Job Performance in the Context of Workplace Friendship and Job Stress: Evidence from the Self-Reports of Public Employees

İş Yeri Arkadaşlığı ve İş Stresi Bağlamında İş Performansı: Kamu Çalışanlarının Kendi Bildirimlerinden Kanıtlar

Sunday Samson Babalola(*)

Chiyem Lucky Nwanzu(**)

Abstract

This research aims to establish a direct correlation between work friendships, job-related stress, and performance. The investigation also explored whether job stress mediates between workplace friendships and job performance. A self-administered questionnaire was utilised to gather data from 125 public employees as part of a quantitative, cross-sectional study. The participants comprised 76% women and 75% married couples, with age $\bar{x} = 37.71$. Regression analyses revealed that workplace friendship is negatively related to job stress and positively associated with the task and contextual performances. Counterproductive work behaviour is positively correlated with high and low job stress levels. Equally, task performance is negatively correlated with high levels of job stress. The findings significantly confirmed the inverted-U theory, which states that performance increases as arousal increases, with performance decreasing only up to a certain point when arousal becomes too high. The mediation result revealed that stress mediates between workplace friendship and job performance. The study explains that increasing the employee's experience of workplace friendship impacts job performance and job stress in an organisationally desirable direction. It also provides a practical guide on the level of stress that benefits organisations in terms of employee performance.

Keywords: Workplace Friendship, Job Stress, Job Performance, Tend-and-Befriend Theory, Affective Event Theory

---

(*) Corresponding Author / Sorumlu Yazar, Walter Sisulu University, Faculty of Management and Public Administration Sciences, Butterworth Campus, Eastern Cape Province, South Africa, sbabalola@wsu.ac.za, ORCID: 0000-0003-3956-712X

(**) Delta State University, Faculty of Social Sciences, Abraka, Nigeria, nwanzulc@delsu.edu.ng, ORCID: 0000-0002-9434-2495

53

Özet

Bu araştırma, iş yeri arkadaşlıkları, işle ilgili stres ve performans arasındaki doğrudan ilişkiyi ortaya koymayı amaçlamaktadır. Çalışmada ayrıca iş stresinin, iş yeri arkadaşlıkları ve iş performansı arasında aracı rolü olup olmadığı incelenmiştir. Nicel ve kesitsel bir araştırma olarak tasarlanan çalışmada, 125 kamu çalışanından anket aracılığıyla veri toplanmıştır. Katılımcıların %76'sı kadın ve %75'i evli olup, yaş ortalaması x̄ = 37,71'dir. Regresyon analizleri, iş yeri arkadaşlığının iş stresi ile negatif, görev ve bağlamsal performans ile pozitif ilişkili olduğunu ortaya koymuştur. Üretkenlik karşıtı iş davranışı ise hem yüksek hem de düşük seviyedeki iş stresiyle pozitif korelasyon göstermektedir. Aynı şekilde, görev performansı yüksek iş stresi seviyeleri ile negatif ilişkilidir. Bulgular, performansın uyarılma arttıkça yükseldiğini ve ancak uyarılma aşırı yüksek seviyelere ulaştığında performansın azaldığını öne süren ters-U teorisini önemli ölçüde doğrulamıştır. Aracılık analizi sonuçları, stresin iş yeri arkadaşlığı ile iş performansı arasındaki ilişkide aracılık ettiğini göstermiştir. Çalışma, çalışanların iş yeri arkadaşlığı deneyimlerinin artırılmasının, iş performansı ve iş stresi üzerinde örgütsel açıdan olumlu bir etki yarattığını açıklamaktadır. Ayrıca, çalışan performansı açısından örgütler için faydalı olan stres seviyelerine ilişkin pratik bir rehber sunmaktadır.

Anahtar Kelimeler: İş Yeri Arkadaşlığı, İş Stresi, İş Performansı, İlgilen ve Arkadaş Ol Kuramı, Duygusal Olaylar Teorisi

Introduction

Building a research-based body of knowledge on workplace friendship (WPF) outcomes has been vigorously pursued in different workplace attitudes and behaviour studies. A workplace friendship is an informal and non-exclusive association between employees characterised by shared values, commitment, trust, and a desire to collaborate. These qualities are reciprocated through various forms of assistance, such as work, communication, time, and resources (Imaduddin, 2024). Studies suggest that WPF is essentially an organisationally desirable work experience. WPF strongly enhances job satisfaction (Gupta, 2020), organisational commitment and psychological safety (Yang & Shiu, 2023), work engagement (Wyandini, Kokasih, & Faridah, 2023), and employees' mental health (Singh & Srivastava, 2020).

The literature on WPF outcomes is growing substantially, but some fundamental issues undermine its usefulness in guiding behaviour, policy formulation, and organisational practices. First, WPF outcome studies focused principally on positive organisational variables, such as job satisfaction, engagement, and psychological safety, while they are almost silent on negative variables, such as job stress (Pillemer & Rothbard, 2018). It is plausible to argue that, just as WPF cre-

ates a positive regulatory experience, it can also reduce employees' negative organisational behaviour. Therefore, it is necessary to understand how friendship in the workplace could reduce negative employee experiences. Second, the current body of literature focuses almost exclusively on the effects of WPF on work-related attitudes, including engagement and job satisfaction. There is a shortage of studies on WPF and behaviour, specifically regarding employee performance. Third, as postulated by the process theory, relationships between variables are not always direct (Buchanan & Huczynski, 2019). Therefore, there is a need to examine the intervening variables in the WPF-job performance relationships. Knowing how moderators and mediators influence a specified relationship is of practical importance. It could guide decisions about manipulating such a relationship in the desired direction. Therefore, this research investigated the correlation between work-related stress, job performance, and work friendship in the context of public sector personnel.

Literature Review

Theoretical background

Two theories (affective event theory and tend-and-befriend theory) underpin the proposals of this study. The relationship between WPF and job performance postulated as organisationally desirable is elucidated by affective event theory (AET), with work stress as a mediating factor. According to the AET of Weiss and Cropanzano (1996), emotional responses from employees may be elicited in response to workplace occurrences. In other words, it exerts an impact on workplace attitudes (e.g., job satisfaction) and employee behaviour (e.g., job performance) (Robbins & Judge, 2022). Moreover, every work environment creates functions that can be a source of inspiration. As an inspiring event, WPF is a source of support for employees. Also, it is acknowledged that organisational support significantly influences job performance (Ma, Zhang, Dong, & Yu, 2023; Sopiah, Wahyudi, & Sangadji, 2023). WPF potentially impacts job performance, as the observed correlation between organisational support and job performance suggests.

Taylor (2006) explained the manifestation of WPF and its correlation with job stress and performance through his tend-and-befriend theory. The theory posits that stress induces individuals to form social bonds with others and that

endogenous opioid peptides and oxytocin are responsible for initiating this response. Therefore, the tend-and-befriend theory explains that WPF responds to job stress. The study by von Dawans, Ditzen, Trueg, Fischbacher, and Heinrichs (2019) supported the theory, as it dictated the desire of participants to be close under stressful conditions. The association of WPF and job performance is also mediated by workplace stress, as the tend and befriend theory explains. The stressor refers to aspects of the work environment that require employees to exhibit adaptive responses (Jex & Britt, 2014). The proposition is based on the observation that people associate responses to stress. Tend and befriend theory proposes that people form a bond as a mitigating response to the stressor's negative consequence in a stressful situation. The theory suggests that WPF reduces job stress among employees. It is plausible because organisational citizenship behaviour (OCB) characterises a high-association work environment (Thamrin, Rahmawati, Rusmin Nuryadin, & Juniar, 2023) and trust in co-workers (Abbasi & Wan Ismail, 2023). OCB and trust among co-workers have the potential to enhance desirable organisational variables. According to Abbasi and Wan Ismail (2023), Supriyanto, Ekowati, Haris, Soetjipto, Haryanto, Rudy and Yahya (2020) and Pranata, Yasa, and Sitiari (2020), OCB enhances employee satisfaction, diminishes deviant work behaviour, and mitigates job stress. Employee trust can reduce resentment and conflict within an organisation. These latter variables positively relate to counterproductive work behaviour (CWB) (Khushk, Zhiying, Yi, Zengtian, & Hui, 2022). Consequently, it is proposed that WPF positively impacts job performance because it reduces job stress, negatively influencing job performance.

