

## INFLUENCE OF LEADERSHIP STYLES ON EMPLOYEES' PSYCHOLOGICAL HEALTH: MEDIATING ROLE OF MINDFULNESS

Maureen Chiegeonu Arukwe<sup>1</sup>, Justina Ifeyinwa Ejike<sup>1</sup>, Lovlyn Ekeowa Kelvin-Iloafu<sup>1</sup>,  
Chukwuebuka Ernest Nwankwo<sup>1</sup>, Nkechi Caroline Nkwonta<sup>1</sup>, Chiemelie Benneth  
Iloka<sup>2\*</sup>.

<sup>1</sup>University of Nigeria, Enugu Campus

<sup>2\*</sup>Enugu State University of Science and Technology

### Abstract

The psychological health of employees is one of the most vital factors that influence their overall performance. Therefore, understanding factors that influence employees' psychological health has always drawn enthusiasm in the academic world. For this study, the focus was on the influence of leadership style on the psychological health of employees as well as the mediating role of mindfulness. A quantitative study of 385 valid responses was conducted to attain these research objectives. Findings indicate that laissez-faire leadership style, transactional leadership style, and transformational leadership style influence the psychological health of employees. This relationship was found to be mediated by mindfulness. Thus, the study concluded that leadership has a direct positive influence on employees' psychological health, and this relationship is mediated by mindfulness.

**Keywords:** Employees, Laissez-Faire, Leadership, Mindfulness, Psychological Health, Transformational, Transactional

### 1. Introduction

The manner in which leadership is executed plays a crucial role in the management process, impacting various organizations and work environments. Leadership style encompasses an individual's attitudes, approaches, and characteristics while leading and managing others, such as teams or employees (Annuar et al., 2023). In recent years, the significance of leadership style has become more evident due to both external factors like global economic crises and internal factors like organizational diversity challenges faced by companies and corporate teams (West et al., 2011; Annuar et al., 2023). Corporations often struggle to handle these issues, relying heavily on leaders' critical thinking and management skills to address demands, foster collaboration among team members, and enhance overall employee happiness (West et al., 2011).

Ensuring employee happiness brings various benefits, including increased loyalty, productivity, and a decreased likelihood of turnover, leading to efficient task execution (Diener & Biswas-Diener, 2008). Effective leadership, as suggested by Mohammed et al. (2013), fosters favorable behaviors and attitudes among employees, particularly in the context of empowering leadership, where authority is shared with subordinates, boosting their intrinsic motivation (Srivastava et al., 2006). Employee personal traits significantly impact their workplace understanding and experience (Barrick et al., 2001).

Conversely, psychological health refers to maintaining a positive mental state that enables individuals to function efficiently (Annur et al., 2023). Various factors, including emotional, environmental, social, and economic factors, influence an individual's well-being. Psychological health extends beyond emotional experiences and is linked to an improved quality of life (Hu, 2020). Essentially, psychological health revolves around an individual's psychological state of mind, based on subjective experiences encompassing both positive and negative feelings (Wright & Bonett, 2007). According to Chang and Nguyen (2018), psychological health significantly impacts overall values and objectives. Enhanced psychological health and positive feelings among employees lead to increased productivity and contribute to the achievement of company objectives (Yang & Zhao, 2018). Consequently, individuals with higher psychological health and well-being are better equipped to deliver high-quality performance, positively influencing customer satisfaction (Hu, 2020).

When employed effectively, leadership style becomes a crucial tool in management, capable of elevating the organizational atmosphere, fostering employee connections, and enhancing overall service performance (Kozak & Uca, 2008). Managers are advised to consistently motivate their teams to embrace change, increase involvement, enhance performance, and make informed technical decisions. Successful managers lead by example, creatively solve problems, inspire a sense of responsibility in others, and make decisions that benefit individual employees and teams, ultimately improving the company's performance. Conversely, inadequate leadership can result in significant financial losses for the company, including absenteeism, high turnover rates, customer dissatisfaction, and poor outcomes, posing a long-term threat to overall success (Lim & Boger, 2005). As leaders play a pivotal role in businesses, their attitudes directly impact the habits, performance, and overall well-being of their employees (Avolio et al., 2009).

