doi.org/10.14710/nmjn.v10i3.32767>
- Bakhtiar, M. I., & Kasim, S. N. (2017). Cognitive restructuring application techniques to reduce student behavior in academic procrastination. <https://doi.org/10.31227/osf.io/njgqx>
- Bashir, S. (2017). Brain training games application enhances cognitive function among healthy subjects. <https://doi.org/10.2196/preprints.7916>
- Brayfield, A. H., & Rothe, H. F. (1951). Job satisfaction index. *PsycTESTS Dataset*. <https://doi.org/10.1037/t08600-000>
- Bäulke, L., Daumiller, M., & Dresel, M. (2019). How conscientiousness and neuroticism affect academic procrastination. *Zeitschrift für Entwicklungspsychologie und Pädagogische Psychologie*, 51(4), 216-227. <https://doi.org/10.1026/0049-8637/a000225>
- Carroll, B. (1973). *Job satisfaction: A review of the literature*.
- Chandler, J., Berg, E., & Barry, J. (2018). Workplace stress in the United Kingdom: Contextualizing difference. *Work Stress*, 33-51. <https://doi.org/10.4324/9781315223339-3>
- Chaudhuri, M. R. (2022). *Dynamics of people management—Operations and obligations*. Allied Publishers.
- Chenery, P., & Monaghan, C. (2023). Predicting personality state variability: Conscientiousness, neuroticism, and personality dysfunction. <https://doi.org/10.31219/osf.io/uys8m>
- Cheng, G. H., Chan, A., Østbye, T., & Malhotra, R. (2019). Productive engagement patterns and their association with depressive symptomatology, loneliness, and cognitive function among older adults. *Aging & Mental Health*, 25(2), 332-340. <https://doi.org/10.1080/13607863.2019.1686458>
- Chung, Y. W. (2018). Workplace ostracism and workplace behaviors: A moderated mediation model of perceived stress and psychological empowerment. *Anxiety, Stress, & Coping*, 31(3), 304-317. <https://doi.org/10.1080/10615806.2018.1424835>
- Cobb, E. P. (2022). Organizational responsibility versus workplace wellbeing. *Managing Psychosocial Hazards and Work-Related Stress in Today's Work Environment*, 143-148. <https://doi.org/10.4324/9781003187349-20>
- Cooper, C. (2013). *From stress to wellbeing volume 1: The theory and research on occupational stress and wellbeing*. Springer.

- Demand-control-Social support model of work stress. (2014). *Encyclopedia of Quality of Life and Well-Being Research*, 1497-1497. https://doi.org/10.1007/94-007-0753-5_100909
- Demand-control-Social support model of work stress. (2023). *Encyclopedia of Quality of Life and Well-Being Research*, 1660-1660. https://doi.org/10.1007/978-3-031-17299-1_300989
- Eleni Spyridaki, & Michael Galanakis. (2022). Locus of control theory, productivity, job satisfaction, and procrastination: A systematic literature review in the organizational context of the 21st century. *Journal of Psychology Research*, 12(12). <https://doi.org/10.17265/2159-5542/2022.12.008>
- Elgmark-Andersson, E., Larsen, L. B., & Ramstrand, N. (2017). A modified job demand, control, support model for active duty police. *Work*, 58(3), 361-370. <https://doi.org/10.3233/wor-172621>
- Fahed-Sreih, J. (2020). Introductory chapter: Job satisfaction and career development. *Career Development and Job Satisfaction*. <https://doi.org/10.5772/intechopen.93088>
- Ferrari, J. R., Johnson, J. L., & McCown, W. G. (2013). *Procrastination and task avoidance: Theory, research, and treatment*. Springer Science & Business Media.
- Ferrari, J. R., Johnson, J. L., & McCown, W. G. (2014). *Procrastination and task avoidance*.
- Fuschiarois, & Pychyl, T. A. (2016). *Procrastination, health, and well-being*. Academic Press.
- Garcia, D., Archer, T., & Arntén, A. A. (2016). *Character, responsibility, and well-being: Influences on mental health and constructive behavior patterns*. Frontiers Media SA.