Conceptual Framework and Development of Hypotheses

Workplace Friendship and Job Stress

Work environments are known for the multitude of formal and informal relationships that can be observed. How supervisors and employees relate to the organisation's objective constitutes formal relationships (Lee, Oh, & Juravich, 2016). Conversely, WPF defines informal contact as non-exclusive, personally oriented, voluntary workplace associations involving shared trust, dedication, affinity, and common interests and values (Choi & Ko, 2020). Psychological needs for belonging and security, social support, and job success are potential drivers of friendship at work (Khaleel, Chelliah, Khalid, Jamil, & Manzoor, 2016). How-

ever, several other individual and organisational factors influence the degree of association in an organisation. Friendship on the job typically exists between employees of similar cultural backgrounds, values, personalities, socioeconomic statuses, social preferences, job positions, or personal interests (Jiang, Xu, & Hu, 2019; Pillemer & Rothbard, 2018). It could range from a superficial acquaintance to a romantic relationship. Since WPF can result in adverse outcomes such as distraction from tasks, groupthink, favouritism (Pillemer & Rothbard, 2018), and incivility (Fasbender, Burmeister, & Wang, 2023), there is a need for WPF control mechanisms.

McShane and Von Glinow (2019) posit that stress is an individual's adaptive reaction to a perceived hazardous or difficult circumstance that endangers their health. Therefore, job stress can be understood as a psychological reaction to pressures that involve particular risks for the staff member and that surpass their capabilities or available resources (Colquitt, Lepine, & Wesson, 2019). It is a psychological state that occurs when demands or stressors placed on an employee are perceived and considered to exceed their ability to deal with them. Hence, stress does not necessarily arise from stressors, which are workplace attributes like work-family conflict and emotional labour that may require employees to adopt adaptive strategies. The key question is how a potentially stressful situation has been assessed and managed to determine its impact and whether that impact is positive or negative (McShane & Von Glinow, 2019).

Studies on WPF-job stress relationships are scarce. However, the dominant trend in the findings is that friendship at work negatively impacts work stress. Illustratively, nursing, radiology, and technology professionals who maintained secure relations over time reported lower stress levels than those with tenuous friendships (Shin & Lee, 2016). WPF's desirable influence on job stress primarily lies in some former outcomes that can reduce how the latter is experienced. Individuals surrounded by peers and colleagues and receiving greater social support encounter reduced stress levels (De Nobile, McCormick, & Hoekman, 2013). Giao, Vuong, and Tushar (2020) posited that social support can mitigate the consequences of distressing encounters. According to the literature review, the manifestations and consequences of WPF could conceivably mitigate the adverse impact of work-related stressors on work performance.

H1: Workplace friendship negatively and significantly predicts job stress.

Workplace Friendship and Job Performance

Directly or indirectly, job performance remains one of the most extensively examined variables in the organisational behaviour literature. Colquitt et al. (2019) define it as how employee behaviour contributes to achieving organisational goals. In a synthesis study by Koopmans et al. (2013), job performance encompasses contextual, CWB, and task performance. The conversion of organisational resources into the products or services that constitute the organisation's output is the focus of task performance (Colquitt et al., 2019). The incumbent's job performance includes officially recognised activities integral to their duties (Landy & Conte, 2016). Contextual performance, or OCB, pertains to individuals' behaviour that harmonises with the psychological and corporate milieu in which the technical core operates (Robbins, Judge, & Breward, 2018). CWB is a voluntary action that substantially contravenes the organisation's norms and threatens the well-being of the organisation, employees, or both (Landy & Conte, 2016). The achievement of the organisation's goal is impeded by deliberate employee behaviour, including but not limited to substance misuse, workplace bullying, falsification of expense reporting, and absenteeism (Lawal, Babalola, & Ordu, 2019; Stephen P Robbins et al., 2018). CWB is gaining recognition as a separate dimension of individual job performance (Colquitt et al., 2019). It has not yet been widely incorporated into job performance measures.

WPF symbolises organisational characteristics such as group cohesion, teamwork, trust, recognition, workplace harmony, and cooperation (Gupta, 2020). These are theoretically and empirically linked in a beneficial direction with job performance. For example, cohesiveness has been positively implicated in role-related behaviour and helping (Im, Chung, & Yang, 2018). Teamwork and trust have a significant and robust connection with employee performance (Sanyal & Hisam, 2018). Positive correlations were found between negative emotions and work conflict, and decreased in-role and extra-role performance was predicted by passive negative emotions, such as guilt and sadness (Rispens & Demerouti, 2016). Interpersonal and organisational workplace deviance and job stress positively correlate with interpersonal conflict (Hasanati, Winarsunu, & Karina, 2018; Nappo, 2020).

The opportunity for WPF indicates the organisational recognition of the need for employees' belongingness (Pillemer & Rothbard, 2018). As exemplified

by the social exchange proposal, such a possibility leads to rewards for increased organisational commitment and participation that positively impact job performance. It has been widely documented that WPF, which manifests corporate support for employees and perceived organisational support, can predict job performance (Astuty & Udin, 2020), flourishing, thriving work engagement (Imran, Elahi, Abid, Ashfaq, & Ilyas, 2020) and job satisfaction (Maan, Abid, Butt, Ashfaq, & Ahmed, 2020). In scholarly investigations, employee well-being has been associated with efficient organisational functioning and job performance (Rufeng, Nan, & Jianqiang, 2023). WPF positively impacts job performance (Imaduddin, 2024; Khushk et al., 2022). Following evidence from empirical and theoretical reports, the following hypotheses were developed:

H2a: workplace friendship positively and significantly predicts task performance.

H2b: workplace friendship positively and significantly predicts contextual performance.

H2c: workplace friendship negatively and significantly predicts counterproductive work behaviour.

Job Stress and Job Performance

There has been considerable scholarly interest in the correlation between stress and job performance, possibly because work environments and tasks are rife with stressors that impact productive work behaviour. However, the relationship has been found to have inconsistent and contradicting results, which are nevertheless dominated by the conclusion that the former is undesirable and damaging to the latter's attainment. In comparison, Odunayo and Oladipupo (2016) found that job stress does not significantly affect OCB. Nisar and Rasheed (2020) state that it negatively impacts in- and extra-role performance. Job stress can both negatively (Batool et al., 2023; Pandey, 2020) and positively affect job performance (Amoako, Gyamfi, Emmanuel, & David, 2017). Besides, according to Gharib, Jamil, Ahmad, and Ghouse (2016), role ambiguity did not substantially impact work performance. However, Komari (2023) argued that the influence of work-related pressure on job performance is detrimental. The inverted-U hypothesis's association between job stress and job performance has been empirically supported in several studies (Amoako et al., 2017). This hypothesis (Landy &

Conte, 2016) posits that the degree of job stress provides a credible rationale for the conflicting associations frequently documented between job stress and job performance. High (extreme pressure) and low (boredom) stress levels are argued to impact performance negatively. Conversely, moderate levels of stress, which have the potential to enhance high motivation, energy, and attentiveness, are believed to improve performance. Therefore, it is hypothesised that:

> H3a: A high-stress level at work negatively and significantly predicts task and contextual performances while positively and significantly predicting counterproductive work behaviour.