The substantial impact of psychological health on an individual's physical well-being and organizational engagement highlights the necessity for in-depth exploration. Consequently, an increasing body of literature has delved into examining the relationship and influence of transformational leadership on psychological health (Berger et al., 2019; Khan et al., 2020). While a distinct connection between these variables has been established (Berger et al., 2019; Khan et al., 2020), there is a lack of studies investigating this relationship with mindfulness as a mediating factor. While one might argue that the relationship between performance and psychological health is minimal, especially in favor of employee performance, most studies have overlooked the importance of examining employees' psychological health and overall well-being. Furthermore, employee psychological well-being has been perceived more as a mediator or additional consequence to explain the relationship between leadership and performance in leadership research, with employee happiness often disregarded as an insignificant outcome (Montano et al., 2017). This study aims to address this gap by exploring the mediating role of mindfulness in the relationship between leadership styles and employees' psychological health.

Overall, the aim of this study is centred on assessing the influence of leadership style on employee's mental health and the mediating role of mindfulness. This aim is further broken down into the following objectives:

1. To assess the influence of transformational leadership style on employee's psychological health.
2. To determine the influence of transactional leadership style on employee's psychological health.
3. To explicate the influence of laissez-faire leadership style on employee's psychological health.
- 4a. To assess whether the influence of transformational leadership style on employee's psychological health is mediated by mindfulness.
- 4b. To determine whether the influence of transactional leadership style on employee's psychological health is mediated by mindfulness.
- 4c. To explicate whether the influence of laissez-faire leadership style on employee's psychological health is mediated by mindfulness.

## 2. LITERATURE REVIEW

### 2.1. Transformational leadership style and psychological health

Several studies have explored the direct correlation between transformational leadership and the psychological well-being of employees. To delve into this discussion, it is crucial to start with a definition of transformational leadership. While various definitions exist, a majority of authors (e.g., Avolio & Bass, 1995; Avolio et al., 1999; Avolio et al., 1991; Bass & Avolio, 1993, 1994; Bass et al., 1996; Hater & Bass, 1988; Yammarino & Bass, 1990) agree on four dimensions of transformational leadership. The first dimension is idealised influence, encompassing both the leader's characteristics perceived by followers and the behaviours that align with being a role model and doing what is ethically right. When leaders exhibit strong values and act in accordance with them, followers tend to rate them highly. The second dimension, inspirational motivation, involves setting high expectations and effectively communicating a positive vision. Intellectual stimulation, the third dimension, emphasises openness to novel task approaches and encouragement of creative thinking in followers. The final dimension, individual consideration, centres on a leader's ability to treat employees as individuals, dedicating time to coach and assist in skill development, showing genuine care, and expressing compassion.

Regarding the understanding of the relationship between transformational leadership and employees' psychological health, numerous studies have pursued this objective. Hu (2020) examined the connection between transformational leadership and psychological well-being among frontline employees in Chinese commercial banks. The findings indicated a direct positive relationship between transformational leadership and the psychological health of frontline employees, with gender differences observed in the impact of transformational leadership style on psychological health. Similarly, Kim and Cruz (2022) conducted a review focusing on service-oriented staff in the service industry, establishing a positive influence of transformational leadership style on employees' psychological health. Gender and sector differences were also noted, with male employees and those in non-medical sectors reporting higher perceived psychological health than their female counterparts. However, the study by Lindert et al. (2022) in Germany did not reveal a direct relationship between transformational

leadership style and psychological health. Based on these observations, the hypothesis is proposed that:

**H1.** *Transformational leadership style influences employees' psychological health.*

## **2.2. Transactional leadership style and psychological health**

Over the years, the transactional approach to leadership has garnered considerable attention from scholars because of its potential impact on workplace health and safety. Transactional leadership is a leadership style that places emphasis on performance expectations, structured procedures, and the use of rewards as means to secure compliance from employees (Bass & Riggio, 2006). Essentially, employees are compensated based on the company's assessment of their performance. It is also characterised as a series of routine transactions between leaders and followers (Pater, 2004), involving an exchange process where leaders and subordinates swap valuable things or information (Burns, 2012).