- Geydar, D. (2020). An empirical research on factors affecting employee absenteeism in an airline industry: A Relook on job stress, work-life balance and job satisfaction as predictors. *International Journal of Psychosocial Rehabilitation*, 24(02), 804-832. <https://doi.org/10.37200/ijpr/v24i2/pr200393>
- Halbesleben, J. R., Neveu, J., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the “COR”. *Journal of Management*, 40(5), 1334-1364. <https://doi.org/10.1177/0149206314527130>
- Haque, A. (2022). *Handbook of research on the complexities and strategies of occupational stress*. IGI Global.
- Hassani, M., Sedaqat, R., & Kazemzadehbeytali, M. (2017). Correlation between the ethical climate, job stress and job satisfaction in nurses. *Medical Ethics Journal*, 11(40), 63-71. <https://doi.org/10.21859/mej-114063>
- Hen, M., & Goroshit, M. (2018). The effects of decisional and academic procrastination on students' feelings toward academic procrastination. *Current Psychology*, 39(2), 556-563. <https://doi.org/10.1007/s12144-017-9777-3>
- Hobfoll, S. E. (2005). Defensive coping in the face of terror: Integrating conservation of resources (COR) and terror management theory. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e538922013-058>
- Hole, V. M. (2018). A study of correlation between job stress and job satisfaction of the college librarian in Thane district. *Journal of Advanced Research in Library and Information Science*, 05(01), 1-8. <https://doi.org/10.24321/2395.2288.201801>
- Huang, W. (2020). Job training satisfaction, job satisfaction, and job performance. *Career Development and Job Satisfaction*. <https://doi.org/10.5772/intechopen.89117>
- Huang, W. (2020). Job training satisfaction, job satisfaction, and job performance. *Career Development and Job Satisfaction*. <https://doi.org/10.5772/intechopen.89117>

- Hussain, K., Iqbal, M. A., & Rehman, S. U. (2023). Unpacking the relationship between work overload, job satisfaction, and turnover intention: The mediating role of job stress. *International Journal of Business and Economic Affairs*, 8(2). <https://doi.org/10.24088/ijbea-2023-82003>
- Jones, J. W., & Boye, M. W. (1992). Job stress and employee counterproductivity. *Stress & well-being at work: Assessments and interventions for occupational mental health*, 239-251. <https://doi.org/10.1037/10116-016>
- Kang, J., & Jang, J. (2019). What do employees perceive as hindrance or challenge stressors in the hotel industry? The role that hope plays. *Journal of Human Resources in Hospitality & Tourism*, 18(3), 299-322. <https://doi.org/10.1080/15332845.2019.1599783>
- Kavuran, E., & Camcib, G. B. (2023). Fear of Covid 19, job stress, life satisfaction, job satisfaction, and burnout. *International Journal of Emerging Trends in Health Sciences*, 7(2), 18-27. <https://doi.org/10.18844/ijeths.v7i2.8419>
- Kponou, M. K. C. (2020). Contract, gender, and job satisfaction: Evidence from Benin. *Career Development and Job Satisfaction*. <https://doi.org/10.5772/intechopen.90358>
- Khalatbari, J., Ghorbanshiroudi, S., & Firouzbakhsh, M. (2013). Correlation of job stress, job satisfaction, job motivation and burnout and feeling stress. *Procedia - Social and Behavioral Sciences*, 84, 860-863. <https://doi.org/10.1016/j.sbspro.2013.06.662>
- Kim, S., & Ahn, D. (2019). Divergent associations of the job stress, the job satisfaction and burnout subtypes. *Stress*, 27(1), 9-16. <https://doi.org/10.17547/kjsr.2019.27.1.9>
- Klehe, U., & Hooft, E. V. (2018). *The Oxford handbook of job loss and job search*. Oxford University Press.