> H3b: A moderate level of job stress positively and significantly predicts task and contextual performances while negatively and significantly predicting counterproductive work behaviour.

> H3c: A low level of job stress negatively and significantly predicts task and contextual performances while positively and significantly predicting counterproductive work behaviour.

Job Stress as a Mediator in Workplace Friendship - Job Performance Link

As the tend-and-befriend theory was further elaborated, several pertinent empirical findings suggested that job stress may mediate WPF and job performance. Various workplace variables are frequently reported to be mediated by job stress. Work-life balance and work-life quality are mediated, for instance, by job stress (Aruldoss, Kowalski, & Parayitam, 2021). Hayajneh et al. (2021) found that work satisfaction is mediated by organisational change and job stress. In addition, the relationship between work stress and performance and social support is also mediated by job stress (Giao et al., 2020). Moreover, Al-Homayan, Shamsudin, Subramaniam, and Islam (2013) found that job stress acts as a mediator between shift work, emotional demands, quantitative and physical demands, and the contextual job performance of nurses. Batool et al. (2023) study revealed that the negative impact of work-related stress on job performance is exacerbated by tension in the workplace. It is proposed that WPF positively affects job performance because it mitigates job tension, which has a detrimental effect on job performance. Therefore, it is hypothesised that:

> H4a: The relationship between workplace friendship and task performance is mediated by job stress.

H4b: The relationship between workplace friendship and contextual performance is mediated by job stress.

H4c: The relationship between workplace friendship and counterproductive work behaviour is mediated by job stress.
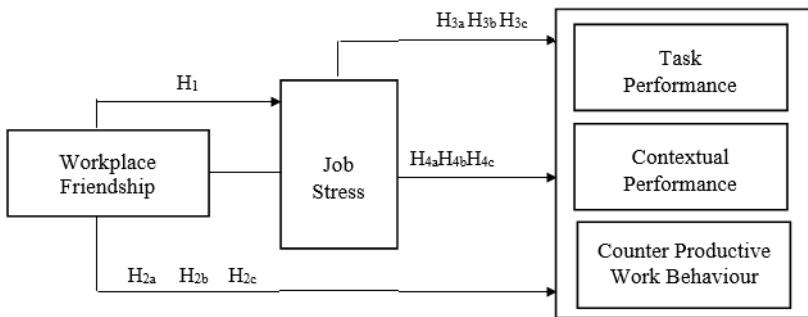

Figure 1: Conceptual framework

Figure 1 depicts the conceptual framework of this investigation, delineating the interconnections among WPF, job stress, and job performance. It is a causally recursive model since feedback effects are not expressed within WPF, and job stress impacts job performance relationships, not vice versa. In addition, job stress is proposed as a mediating variable in the WPF and job performance relationship.

Methods

Participants and Procedure

Public and private sector employees are reported to differ in perceived individual performance and prevalence of friendship (Balaban & Özsoy, 2016), job stress (Basu, Ray, & Paul, 2019), OCB (Ingrams, 2020), and CWB (Szostek, 2019). Consequently, this study was limited to making a focused contribution by studying public sector organisations. One hundred twenty-five employees of public organisations were sampled in Delta State, Nigeria. Participants comprise 24% men and 76% women, 75% married and 25% single. Their age means were 37.71 years (SD, 9.90; range, 37 years). Because the sample is literate, the self-report method utilised is credible. By including all employee categories in the sample, ecological validity was enhanced.

Participants received the self-report questionnaires at their workplaces. The self-report measure was adopted in this study as the variables examined are about respondent feeling, experience and cognition, which are likely to be better understood and revealed by the individual than any other, including supervisor or co-worker. More so, researchers (e.g., Corneille & Gawronski, 2024) conclude that skillfully used self-report measures are better instruments than implicit measures such as performance indicators. Within one week, 128 responses were received. However, after sorting out those that were not completed adequately, 125 were used for data analysis. The sample size adopted for the study followed Green's (1991) formula of 50+ 8m (m = number of the independent variable). According to Green's approach, a sample size of 74 is sufficient for this study, which has three independent variables. Green's approach is about the minimum sample size required for a study, while this study, with its sample size of 125, has responses sufficiently above the required minimum. To ensure statistical output validity, a five-point Likert scale format was utilised: five for "strongly agree," four for "agree," three for "undecided," two for "disagree," and one for "strongly disagree." This design was used to generate sufficient response variability. When scoring a low, medium, and high level of stress in the workplace, scores ranging from 1 to 2.5 (strongly disagree and disagree) were considered low. Scores between 2.6 and 3.5 were considered within the undecided range and not used for analysis. Scores between 3.6 and 4.3 were treated as a medium level of job stress, while scores between 4.4 and 5 were considered high.

Instrument

The Nielsen, Jex, and Adams (2000) 12-item scale was utilised for WPF, comprising the prevalence of friendship and opportunity dimensions, with six items each. It is a widely adopted measure of friendship at work with records of good psychometric properties (Nwanzu & Babalola, 2023; Yang & Shiu, 2023). Sample items from the scale are "I have formed strong friendships at work" and "I have the opportunity to get to know my co-workers". Job stress was measured on a 5-item one-dimensional scale (Lambert, Hogan, Camp, & Ventura, 2006). Ekawarna (2019) and Hasudungan and Mustika (2024) adopted the stress scale among adjunct university faculties and employees working in various companies in Indonesia, respectively, and indices of satisfactory reliability and validity were reported. Sampled items from the scale are "much time my job makes me very frustrated or angry." and "I am usually under much pressure when I am at work".

Individual job performance was measured on a 14-item scale by Koopmans et al. (2013), consisting of 4 items for task performance, 5 for contextual performance, and 5 for CWB. However, "I can separate the main issue from the side issue at work" was not used for data analysis as it correlated too strongly with the other items in the scale. The CWB subscale comprised five items that were reverse-coded. Sample items in the scales are "I keep in mind the results that I had to achieve in my work", "I took on challenging work tasks when available", and "I complained about unimportant matters at work". The CWB subscale comprised five items that were reverse-coded. Positive evaluations of the psychometric properties of the individual work performance questionnaire have contributed to its growing acceptance among researchers (Badran & Khaled, 2024; Nwanzu, Babalola, & Osazevbaru, 2023).

Design and Statistics

The cross-sectional design was utilised in this investigation as data was gathered from the sample simultaneously (Malhotra, Nunan, & Birks, 2017). Participants were selected by convenience sampling, which meets the public organisation's work. Regression analysis was used to test the hypotheses, and supporting assumptions were adhered to by the design and preliminary data analysis for this parametric statistical test. The collected data, for instance, were independent, thus satisfying the requirement for separate responses. The Likert scale format adopted satisfied the need for interval scaling. According to Field (2018), the Durbin-Watson test statistics indicated a range of 1.23 to 2.56, which falls within the acceptable threshold for autocorrelation. The moderate correlation between the predictor and criterion variables indicates that multicollinearity did not exist in the model.