Numerous studies have explored the impact of transactional leadership styles on the psychological health of employees. In the study by Smith et al. (2016), transactional leaders were noted for setting clear rules and expectations, fostering adherence to safety protocols, and thereby reducing the likelihood of hazards and accidents. This strict approach also cultivates a culture of accountability, with clearly defined employee responsibilities (Smith et al., 2016). Lingard et al. (2019) suggested that transactional leaders often use systematic recognition or rewards to ensure adherence to established rules and expectations, motivating employees to prioritise their safety and health. This incentivization not only motivates employees to be mindful of their psychological safety and health but also instills a sense of value for their overall well-being through an organisational culture that prioritises workplace safety (Lingard et al., 2019).

On a similar note, Kapp (2012) highlighted that the structured and task-oriented focus of transactional leadership can lead to a decrease in workplace incidents and accidents. However, conflicting findings exist, with studies indicating negative or no relationships between transactional leadership and employees' psychological health. Lu and Yang (2010) emphasised that the rigid nature of transactional leadership, with its emphasis on compliance rather than adaptability, may pose challenges in rapidly changing work environments. For example, overreliance on structured procedures in such dynamic settings can compromise safety measures, negatively impacting employees' psychological health (Lu & Yang, 2010). Molnar et al. (2019) also pointed out that transactional leaders may be less concerned about the psychological health of employees, as their strict adherence to predefined procedures and rules may discourage employees from speaking up about psychological health issues.

In a recent study by Parker et al. (2020), transactional leadership was revealed to prioritise meeting targets and adhering to procedures over the well-being and safety of employees, underscoring the need to examine the impact of leadership styles on employees' psychological health (Parker et al., 2020). This style creates a culture where employees are reluctant to speak out due to potential negative consequences, negatively affecting their overall psychological health (Chen & Liu, 2021), as they are compelled to prioritise the company's targets and rules even at the expense of their health.

**H2.** *Transactional leadership style influences employees' psychological health.*

### 2.3. Laissez-faire leadership style and psychological health

Laissez-faire leadership is often characterised as a state of "non-leadership" within an organization. As described by Bass and Avolio (1995), it represents the absence of leadership, involving a reluctance to intervene or make decisions. Laissez-faire leaders resist expressing opinions, avoid taking action, and are known to be absent when needed (Bass & Avolio, 1994; Judge & Piccolo, 2004; Hinkin & Schriesheim, 2008).

Numerous studies examining the consequences of the laissez-faire leadership style suggest various negative effects on employees (Bass & Avolio, 1997; Hinkin & Schriesheim, 2008; Skogstad et al., 2014; Hu et al., 2022; Parveen et al., 2022). However, there are also studies proposing that a laissez-faire leadership style may not necessarily result in negative outcomes in the workplace. For instance, in their investigation of the relationship between laissez-faire leadership and motivation, Chaudhry and Javed (2012) reported a positive but non-significant relationship with employee motivation. Conversely, Zareen et al. (2015) and Fiaz et al. (2017) substantiated a significant positive impact of laissez-faire leadership on motivation. Additionally, Pahi et al. (2018) affirmed the beneficial influence of laissez-faire leadership on doctors' commitment to service quality. Breevaart and Zacher (2019) demonstrated that leaders exhibiting both transformational and laissez-faire leadership foster higher trust among subordinates. Tong (2020) observed a positive effect of laissez-faire psychological leadership on organisational learning ability. Recent research by Oprea et al. (2022) identified a link between laissez-faire leadership and positive job-creating behaviors. Jamali et al. (2022) outlined a positive impact of laissez-faire leadership on faculty performance within academic institutions. Furthermore, Md. Rami et al. (2022) affirmed the advantageous effects of laissez-faire leadership on social capital. Given the discussions above, the hypothesis is proposed that:

**H<sub>3</sub>. Laissez-faire leadership style influences employees' psychological health.**

### 2.4. Mediating role of mindfulness on relationship between leadership style and psychological health

Mindfulness, broadly defined as "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 2005), involves focused awareness of the current moment, heightened attentiveness to internal and external stimuli, and a non-judgmental acceptance (Brown & Ryan, 2003; Baer et al., 2004). Glomb et al. (2011) have recently conceptualised mindfulness as receptive attention and awareness of present events and experiences, encompassing thoughts, sensations, and external stimuli within the social environment. While existing research supports the positive correlation between individual mindfulness and well-being (Good et al., 2016), Mah (2022) describes employee mindfulness as being receptively attentive and aware of events and experiences as they unfold in the present moment.

In the realm of organizational research, the focus has predominantly been on the intrapersonal effects of mindfulness and mindfulness-based interventions, as evidenced by works such as Hülshager et al. (2014, 2015), Roche et al. (2014), and Shonin et al. (2014). Surprisingly, the impact of mindfulness on interpersonal interactions and relationships has been largely overlooked in academic discourse (Good et al., 2016). However, interpersonal dynamics between leaders and followers constitute the essence of leadership (Northouse, 2013), making

it a particularly compelling subject for exploration. Despite its centrality, only a limited number of theoretical papers have delved into the role of mindfulness in leader-follower relationships, with works by Glomb et al. (2011) and Sauer and Kohls (2011) suggesting that mindfulness may enhance leaders' ability to navigate the multifaceted demands of leadership. Empirical validation in this domain remains in its early stages, with Reb et al. (2014) discovering, in two separate investigations, that followers under leaders with high levels of dispositional mindfulness reported elevated well-being and job performance. Psychological need satisfaction was identified as a mediating factor in the connection between the self-reported dispositional mindfulness of the leader and outcomes for the followers. In a parallel vein, a recent study by Reb et al. (2018) revealed a positive association between leader mindfulness and follower-reported quality of Leader-Member Exchange (LMX). In a study by Walsh and Arnold (2020), the focus was on exploring the role of employee mindfulness in moderating the relationship between leadership style and psychological health (well-being). The findings showed that employee mindfulness positively moderated the influence of transformational leadership on employees' psychological health (Mah, 2022). Given these discussions, the following hypotheses have been developed:

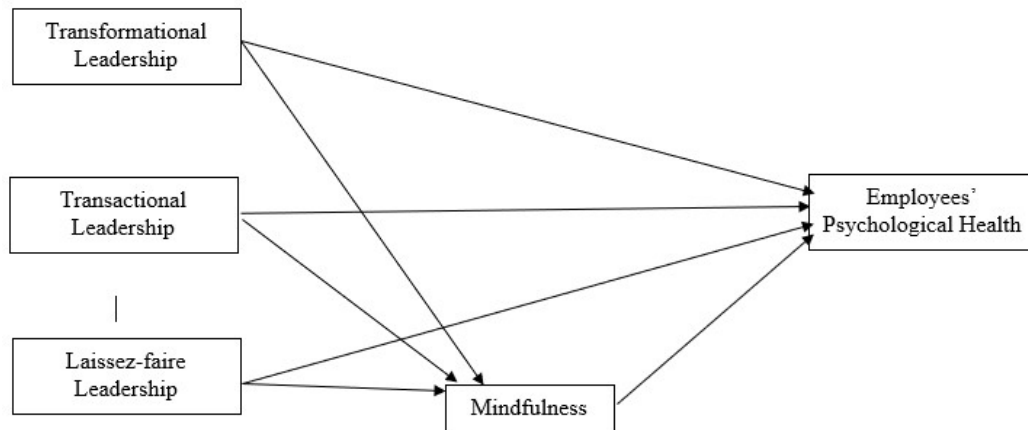
**H<sub>4a</sub>.** *Mindfulness mediates the relationship between transformational leadership style and employees' psychological health.*