- Kumcagiz, H., Ersanli, E., & Alakus, K. (2014). Hopelessness, procrastination and burnout in predicting job satisfaction: A reality among public school teachers. *International Journal of Academic Research*, 6(1), 333-339. <https://doi.org/10.7813/2075-4124.2014/6-1/b.45>
- Liu, X., Xu, M., & Chen, S. (2024). What causes the silence behavior of employees in construction projects: Based on the job demand-control-Support model. <https://doi.org/10.2139/ssrn.4749354>
- Liu, Y., & Wang, Y. (2021). Self-control and organizational citizenship behavior: The role of vocational delay of gratification and job satisfaction. *Work*, 68(3), 797-806. <https://doi.org/10.3233/wor-203413>
- Locke, E. (2011). *Handbook of principles of organizational behavior: Indispensable knowledge for evidence-based management*. John Wiley & Sons.
- Macdonald, W. A. (2018). Workload and workplace stress. *Work Stress*, 113-138. <https://doi.org/10.4324/9781315223339-6>
- Mayhew, C. (2018). Exploration of the links between workplace stress and precarious employment. *Work Stress*, 203-219. <https://doi.org/10.4324/9781315223339-10>
- McGregor, A., & Caputi, P. (2022). *Presenteeism behaviour: Current research, theory and future directions*. Springer Nature.
- McKee, G. H., Markham, S. E., & Scott, K. D. (1992). Job stress and employee withdrawal from work. *Stress & well-being at work: Assessments and interventions for occupational mental health*, 153-163. <https://doi.org/10.1037/10116-010>
- Metin, Ü. B. (2022). Procrastination and authenticity at work. <https://doi.org/10.33540/912>
- Moake, T. R. (2017). Challenge stressors, hindrance stressors, and psychological strain : The role of appraisals and goal orientations. <https://doi.org/10.32469/10355/61979>

- Mohsin, F. Z., & Ayub, N. (2014). The relationship between procrastination, delay of gratification, and job satisfaction among high school teachers. *Japanese Psychological Research*, 56(3), 224-234. <https://doi.org/10.1111/jpr.12046>
- Moslemi, Z., Ghomi, M., & Mohammadi, D. (2020). The relationship between personality dimensions (neuroticism, conscientiousness) and self-esteem with academic procrastination among students at Qom University of medical sciences. *Development Strategies in Medical Education*, 7(1), 5-16. <https://doi.org/10.29252/dsme.7.1.5>
- Novell, N. (2003). Job factors influencing overall job satisfaction. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e416902005-699>
- Nyberg, G. (2021). A school-based intervention to improve mental health, cognitive function and academic performance in adolescents. <http://isrctn.com/>. <https://doi.org/10.1186/isrctn78666212>
- Oshagbemi, T. (2013). *Job satisfaction in higher education*. Trafford Publishing.
- Parker, D. F., & DeCotiis, T. A. (1983). Job stress scale. *PsycTESTS Dataset*. <https://doi.org/10.1037/t01221-000>
- Pawar, B. S. (2019). Employee performance and employee well-being. *Employee Performance and Well-being*, 47-57. <https://doi.org/10.4324/9780429244193-4>
- Pawar, B. S. (2019). Workplace spirituality for employee performance and well-being. *Employee Performance and Well-being*, 151-168. <https://doi.org/10.4324/9780429244193-9>
- Peterson, C. L. (2018). Workplace changes in Australia and their effects on stress. *Work Stress*, 11-32. <https://doi.org/10.4324/9781315223339-2>
- Pietrzak, A., & Tokarz, A. (2016). Procrastination as a form of Misregulation in the context of affect and self-regulation. *Studia Humana*, 5(3), 70-82. <https://doi.org/10.1515/sh-2016-0016>
- Pisanti, R., Montgomery, A. J., & Quick, J. C. (2018). Psychosocial job dimensions and distress/well-being: Issues and challenges in occupational health psychology. *Frontiers Media SA*.
- Pollack, S., & Herres, J. (2020). Prior day negative affect influences current day procrastination: A lagged daily diary analysis. *Anxiety, Stress, & Coping*, 33(2), 165-175. <https://doi.org/10.1080/10615806.2020.1722573>
- Rajbhandari, B. (2023). Mindfulness practice relates to improvements in delaying gratification in preschoolers. *AERA 2023*. <https://doi.org/10.3102/ip.23.2010091>
- Riyanto, S., Endri, E., & Herlisha, N. (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162-174. [https://doi.org/10.21511/ppm.19\(3\).2021.14](https://doi.org/10.21511/ppm.19(3).2021.14)
- Schonfeld, I. S., & Chang, C. (2017). *Occupational health psychology*. Springer Publishing Company.