Common-Method Variance

The data collection methods employed, i.e., self-administered surveys and cross-sectional design, are widely associated with possibly predisposing data analysis outcomes and common method bias (Bozionelos & Simmering, 2022; Nwanzu & Babalola, 2024). As Liang, Lin, Shiau, and Chen (2021) described, the common-method variance effect (CMV) is a phenomenon wherein correlations between measures are inflated or deflated. CMV influence was weakened in this study by applying some well-recommended design remedies (Memon et al.,

2023). These control methods are (a) having measure items presented in unambiguous language and layout; (b) having a physical separation between each focal factor and the respondents by presenting a separate sheet of paper, which was done to hinder the respondents' cognitive progression from one measure to the next; and (c) not collecting information about the identity of the respondents. The name or ID number of staff was not asked to guarantee the anonymity and confidentiality of the participants, encouraging and improving participation and honesty in their responses.

Control Variables.

WPF and job performance relationships analysis included education and job tenure as control variables. Human capital theory (Becker, 2009; Marginson, 2019) elucidates the significance of education, skills, experience, and length of employment in the present investigation. This theory proposes that increasing knowledge, skills, and abilities by education and job tenure improves job performance.

Ethical Consideration

Research and Ethics Committee of Delta State University, Nigeria, granted ethical approval. The purpose of the study was presented appropriately, along with the questionnaire. The voluntary nature of participation was made known to the participants. Additionally, they were apprised of their prerogative to withdraw from the study during the response phase. Since no form of identification was requested from the participants, anonymity and confidentiality were ensured. Participants were also assured that they would not suffer any wrath from their organisation or any other agent by participating in the study.

Results

Reliability and validity

Cronbach's alpha was utilised to assess the reliability and dependability of internal consistency. Table 1 contains the coefficients of the observed measuring instruments. Cronbach's alpha values varied from α = 0.66 to α = 0.83, indicating adequate reliability coefficients for the measuring instruments. Construct validity looks at the pattern of interrelationships among variables. The pattern

of correlations between the constructs that are conceptually similar or dissimilar is referred to as the test's convergent or divergent validity, respectively (Morling, 2021). The positive correlations between WPF, task performance, and contextual performance support the convergent validity of the adopted measures. The scales' divergent validity is supported by the negative correlations observed between WPF and job stress, job stress and task performance, job stress and contextual performance, and the positive association between job stress and CWB. These correlations are aligned in the expected direction and consistent with the theory.

Table 1. Mean, standard deviation, Cronbach's alpha and intercorrelation of the variables studied

	x̄	SD	A	Item	JT	ED	FO	FP	WF	JS	TP	CP
JT	11.19	8.03			1							
ED	1.91	0.29			0.15	1						
FO	3.68	0.56	0.83	12	-0.02	0.01	1					
FP	3.96	0.58	0.73	6	-0.01	0.07	0.56**	1				
WF	3.34	0.56	0.76	6	-0.06	0.04	0.74**	0.74**	1			
JS	2.37	0.87	0.77	5	-0.12	-0.07	-0.06	-0.01	-0.02	1		
TP	4.24	0.55	0.66	3	-0.13	-0.02	0.12	0.17	0.26*	-0.02	1	
CP	4.18	0.52	0.70	5	-0.00	0.15	0.32*	0.33*	0.31*	0.00	0.39*	1
CB	3.99	0.71	0.68	5	0.20*	-0.04	0.04	-0.01	0.04	0.28**	0.23**	-0.09

Note: job tenure (JT); education (ED); friendship opportunity (FO); friendship prevalence (FP); workplace friendship (WF); job stress (JS); task performance (TP); contextual performance (CP); counterproductive work behaviour (CWB); * = p < 0.05; ** = p < 0.01.

Test of hypotheses

A simple regression analysis predicting job stress using the dimensions of WPF, friendship opportunity, and friendship prevalence is presented in Table 2. The results indicate that the composite level of analysis, Hypothesis 1, was partially supported, as the relationship was negative but not statistically significant. For the dimensional analysis, friendship opportunity negatively predicts job stress, while friendship prevalence predicts job stress. However, the relationships were also not statistically significant. The *b* values (unstandardised coefficient) mean that the participants' job stress decreases by 3% for every one-unit increase in WPF. Participants' job stress was reduced by 10% for every one-unit increase in

friendship opportunities. For every increase in one unit's friendship prevalence, the participants' job stress decreases by 1%. The R^2 values indicate that WPF, friendship opportunity and friendship prevalence accounted for more than 1%, 5% and 1 % variance in job stress, respectively. Based on Cohen's (2013) criterion, the R^2 values indicate a small effect size.

Table 2. Simple regression analysis predicting job stress from WPF, friendship opportunity, and friendship prevalence.

					Job stress			
	B	SE	B	r^2	95% CI		DW
					UB	LB	
WF	-0.03	0.13	-0.02	0.001	-0.30	0.23	1.85
FO	-0.10	0.13	-0.06	0.005	0.36	0.16	1.82
FP	0.01	-0.10	0.01	0.001	-0.19	0.22	1.84

Note: workplace friendship (WF); friendship opportunity (FO); friendship prevalence (FP); Durbin Watson (DW)

Task performance, contextual performance, and the CWB of WPF and its two dimensions are all predicted by a simple regression analysis, as shown in Table 3. The statistics on Hypothesis 2a reveal that WPF positively and significantly predicts task performance. Analysis of Hypothesis 2b also shows that WPF positively and significantly predicts contextual performance, while statistics on Hypothesis 2c indicate that WPF negatively (non-significant) influences CWB. Additional analysis shows that friendship's opportunity substantially predicted contextual performance but negatively (but non-significantly) predicted task performance and CWB. Task and contextual performance are significantly and positively correlated with the prevalence of friendship, whereas CWB is positively correlated (but insignificantly).

Table 3. Simple regression analysis predicting job performance
from WPF, friendship opportunity, and friendship prevalence

	Job performance											
	Task Performance				Contextual Performance				Counterproductive Behaviour			Work
	b	SE	β	PC	B	SE	β	PC	b	SE	β	PC
WF	0.28	0.08	0.28*	0.28	0.28	-0.08	0.31*	0.31	0.01	0.14	0.06	0.06
JT	-0.01	-0.01	-0.10	-0.10	0.00	-0.00	0.00	0.00	0.02	0.01	0.21*	0.21
EDU	-0.12	0.20	-0.06	-0.06	0.14	0.19	0.01	0.07	-0.27	0.32	-0.08	-0.08
FO	0.14	0.09	-0.15	-0.15	0.31	0.08	0.34*	0.34	-0.02	0.14	-0.10	-0.01
JT	-0.01	0.01	-0.12	-0.12	-0.00	0.01	-0.01	-0.01	-0.02	0.01	0.20*	0.20
EDU	-0.08	0.20	-0.04	-0.04	0.18	0.18	0.09	0.09	0.26	0.32	-0.08	-0.08
FP	0.23	0.06	0.35*	0.34	.23	0.06	0.35	0.35*	0.01	0.11	0.09	0.09
JT	-0.00	0.01	0.02	0.02	.00	0.01	0.02	0.02	0.02	0.01	0.22	0.21
EDU	0.08	0.18	0.04	0.04	0.08	0.18	0.04	0.04	-0.30	0.32	-0.09	-0.09

Note: workplace friendship (WF); friendship opportunity (FO); friendship prevalence (FP); job tenure (JT); education (EDU); * p = < 0.05

Task performance, contextual performance, and CWB are all predicted by a simple regression analysis showing differences between low, moderate, and high work stress, as shown in Table 4. There is a positive and meaningful correlation between CWB and a high level of job stress but an insignificant negative association with contextual performance, according to the statistics analysed for Hypothesis 3a. Statistical analysis of Hypothesis 3b revealed an insignificant positive correlation between medium job stress and task performance, contextual performance, and CWB. Hypothesis 3c report demonstrated that low job stress correlates significantly positively with CWB but has insignificant negative effects on task and contextual performance.