**H<sub>3</sub>.** *Mindfulness mediates the relationship between transactional leadership style and employees' psychological health.*

**H<sub>3</sub>.** *Mindfulness mediates the relationship between laissez-faire leadership style and employees' psychological health.*

**2.5. Conceptual Framework**

**Figure 1. Conceptual Framework**



Source: Author (2023)

**3. Methodology**

The study employed a quantitative research method based on positivist philosophy. A deductive approach was used to develop the questionnaire used in data gathering. In determining the desired sample size, empirical studies have proposed various rules and guidelines (Memon et al., 2020). For instance, the widely recognised Krejcie and Morgan table

(KMT) recommends a sample size of 384 for a population of one million or more (Krejcie & Morgan, 1970). Roscoe and Byars (1971) suggest that a sample size ranging from 30 to 500 is suitable for most behavioural studies. Gorsuch (1990) advocates for a sample-to-item ratio of no less than 5:1, implying that a study with 25 items would require a minimum of 125 respondents. Both Kline (2016) and Kock and Hadaya (2018) propose that a sample size exceeding 200 is appropriate for analysing structural equation models. Aligning with these recommendations from existing literature, a sample size of approximately 385 was deemed suitable for this study's context. Data were gathered based on a face-to-face convenience sampling method. The data were gathered from October 13 to December 10, 2023. A cross-sectional approach was employed in data gathering, and the gathered data were analysed using IBM's SPSS and AMOS software for frequential and path analysis.

**3.1. Research ethics**

This research received approval from the Faculty of Business Administration at the University of Nigeria, which oversees ethical considerations and grants approval for studies involving human participants. The approval followed several modifications to the questionnaire, aimed at safeguarding respondents' data from third-party exposure and ensuring the overall protection of responses. Prior to receiving the questionnaire, written consent from respondents was obtained, signifying their agreement to participate. Respondents had the autonomy to withdraw from the data collection process at any point. The gathered responses were exclusively utilised to achieve the study's objectives and were not shared with any external entities. Importantly, the collected data underwent no manipulation, as the researcher's integrity was prioritised throughout all stages of the research process.

**4. Data analysis**

**4.1. Respondents' profile**

Table 1 provides an overview of the demographic variables of the respondents. First is the gender distribution, revealing that a majority of the respondents were female (54.5%), followed by their male counterparts (45.5%). The age distribution indicates that a significant proportion falls within the 18–30 years old category (47%), followed by those aged 51 years and older (29.5%), and lastly, individuals aged 31–50 years old (23.6%). Examining the respondents' ethnicity, the majority identify as Igbos (53%), followed by Yoruba (39.2%), Hausa (6.1%), and others (1.6%). Finally, the researchers sought to explore the duration of respondents' employment, as it could potentially influence their overall comprehension of the questions. The majority of respondents reported being employed for 11–15 years (41.2%), followed by those employed for over 15 years (22.4%), 6–10 years (20.2%), 1–5 years (10.1%), and finally, less than 1 year (6.2%).

**Table 1. Respondents' demographic variables**

		<i>n</i>	Per %	Cum. Per %
Gender	Female	210	54.5	54.5

	Male	175	45.5	100.0
Age	18-30 Years Old	181	47.0	47.0
	31-50 Years Old	91	23.6	70.5
	51 Years Old and Above	113	29.5	100.0
Ethnicity	Igbo	204	53.0	53.0
	Yoruba	151	39.2	92.2
	Hausa	24	6.1	98.3
	Others	6	1.6	100
How long have you been employed?	Above 15 years	86	22.4	22.4
	11-15 years	159	41.2	63.6
	6-10 years	78	20.2	83.8
	1-5 years	39	10.1	93.8
	Less than 1 year	24	6.2	100.0

#### 4.2. Test of reliability

The internal consistency of the questionnaire was evaluated using Cronbach's alpha ( $\alpha$ ) for each multi-item scale. Cronbach's alpha values range from 0 to 1, with higher values signifying a greater degree of shared covariances among scale items consistently measuring the same variable (Cronbach, 1951; Cortina, 1993). While some researchers generally accept a value of  $\alpha > 0.7$  for most research (Tavakol & Dennick, 2011; Bonett & Wright, 2015; Taber, 2018), others advocate for more stringent thresholds, such as  $\alpha > 0.8$  (Cho & Kim, 2015; Heo et al., 2015).