- Schouwenburg, H. C. (1995). Academic procrastination. *Procrastination and Task Avoidance*, 71-96. https://doi.org/10.1007/978-1-4899-0227-6_4
- Sharma, K. A., Cooper, C. L., & Pestonjee, D. (2021). *Organizational stress around the world: Research and practice*. Routledge.
- Simpson, W. (2008). Procrastination and arousal-based personality traits: An examination of personality traits and beliefs about sensation-seeking motives for academic procrastination. <https://doi.org/10.22215/etd/2008-08480>

- Sinambela, S. (2020). The effect of workload on job stress, work motivation, and employee performance. *International Journal of Psychosocial Rehabilitation*, 24(04), 1373-1390. <https://doi.org/10.37200/ijpr/v24i4/pr201109>
- Sinha, R. (2020). Career development: An enabler for job satisfaction. *Career Development and Job Satisfaction*. <https://doi.org/10.5772/intechopen.91683>
- Sirois, F. M. (2022). Procrastination: What it is, why it's a problem, and what you can do about it. American Psychological Association.
- Sokolowska, J., & Zusho, A. (2006). Effective procrastination strategies? self-regulation of academic procrastination among high achievers. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e536972007-001>
- Spector, P. E. (2022). The assessment of job satisfaction. *Job Satisfaction*, 13-34. <https://doi.org/10.4324/9781003250616-2>
- Stufano, A., Vimercati, L., & Awoonor-Williams, J. K. (2022). Factors and health outcomes of job burnout. *Frontiers Media SA*.
- Sudhir, P., Petwal, P., & Mehrotra, S. (2021). Procrastination and self-compassion in individuals with anxiety disorders. *Telangana Journal of Psychiatry*, 7(1), 22. https://doi.org/10.4103/tjp.tjp_20_21
- Sun, Z. (2014). *Handbook of research on demand-driven web services: Theory, technologies, and applications: Theory, technologies, and applications*. IGI Global.
- Suparman, T. I. (2024). The effect of flexible work system, workload, work ability, job satisfaction, employee engagement and work stress on employee performance (Case study at PT Mecoindo). *Jurnal Indonesia Sosial Teknologi*, 5(3), 1243-1259. <https://doi.org/10.59141/jist.v5i3.974>
- Sutton, A. (2020). *Work psychology in action*. Bloomsbury Publishing.
- Tabancali, E. (2016). The relationship between teachers' job satisfaction and loneliness at the workplace. *Eurasian Journal of Educational Research*, 16(66), 1-30. <https://doi.org/10.14689/ejer.2016.66.15>
- Taylor, R. (1976). Procrastination: The personality and situational correlates of procrastination behavior for achievement tasks. https://doi.org/10.31390/gradschool_disstheses.3356
- Theorell, T. (2020). The demand control support work stress model. *Handbook of Socioeconomic Determinants of Occupational Health*, 1-15. https://doi.org/10.1007/978-3-030-05031-3_13-2
- Udemba, N. (2021). Relationship between self efficacy and job performance and satisfaction of secondary school teachers in Anambra state. *International Journal of Multidisciplinary Research and Analysis*, 04(05). <https://doi.org/10.47191/ijmra/v4-i5-06>
- Wei, L., Jaisook, N., Zhao, F., Li, M., Yang, C., & Zhang, L. (2023). Mixed-method report into Chinese postgraduates' procrastination behavior, academic engagement and self-confidence. *European Journal of Education Studies*, 10(6). <https://doi.org/10.46827/ejes.v10i6.4819>
- Wei, L., & Song, Y. (2024). Correlational analysis of the interplay among academic anxiety, emotional intelligence management, and academic resilience. *European Journal of Education Studies*, 11(4). <https://doi.org/10.46827/ejes.v11i4.5268>
- Weinberg, A., Sutherland, V., & Cooper, C. (2015). *Organizational stress management: A strategic approach*. Springer.