Table 4. Simple regression analysis predicting task performance, contextual performance, and counterproductive behaviour from job stress

| | Job performance | | | | | | | | | | | |
| | Task Performance | | | | Contextual Performance | | | | Counterproductive behaviour | | | work |
	B	SE	β	R^2	B	SE	β	R^2	B	SE	β	R^2
HS	-1.14	0.44	-0.67**	0.45	-0.14	0.37	-0.13*	-0.10	0.82	0.20	0.82**	0.68
MS	0.27	0.28	0.23*	0.05	0.19	0.30	0.15*	0.02	0.34	0.18	0.43**	0.18
LS	-0.00	-0.01	-0.00	0.00	-0.05	0.14	-0.04	0.00	0.28	0.14	0.19*	0.03

Note: high job stress (HS), moderate job stress (MS), low job stress (LS), Durbin Watson (DW); ** p = < 0.01; * p = < 0.05

Almost every mediation discussion refers to Baron and Kenny (1986) as a basis, and the present study is no exception. However, the current study identified a weakness in the non-recognition of the possibility of positive and negative relationships within a model. Since the present study model included positive and negative relationships, a proposed and adopted scheme interprets "mediation."

Relationships between WPF, friendship opportunities, friendship prevalence, and job performance are mediated by job stress, as shown in Table 5. Comparing the mediating effect of job stress on the association between WPF and task performance did not decrease the zero-order correlation (ZOC) value of β. According to Baron and Kenny (1986), the impact of mediation exists when there is a sufficient reduction in the predictor's β compared to its ZOC. The decrease in predictor β is likely when the predictor and mediator are hypothesised to be related to the variable of the criteria in the same positive direction. It is unlikely to be reduced when the predictor and mediator variables are hypothesised or expected to correlate with the criteria variable in opposite directions (positive and negative). In the latter circumstance, mediation could be interpreted to occur when there is no reduction in the predictor's β value compared to its ZOC or an increase in the predictor's β value compared to its ZOC. Therefore, a statistic in Table 5 revealed that the relationship between WPF, friendship opportunity, friendship prevalence, task performance, contextual performance and CWB was mediated by work stress.

Table 5. Mediation effect of job stress on the relationship between
WPF and job performance

	Task Performance			Contextual Performance			Counterproductive work behaviour		
	β	T	ZOC	β	T	ZOC	β	T	ZOC
WF	0.26*	2.99	0.26	0.31*	3.66	0.31	0.05	0.24	0.04
JS	-0.01	-0.17	-0.02	0.01	0.09	0.00	0.28*	3.26	0.28
FO	0.12	1.40	0.12	0.33*	3.91	0.33	0.06	0.73	0.04
JS	-0.01	-0.12	-0.02	0.02	0.27	0.00	0.28*	3.29	0.28
FP	0.19*	2.19	0.19	0.33*	3.94	0.33	-0.01	-0.14	-0.01
JS	-0.02	-0.26	-0.02	-0.00	-0.04	0.00	0.28*	3.25	0.28

Note: workplace friendship (WF); Friendship opportunity (FO); Friendship prevalence (FP); Job stress (JS); Zero-order correlation (ZOC); * p = < 0.05.

The relationship between WPF and task performance, contextual performance and CWB is illustrated in Figure 2, where job stress acts as a mediator. With task performance having a direct effect, ZOC, = 0.26; Indirect effect, β = 0.26; Contextual performance had a direct effect, ZOC, = 0.31; indirect effect, β= 0.31; and CWB showed a direct effect, ZOC, = 0.04; indirect effect, β = 0.05.
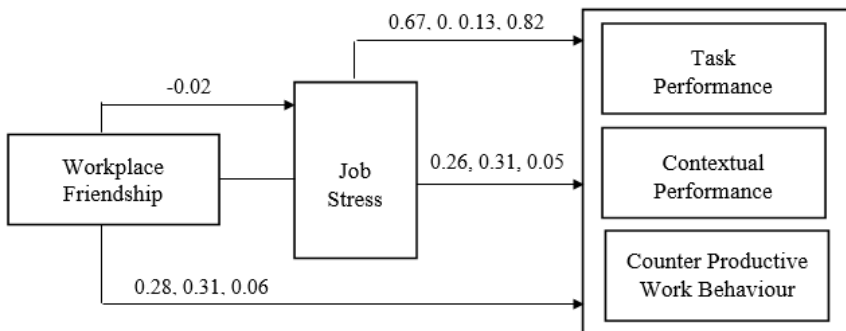

Figure 2: Interactions of WPF, job stress and job performance

Discussion

This study examines the link between WPF and job performance, focusing on the mediating role of job stress. Existing literature also examines job stress and a hostile workplace experience to mediate positive workplace experiences (WPF and job performance). Few hypotheses developed on the various concerns received confirmation from data analysis, while some were not confirmed, revealing valuable trends. For example, the relationship between friendship in the workplace, friendship opportunities, and job stress were not significant but harmful. Previous research (Shin & Lee, 2016), empirical evaluations (Wojciechowski, 2019), and the tend-and-befriend theory (Taylor, 2006, 2012), which posits a negative correlation between WPF and job stress, are consistent with these results. With positive experiences like resources, social support, and recognition reflected in the WPF composite, it is anticipated that the WPF would positively impact job stress. Each of the skills can prevent reduced stressors and their consequences. However, it was unexpected that the prevalence of friendships on the job positively correlates with job stress, although several empirical studies have produced contradictory results regarding the correlation between employee outcomes and friendship (e.g., Choi & Ko, 2020). This explanation underscores the necessity for further research to address the consequences of WPF.

Extensive research has established WPF's positive impact on job performance (Chang, Wu, Mui, & Lin, 2018; Chao, 2018; Khushk et al., 2022). WPF predicts job performance in an organisationally desirable direction. Specifically, it positively affects task and contextual performances while negatively affecting CWB. The same trend of findings was observed for friendship opportunity and friendship prevalence. The results above are consistent with affective event theory (Weiss & Cropanzano, 1996), which posits that workplace incidents like WPF, job performance and other workplace-related behaviours trigger employee emotional responses. These results were expected, as WPF is well documented to positively impact job satisfaction and organisational commitment, with organisationally desirable job performance implications. Similarly, several studies have identified that WPF is inversely related to the intention to quit and significantly hinders job performance. Therefore, WPF is characterised by factors that create and foster an enabling environment for job performance.

CWB, task performance, and contextual performance were all significantly impacted by job stress, which produced intriguing results. As hypothesised, there

is an inverse relationship between high levels of job stress and task and contextual performance, while an inverse relationship exists with CWB. However, the correlation was not significant for contextual performance. Moderate job stress correlates positively with task and contextual performance, as assumed. In contrast to expectations, however, there is a positive correlation between moderate stress and CWB. Also, as predicted, low levels of job stress correlate negatively with contextual task performance and positively with CWB. As for the relationship between job stress and performance, the analyses support the inverted U hypothesis. The inverted U theory states that performance increases as arousal (or pressure) increases. However, performance declines only up to a certain point when arousal becomes too high (Landy & Conte, 2016). Some researchers (Amoako et al., 2017) have also reported support for various aspects of the inverted-U hypothesis. The non-significant observations for the relationships are plausibly a function of the meagre sample size that resulted from splitting the participants into various levels of job stress. The small effect sizes obtained in this study also supported the above explanation.