In this study, all Cronbach's alpha values, as presented in Table 2, comfortably surpassed the recommended thresholds: transformational leadership,  $\alpha = 0.823$ ; transactional leadership,  $\alpha = 0.879$ ; laissez-faire leadership,  $\alpha = 0.828$ ; psychological health,  $\alpha = 0.893$ ; and mindfulness,  $\alpha = 0.878$ . Furthermore, the corrected item-total correlation (CITC) values, exceeding 0.5, indicated strong item coherence and appropriate discrimination among questions. Table 2 also provides the Cronbach's alpha value that would result if a specific question were removed from the scale. It is evident that removing any question within each scale would lead to a decrease in Cronbach's alpha, reaffirming the high level of item reliability.

**Table 2. Results of the Cronbach's alpha values.**

Variable	Items	Corrected Item-Total	Cronbach's Alpha if	Cronbach's Alpha
----------	-------	----------------------	---------------------	------------------



		<b>Correlation (CITC)</b>	<b>Item Deleted</b>	
Transformational Leadership	TFL1	0.512	0.956	0.823
	TFL2	0.576	0.946	
	TFL3	0.621	0.955	
	TFL4	0.570	0.976	
Transactional Leadership	TSL1	0.678	0.925	0.879
	TSL2	0.717	0.925	
	TSL3	0.708	0.945	
	TSL4	0.738	0.955	
Laissez-faire Leadership	LFL1	0.619	0.945	0.828
	LFL2	0.759	0.975	
	LFL3	0.760	0.985	
	LFL4	0.771	0.914	
Psychological Health	PH1	0.568	0.966	0.893
	PH2	0.641	0.965	
	PH3	0.735	0.965	
	PH4	0.700	0.965	
Moderating role of mindfulness	MIND1	0.784	0.915	0.878
	MIND2	0.538	0.936	
	MIND3	0.615	0.965	
	MIND4	0.509	0.936	

### 4.3. Test of validity

An initial exploratory factor analysis (EFA) was conducted to evaluate the items. EFA is a statistical technique employed to determine the number of latent constructs and identify the underlying factor structure, particularly in cases with limited information on dimensionality (Fabrigar et al., 1999). The analysis was carried out using VARIMAX rotation in SPSS 27, and the final six-factor solution explained 65.4% of the variance (refer to Table 3). The Kaiser-Meyer-Olkin (KMO) test produced a value of 0.950, indicating the appropriateness of the

sample size. Additionally, Bartlett's test for sphericity was performed to confirm moderate intercorrelations between items, yielding a value of 32829.771 ( $p = 0.000$ ), affirming the suitability for factor analysis. As depicted in Table 4, the EFA validated the anticipated 5 factors, with items exhibiting stronger loadings on their respective factors ( $>0.50$ ) compared to other factors, thus establishing both convergent and discriminant validity.

**Table 3. Results of the exploratory factor analysis (total variance explained).**

Factor	Initial Eigenvalues			Extraction SSL			Rotation SSL		
	Total	% of Var	CUM %	Total	% of Var	CUM %	Total	% of Var	CUM%
1	16.792	47.978	47.978	16.792	47.978	47.978	4.946	14.131	14.131
2	2.134	6.097	54.076	2.134	6.097	54.076	4.919	14.055	28.186
3	1.297	3.704	66.801	1.297	3.704	66.801	3.643	10.410	59.552
4	1.507	4.307	63.097	1.507	4.307	63.097	3.649	10.425	49.143
5	1.000	2.858	69.660	1.000	2.858	69.660	3.537	10.107	69.660

SSL, sums squares of loadings; CUM, cumulative; criterion, eigenvalue  $>1$ ; varimax rotation