- Westman, M., Hobfoll, S. E., Chen, S., Davidson, O. B., & Laski, S. (2004). Organizational stress through the lens of conservation of resources (Cor) theory. *Research in Occupational Stress and Well-being*, 167-220. [https://doi.org/10.1016/s1479-3555\(04\)04005-3](https://doi.org/10.1016/s1479-3555(04)04005-3)

- Wilson, G. (2021). A diary study of feedback seeking behaviours in individuals with social anxiety disorder compared to individuals with generalized anxiety disorder of no history of mental health difficulties. <https://doi.org/10.32920/ryerson.14652483.v1>
- Witte, H. D. (2004). Job insecurity, job satisfaction, life satisfaction and happiness. Is the impact of job insecurity on happiness and life satisfaction caused by job satisfaction? PsycEXTRA Dataset. <https://doi.org/10.1037/e524332011-046>
- Yang Weijun, & Li Jingjin. (2015). The relationship between vocational delay of gratification and job performance and career satisfaction: The regulation mechanism. 2015 12th International Conference on Service Systems and Service Management (ICSSSM). <https://doi.org/10.1109/icsssm.2015.7170304>
- Yıldırım, N. (2022). Resources, stressors and coping strategies of nurses caring for patients with coronavirus disease from the perspective of conservation of resources theory: A qualitative study. Journal of Psychiatric Nursing. <https://doi.org/10.14744/phd.2021.24434>
- Zang, L., & Feng, Y. (2023). Relationship between job satisfaction and work engagement in Chinese kindergarten teachers: Vocational delay of gratification as a mediator. Frontiers in Psychology, 14. <https://doi.org/10.3389/fpsyg.2023.1114519>
- Zhang, B. (2023). Construction of psychological adjustment function model of music education based on emotional tendency analysis. International Journal of Mental Health Promotion, 25(5), 655-671. <https://doi.org/10.32604/ijmh.2023.025913>
- ÇAKMAK, T. Ö. (2023). Developing University students coping skills with academic procrastination behavior: A cognitive behavioral theory based Psychoeducation practice. Journal of Computer and Education Research, 11(22), 728-743. <https://doi.org/10.18009/jcer.1332329>

- resolution/the_international_comparative_legal_guide_to_enforcement_of_foreign_judgments_2018.pdf?sfvrsn=d6d53a47_2
- Standing International Forum of Commercial Courts. (2020). *2nd Edition of the SIFoCC Multilateral Memorandum on Enforcement of Commercial Judgments for Money*. <https://www.judiciary.uk/wp-content/uploads/2020/12/Memorandum-on-Enforcement-2nd-Edition.pdf>
- The Supreme People's Court of the People's Republic of China. (2019). *Opinions of the Supreme People's Court on Further Providing Judicial Services and Guarantees by the People's Court for the Belt and Road Initiative[(2019)Fafa No.29]*. https://english.court.gov.cn/2021-10/23/c_761783.htm
- The Supreme People's Court of the People's Republic of China. (2022). *Minutes of the National Symposium on the Foreign-related Commercial and Maritime Trial Work of Courts* [CLI.3.5114710(EN)]. https://pkulaw.com/en_law/bffd20e9ace35db2bdfb.html
- Zhang, W. L. (2014). *Recognition and Enforcement of Foreign Judgments in China: rule, practice and strategies*. Alphen aan den Rijn, The Netherlands: Kluwer Law International.
- 张先舫. (2021). “一带一路”背景下外国民商事判决承认和执行中推定互惠原则的适用. *People's Judicature Application*, Vol. 912, 63. https://kns.cnki.net/kcms2/article/abstract?v=RkYMYaebi8VANtEld9beLAAI2LRTUkc9ZszKY04dkEQbZlgWj7wihN3wBeadLCYxIndQdEaI0B_sBLNOOR-Bxs7KLFTt5NkmqpGlodm9B501zEaIsCpdjflXETUyqirevYKlk6sQNAU=&uniplatform=NZKPT&flag=copy