The thought-provoking nature of the relationship between job performance and the mediating effect of job stress on the WPF is evident. The relationship between WPF and job performance exhibited value-b equal to or greater than the zero-order correlation when job stress was under control. It agrees with the tend-and-befriends theory, which states that people form a bond as a mitigating response to stressors' negative consequences in a stressful situation. Nevertheless, the outcome contradicts one of Baron and Kenny's (1986) mediation processes, which posits that when the mediator variable is controlled, a significant correlation between the predictor and criterion variables is no longer meaningful for mediation.

The study revealed that Baron and Kenny's (1986) mediation interpretation approach is suitable when the predictor and mediator are expected to relate positively with the criterion variable. However, they are unsuitable when the predictor and mediator variables are hypothesised or expected to correlate with the criterion variable in opposite directions (positive and negative) or when the predictor and mediator variables are hypothesised or expected to relate negatively to the criterion variable. The various relationships proposed were either positive versus malicious or harmful versus negative, and such relationships were not accommodated in Baron and Kenny's (1986) approach. It is logical to suggest that controlling job stress in WPF with task performance and contextual performance would increase or remain constant rather than decrease.

The findings of this study from the mediation analysis were consistent with the above proposals, which informed the mediation analysis results as the sample size has a power of 80% when the effect size is medium. However, the effect size statistics observed in this study were small, which indicates that the adopted sample is not likely to detect a "significance" even when it does exist. This limitation with the apparent sample size explained why virtually all the results obtained were in the predicted directions, but only a few were significant. Similarly, the correlation between friendships at work and CWB is expected to increase. In summary, stress is interpreted to mediate WPF with task performance, contextual performance, and CWB.

Implication and Recommendation

Implications of this research include confirmation, model clarification, and theory development. First, the research identified the limitations of the mediation analysis approach developed by Baron and Kenny (1986). It clarifies that the plan does not incorporate an interpretation of the outcome of the mediation analysis when the proposed mediator, such as stress at work, has a negative connotation. Additionally, predictors, such as WPF and criterion variables (e.g., job performance), are of positive intention. Edwards (2010) states the importance of clarifying theories and models and remarks that organisational research would make better progress for theory development if attention is committed to refining theories and researching approaches that create boundaries and limitations. Second, an overwhelming body of research suggests a positive correlation between WPF and job performance (Chang et al., 2018; Nougarou, 2017). WPF significantly and positively predict job performance, showing that the current study validated the tend-and-befriend theory.

Third, the relationship model encompassing job stress and job performance at the high, medium, and low levels supports the inverted U-shaped hypothesis regarding this relationship. Consensus and validation of the tend-and-befriend theory are provided by the results indicating that WPF mediates the relationship between job-related stress and job performance and job stress, which was negatively predicted. This study thus adds to a body of research that supports a line of conclusions that may inspire middle-range theories on the link between WPF and job performance.

Recommendation for practice

The recommendation for practice is derived from the preceding observations. The negative predictive relationship of WPF with job stress suggests an organisationally desirable influence. They imply that increasing the employees' experience of WPF would decrease job stress. Employee well-being is inversely correlated with job stress, undermining the organisation's effectiveness. Both high and low levels of job stress negatively impact performance. HR professionals' inclusion of WPF traits as part of the candidate's recruitment and selection processes would create an environment that tends toward friendship. However, the caveat avoids creating WPF characterised by nepotism and romance as detrimental to organisational health. Management must harness the valuable potential of friendship on the job through policies and programmes such as social activities within and outside the workplace and team-building activities. Managers and supervisors should exhibit behaviour that enhances WPF. Such actions could include regular interaction with subordinates, not comparing aides against one another, and being impartial and accessible to the assistants.

A moderate level of stress on the job can be achieved through training and retraining employees, which would equip them to perform their tasks with ease. On the contrary, moderate job stress impacts the direction of job performance in an organisationally desirable course. It has implications for organisational professionals to gauge the level of stress that employees are experiencing. Ensure it is neither too high nor too low but enough to motivate employees' productive work behaviour and maintain their well-being.

Limitations

The causal relationship could not be identified or comprehended due to the cross-sectional study design. Subsequent research should investigate longitudinal designs and field experiments to elucidate these phenomena. Significant results can only be detected by a moderate sample size relative to the population effect size. This principle is particularly applicable to the analysis of job stress levels. Further research on job performance, WPF, and job stress should employ a sample size capable of discerning a "significance" even with a small population effect size.

The interpretation of the mediation results offered was at variance with an aspect of Baron and Kenny's (1986) widely adopted recommendation. The devi-

ation explains that the predictor variable correlates positively with the criterion variable, while the mediator variable correlates negatively with the criterion variable. More studies should test the interpretation approach offered in the present study, as there was a composite analysis for WPF, while none for job performance. There was no combined job performance analysis because the task and the contextual dimension of job performance express positive behavioural outcomes, while CWB expresses negativity. Therefore, it was not appropriate to combine the scores of the aspects to form a composite variable. Finally, since both stress (Mensah, 2021; Yan et al., 2021) and WPF (Kumar & Mondal, 2020) are experienced differently by men and women, future studies should control participants' gender. Further studies should also examine other demographic variables, such as age and organisational position, as they are implicated in job stress (Stefaniak, Blaxton, & Bergeman, 2021). Indeed, demographic factors should be examined as a dimension in future studies.

References / Kaynaklar

Abbasi, A. & Wan Ismail, W. K. 2023. Linking organisational citizenship behaviour and organisational trust towards reducing workplace deviance behaviour in higher education. *Cogent Social Sciences*, 9 (1): 2157538.

Al-Homayan, A. M., Shamsudin, F. M., Subramaniam, C., & Islam, R. 2013. The mediating effects of job stress on the relationship between job demands-resources and nurses' performance in public sector hospitals in Saudi Arabia. *Australian Journal of Basic and Applied Sciences*, 7 (10): 52-62.

Amoako, E. P., Gyamfi, O. A., Emmanuel, A. K., & David, B. 2017. The effect of occupational stress on job performance at Aspet A. Company Limited. *Global Journal of Arts, Humanities and Social Sciences,* 5 (8): 1-17.

Aruldoss, A., Kowalski, K. B., & Parayitam, S. 2021. The relationship between quality of work life and work-life-balance mediating role of job stress, job satisfaction and job commitment: Evidence from India. *Journal of Advances in Management Research*, 18 (1): 36-62.

Astuty, I. & Udin, U. 2020. The effect of perceived organisational support and transformational leadership on affective commitment and employee performance. *The Journal of Asian Finance, Economics and Business*, 7 (10): 401-411.

Badran, F. M. M. & Khaled, E. M. 2024. Workplace friendship and its influence on organisational commitment among staff nurses. *Egyptian Journal of Health Care,* 15 (2): 1201-1213.

Balaban, Ö. & Özsoy, E. 2016. Effects of workplace friendship on individual outcomes. *Bartin University Journal of Faculty of Economics and Administrative Sciences/ Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 7 (13): 326-338.

Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51 (6): 1173-1182.

Basu, S., Ray, S., & Paul, K. C. 2019. A study on stress in public and private sector bank employees in West Bengal. *International Journal of Research and Scientific Innovation*, 6 (12): 93-97.

Batool, A., Ayub, U., Fazal, S., Ahmed, I., Laghari, M. S. N., & Batool, A. 2023. The impact of occupational stress with the mediating factor of workplace stress on employees' job performance: A case of banking sector of Pakistan. *Journal of Positive School Psychology*, 7 (4): 1664-1679.