**Table 4. Results of the exploratory factor analysis (component matrix).**

	Factors					
	1	2	3	4	5	6
TFL1	0.733	0.191	0.113	0.051	0.133	0.046
TFL2	0.711	0.183	0.081	0.078	0.343	0.213
TFL3	0.581	0.192	0.200	0.220	0.165	0.195
TFL4	0.725	0.145	0.178	0.217	0.015	0.113
TSL1	0.601	0.328	0.437	0.232	0.058	0.016
TSL2	0.547	0.350	0.483	0.167	0.050	0.111
TSL3	0.389	0.409	0.420	0.356	0.151	0.036
TSL4	0.437	0.383	0.499	0.281	0.178	0.131
LFL1	0.440	0.244	0.247	0.157	0.321	0.215
LFL2	0.327	0.245	0.422	0.282	0.411	0.137
LFL3	0.299	0.234	0.524	0.278	0.352	0.172
LFL4	0.378	0.250	0.601	0.279	0.246	0.229
PH1	0.116	0.193	0.050	0.807	0.188	0.156
PH2	0.172	0.211	0.075	0.808	0.178	0.237
PH3	0.275	0.229	0.293	0.666	0.181	0.239

PH4	0.263	0.171	0.316	0.500	0.227	0.339
MIND1	0.268	0.122	0.172	0.205	0.549	0.315
MIND2	0.045	0.196	0.037	0.243	0.814	0.091
MIND3	0.238	0.202	0.276	0.072	0.698	0.156
MIND4	0.020	0.153	0.192	0.163	0.781	0.075

To further assess the construct validity, confirmatory factor analysis (CFA) was performed using SPSS Amos 26. CFA is a method that scrutinises the consistency between observed data and the hypothesised conceptual model, delineating the expected relationships between latent factors (Brown, 2015). The results are depicted in Tables 5 and 6. Firstly, as outlined in Table 5, the composite reliability ranges from 0.702 to 0.856, surpassing the recommended threshold of 0.70 as advocated by various researchers (Bacon et al., 1995; Shrestha, 2021). The Average Variance Extracted (AVE) scores for the constructs all surpass the suggested minimum of 0.50, as proposed by Hulland (1999) and Brown (2015), indicating convergent validity. Secondly, the standardised factor loadings for the items span from 0.621 to 0.874, all surpassing the minimum threshold of 0.50 (Brown, 2015). Thirdly, as presented in Table 6, the goodness-of-fit indicators (GFIs) for the measurement model are all considered acceptable:  $\chi^2/\text{degree of freedom}$  (CMIN/DF) = 1.068; GFI = 0.962; RMSEA = 0.032; NFI = 0.933; IFI = 0.929; TLI = 0.997; CFI = 0.951. In summary, the results of the CFA are deemed satisfactory, providing validation for the subsequent analysis of the structural model.

**Table 5. Results of the confirmatory factor analysis.**

Variable	Items	Unstandardized loadings	S. E	Standardized loadings	CR	AVE	<i>p</i>
Transformational Leadership	TFL1	1.000		0.803	0.740	0.587	
	TFL2	0.947	0.035	0.760			***
	TFL3	0.899	0.037	0.691			***
	TFL4	0.914	0.039	0.671			***
Transactional Leadership	TSL1	1.000		0.853	0.753	0.565	
	TSL2	0.991	0.030	0.805			***
	TSL3	1.013	0.029	0.830			***
	TSL4	1.023	0.029	0.824			***
Laissez-faire Leadership	LFL1	1.000		0.857	0.856	0.580	
	LFL2	1.048	0.029	0.843			***
	LFL3	1.013	0.030	0.813			***

	LFL4	0.877	0.032	0.708			***
Psychological Health	PH1	1.010	0.033	0.793	0.702	0.503	***
	PH2	0.947	0.029	0.822			***
	PH3	0.890	0.036	0.669			***
	PH4	0.894	0.041	0.604			***
Mindfulness	MIND1	1.113	0.044	0.855	0.798	0.554	***
	MIND2	1.118	0.044	0.854			***
	MIND3	1.128	0.049	0.761			***
	MIND7	0.958	0.043	0.621			***