Becker, G. S. 2009. *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.

Bozionelos, N. & Simmering, M. J. 2022. Methodological threat or myth? Evaluating the current state of evidence on common-method variance in human resource management research. *Human Resource Management Journal,* 32 (1): 194-215.

Buchanan, D. A. & Huczynski, A. 2019. *Organisational behaviour*. Pearson UK.

Chang, C.-M., Wu, C.-S., Mui, W.-C., & Lin, Y.-H. 2018. The impact of perceived supervisor support and workplace friendship on organisational citizenship behaviour in sport centre. *International Journal of Organisational Innovation,* 10 (4): 140-149.

Chao, C. 2018. *Does it work? Research on the relationship between workplace friendship and job performance: The organisational commitment as mediator.* **2018 3rd International Conference on Education, E-learning and Management Technology,** *EEMT 2018)* (pp. 67-71): Atlantis Press.

Choi, Y. & Ko, S.-H. 2020. Roses with or without thorns? A theoretical model of workplace friendship. *Cogent Psychology,* 7 (1): 1761041.

Colquitt, J. A., Lepine, J. A., & Wesson, M. J. 2019. *Organisational behaviour: Improving performance and commitment in the workplace*, (6th ed.). McGraw-Hill.

Corneille, O. & Gawronski, B. 2024. Self-reports are better measurement instruments than implicit measures. *Nature Reviews Psychology, 3* (12): 835-846.

De Nobile, J., McCormick, J., & Hoekman, K. 2013. Organisational communication and occupational stress in Australian Catholic primary schools. *Journal of Educational Administration,* 51 (6): 744-767.

Edwards, J. R. 2010. Reconsidering theoretical progress in organisational and management research. *Organisational Research Methods, 13* (4): 615-619.

Ekawarna, F. K. 2019. The effect of perception of organisational politics and work-family conflict on job stress and intention to quit: The case of adjunct faculty members in one state university. *International Journal of Scientific and Technology Research, 8* (10): 322-333.

Fasbender, U., Burmeister, A., & Wang, M. 2023. Managing the risks and side effects of workplace friendships: The moderating role of workplace friendship self-efficacy. *Journal of Vocational Behaviour, 143*: 103875.

Field, A. 2018. *Discovering statistics using IBM SPSS* (5th ed.). SAGE Publications.

Gharib, M., Jamil, S. A., Ahmad, M., & Ghouse, S. 2016. The impact of job stress on job performance: A case study on academic staff at Dhofar University. *International Journal of Economic Research, 13* (1): 21-33.

Giao, H. N. K., Vuong, B. N., & Tushar, H. 2020. The impact of social support on job-related behaviours through the mediating role of job stress and the moderating

role of locus of control: Empirical evidence from the Vietnamese banking industry. *Cogent Business and Management, 7* (1): 1841359.

Green, S. B. 1991. How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research, 26* (3): 499-510.

Gupta, A. K. 2020. Workplace friendships: An affirmative effect on the organisational obligation. *International Journal on Emerging Technologies, 11* (3): 526-530.

Hasanati, N., Winarsunu, T., & Karina, V. D. 2018. The influence of interpersonal conflict on counterproductive work behaviour mediated by job stress. *Advances in Social Science, Education and Humanities Research, 133*: 276-282.

Hasudungan, G. N. & Mustika, M. D. 2024. The role of personality on resilience-moderated work stress in employees. *Jurnal Ilmiah Psikologi Terapan, 12* (1): 53-59.

Hayajneh, N., Suifan, T., Obeidat, B., Abuhashesh, M., Alshurideh, M., & Masadeh, R. 2021. The relationship between organisational changes and job satisfaction through the mediating role of job stress in the Jordanian telecommunication sector. *Management Science Letters, 11* (1): 315-326.

Im, S., Chung, Y., & Yang, J. 2018. The mediating roles of happiness and cohesion in the relationship between employee volunteerism and job performance. *International Journal of Environmental Research and Public Health, 15* (12): 2903.

Imaduddin, I. 2024. The relationship between workplace friendship and workplace well-being on productivity. *Journal La Bisecoman, 5* (1): 108-118.

Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. 2020. Impact of perceived organisational support on work engagement: mediating mechanism of thriving and flourishing. *Journal of Open Innovation: Technology, Market, and Complexity, 6* (3): 82.

Ingrams, A. 2020. Organisational citizenship behaviour in the public and private sectors: A multilevel test of public service motivation and traditional antecedents. *Review of Public Personnel Administration, 40* (2): 222-244.

Jex, S. M. & Britt, T. W. 2014. *Organisational psychology: A scientist-practitioner approach*. John Wiley & Sons.

Jiang, L., Xu, X., & Hu, X. 2019. Can gossip buffer the effect of job insecurity on workplace friendships? *International Journal of Environmental Research and Public Health, 16* (7): 1285.

Khaleel, M., Chelliah, S., Khalid, J., Jamil, M., & Manzoor, F. 2016. Employee engagement as an outcome of friendship at workplace: Moderating role of job embeddedness. *International Journal of Academic Research in Business and Social Sciences, 6* (6): 1-6.

Khushk, A., Zhiying, L., Yi, X., Zengtian, Z., & Hui, Y. 2022. Effects of workplace envy on task performance in a banking sector: Mediating role of counterproductive work behaviour. *Arabian Journal of Business and Management Review*, *12* (9): 462.

Komari, N. 2023. Effect of job pressure on employee performance in Indonesia. *Enrichment: Journal of Management*, *13* (3): 1883-1892.

Koopmans, L., Bernaards, C., Hildebrandt, V., Van Buuren, S., Van Der Beek, A. J., & De Vet, H. C. W. 2013. Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, *62* (1): 6-28.

Kumar, M. & Mondal, A. 2020. Gender differences in friendship pattern and relationship to self-esteem among college students. *International Journal of Indian Psychology*, 8 (3): 1518-1531.

Lambert, E. G., Hogan, N. L., Camp, S. D., & Ventura, L. A. 2006. The impact of work-family conflict on correctional staff: A preliminary study. *Criminology and Criminal Justice*, 6 (4): 371-387.

Landy, F. J. & Conte, J. M. 2016. *Work in the 21st century: An introduction to industrial and organisational psychology*. John Wiley & Sons.

Lawal, A. M., Babalola, S. S., & Ordu, U. F. 2019. Examining age, pay satisfaction and intent to leave in counterproductive work behaviour among university support staff. *Bangladesh e-Journal of Sociology*, 16 (2): 194-205.

Lee, S., Oh, N., & Juravich, M. 2016. Examination of formal and informal relationships between service provider and client for ticket sales outsourcing in the United States. *Journal of Relationship Marketing*, 15 (1-2): 62-80.

Liang, T.-P., Lin, Y.-L., Shiau, W.-L., & Chen, S.-F. 2021. Investigating common-method bias via an EEG study of the flow experience in website design. *Journal of Electronic Commerce Research*, 22 (4): 305-321.

Ma, P., Zhang, L., Dong, H., & Yu, J. 2023. The relationships between teachers' emotional labour and display rules, trait emotions, exhaustion, and classroom emotional climate. *Frontiers in Psychology*, 14: 957856.

Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., & Ahmed, S. 2020. Perceived organisational support and job satisfaction: A moderated mediation model of proactive personality and psychological empowerment. *Future Business Journal*, 6 (1): 21.

Malhotra, N. K., Nunan, D., & Birks, D. F. 2017. *Marketing research: An applied approach.* Pearson.

Marginson, S. 2019. Limitations of human capital theory. *Studies in Higher Education*, 44 (2): 287-301.

McShane, S. L. & Von Glinow, M. A. 2019. *Organisational behaviour* (4th ed.). McGraw-Hill Education.

Memon, M. A., Thurasamy, R., Cheah, J.-H., Ting, H., Chuah, F., & Cham, T.-H. 2023. Addressing common-method bias, operationalisation, sampling, and data collection issues in quantitative research: Review and recommendations. *Journal of Applied Structural Equation Modelling*, 7 (2): i-xiv.

Mensah, A. 2021. Job stress and mental well-being among working men and women in Europe: The mediating role of social support. *International Journal of Environmental Research and Public Health*, 18 (5).

Morling, B. 2021. *Research methods in psychology: Evaluating a world of information*. WW Norton.

Nappo, N. 2020. Job stress and interpersonal relationships cross country evidence from the EU15: A correlation analysis. *BMC Public Health*, 20 (1): 1143.

Nielsen, I. K., Jex, S. M., & Adams, G. A. 2000. Development and validation of scores on a two-dimensional workplace friendship scale. *Educational and Psychological Measurement*, 60 (4): 628-643.

Nisar, S. K. & Rasheed, M. I. 2020. Stress and performance: Investigating relationship between occupational stress, career satisfaction, and job performance of police employees. *Journal of Public Affairs,* 20 (1): e1986.

Nougarou, J. C. 2017. *The effect of workplace friendship, team-member exchange and leader-member exchange on organisational citizenship behaviour.* Culminating Projects in Psychology.

Nwanzu, C. L. & Babalola, S. S. 2023. The role of workplace friendship in cultural intelligence and quality of work-life: A cross-sectional study. *Annals of Spiru Haret University: Economic Series*, 23 (1): 186-208.

Nwanzu, C. L. & Babalola, S. S. 2024. Impact of ethical leadership and psychological ownership on employees' voluntary pro-environmental behaviour: A case study of selected organisations in Delta State Nigeria. *Environment, Development and Sustainability*, 1-21.

Nwanzu, C. L., Babalola, S. S., & Osazevbaru, H. O. 2023. Effect of public service motivation and psychological empowerment on individual work performance of public sector employees. *African Journal of Business and Economic Research,* 18 (2): 109 – 128.

Odunayo, T. A. & Oladipupo, L. 2016. The influence of perceived occupational stress on the organisational citizenship behaviour of bankers in Ikeja, Lagos State. *European Scientific Journal*, 12 (17): 449-485.

Pandey, D. L. 2020. Work stress and employee performance: An assessment of impact of work stress. *International Research Journal of Human Resource and Social Sciences*, 7 (5): 124-135.

Pillemer, J. & Rothbard, N. P. 2018. Friends without benefits: Understanding the dark sides of workplace friendship. *Academy of Management Review*, 43 (4): 635-660.

Pranata, S. P. K. A., Yasa, P. N. S., & Sitiari, N. W. 2020. The effect of organisational citizenship Behaviour (OCB) towards work stress and performance of employees in income Agency Regional City of Denpasar. *Jurnal Ekonomi and Bisnis JAGADIT-HA*, 7 (1): 65-72.

Rispens, S., & Demerouti, E. 2016. Conflict at work, negative emotions, and performance: A diary study. *Negotiation and Conflict Management Research*, 9 (2): 103-119.

Robbins, S. P. & Judge, T. A. 2022. *Organisational behaviour* (Updated Global Edition ed.). Pearson Higher Education.

Robbins, S. P., Judge, T. A., & Breward, K. 2018. *Essentials of organisational behaviour* (First Canadian Edition ed.). Pearson Education.

Rufeng, L., Nan, Z. & Jianqiang, Z. 2023. Impact of employee well-being on organisational performance in workplace. *International Journal of Management and Human Science*, 7 (2): 87-95.

Sanchez-Gomez, M. & Breso, E. 2020. In pursuit of work performance: Testing the contribution of emotional intelligence and burnout. *International Journal of Environmental Research and Public Health*, 17 (15): 5373.

Sanyal, S. & Hisam, M. W. 2018. The impact of teamwork on work performance of employees: A study of faculty members in Dhofar University. *IOSR Journal of Business and Management*, 20 (3): 15-22.

Shin, S. Y. & Lee, S. G. 2016. Effects of hospital workers' friendship networks on job stress. *PLOS ONE*, 11 (2): e0149428.

Singh, V. & Srivastava, U. R. 2020. Role of workplace friendship in mental health of hospitality employees. *Psychology and Behavioural Science International Journal*, 15 (4): 555916.

Sopiah, S., Wahyudi, H. D., & Sangadji, E. M. 2023. The effect of perceived organisational support on job performance through job engagement. *Journal of Management, Economics, and Industrial Organisation*, 7 (3): 16-33.

Stefaniak, A. R., Blaxton, J. M., & Bergeman, C. S. 2021. Age differences in types and perceptions of daily stress. *The International Journal of Aging and Human Development*, 94 (2): 215-233.

Sulphey, M. M., AlKahtani, N. S., Senan, N. A. M., & Adow, A. H. E. 2024. A bibli-ometric study on organisation citizenship behaviour for the environment. *Global Journal of Environmental Science and Management*, 10 (2): 891-906.

Supriyanto, A. S., Ekowati, V. M., Haris, A., Soetjipto, B. E., Haryanto, M., Rudy, D., & Yahya, M. 2020. The effect of organisational citizenship behaviour on job satis-faction mediated with spiritual leadership. *International Journal of Business and Society*, 21 (2): 737-748.

Szostek, D. 2019. Counterproductive work behaviour: Comparison of the public and private sector. *Journal of Positive Management,* 9 (1): 3-17.

Taylor, S. E. 2006. Tend and befriend: Biobehavioural bases of affiliation under stress. *Current Directions in Psychological Science*, 15 (6): 273-277.

Taylor, S. E. 2012. Tend and befriend theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 32-49). Sage Publications Ltd.

Thamrin, R. M. H., Rahmawati, R., Rusmin Nuryadin, M., & Juniar, A. 2023. Quality of work life and work environment on organisational citizenship behaviour with job satisfaction as mediation. *International Journal of Scientific Research and Management,* 11 (01): 4468-4475.

von Dawans, B., Ditzen, B., Trueg, A., Fischbacher, U., & Heinrichs, M. 2019. Effects of acute stress on social behaviour in women. *Psychoneuroendocrinology*, 99: 137-144.

Weiss, H. M. & Cropanzano, R. 1996. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organisational behaviour: An annual series of analytical essays and critical reviews* (Vol. 18, pp. 1-74). US: Elsevier Science/JAI Press.

Wojciechowski, D. 2019. **How the friendship between nurses can reduce stress**. Ret-rieved from https://minoritynurse.com/how-friendships-between-nurses-can-redu-ce-stress/r

Wyandini, D. Z., Kokasih, H. M. E., & Faridah, I. 2023. Does workplace friendship contribute toward work engagement among employees of West Java's industrial area? *Indonesian Psychological Research,* 5 (1): 1-8.

Yan, S., Xu, R., Stratton, T. D., Kavcic, V., Luo, D., Hou, F., . . . Jiang, Y. 2021. Sex dif-ferences and psychological stress: Responses to the COVID-19 pandemic in China. *BMC Public Health*, 21 (1): 79.

Yang, F.-H., & Shiu, F.-J. 2023. Evaluating the impact of workplace friendship on social loafing in long-term care institutions: An empirical study. *Sustainability*, 15 (10): 7828.