**Table 6. Goodness-of-fit indices of the measurement model.**

$X^2$	CMIN/DF	GFI	RMSEA	NFI	IFI	TLI	CFI
	<3	>0.9	<0.08	>0.9	>0.9	>0.9	>0.9
877.136	1.068	0.962	0.032	0.933	0.929	0.997	0.951

**4.4. Correlation Analysis**

Discriminant validity assessment was conducted through correlation analysis, examining the extent to which measures of distinct constructs demonstrate minimal correlation (Matthes & Ball, 2019). Specifically, we compared the square root of the average variance extracted (AVE) for each factor against the correlation coefficients among constructs in the correlation matrix. Table 7 illustrates that the inter-construct correlation coefficients consistently remain below 0.5, indicating a substantial divergence between different constructs. Additionally, these coefficients notably fall below the square roots of the AVEs, further affirming the satisfactory discriminant validity across various constructs. The outcomes of the correlation analysis lend additional support to the subsequent analysis of the structural model.

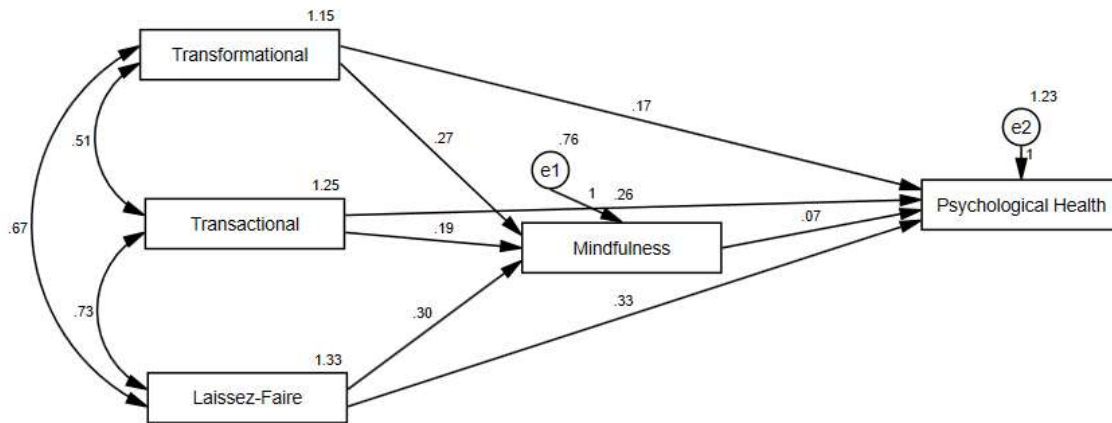
**Table 7. Discriminant validity for the measurement model (implied correlation matrix).**

	TFL	TSL	LFL	MIND	PH
Transformational Leadership	<b>0.797</b>				
Transactional Leadership	0.743	<b>0.861</b>			
Laissez-faire Leadership	0.667	0.723	<b>0.871</b>		
Mindfulness	0.545	0.623	0.654	<b>0.871</b>	
Psychological Health	0.551	0.622	0.721	0.637	<b>0.624</b>

**4.5. Path coefficient analysis**

Utilizing SPSS AMOS 26, a path coefficient analysis (Land, 1969) was conducted to evaluate the suggested causal connections among constructs. Figure 1 illustrates the path analysis for the model, while the standardised path coefficients within the structural model, along with their statistical significance, are presented in Table 8. It is noteworthy that all interrelations between constructs demonstrated positive and significant associations. Specifically, a positive and statistically significant relationship was established between transformational leadership style and employees' psychological health, featuring a substantial standardised coefficient ( $\beta = 0.173$ ,  $p < 0.001$ ). Similarly, significant positive relationships were identified between transactional leadership style and employees' psychological health ( $\beta = 0.262$ ,  $p < 0.001$ ) and laissez-faire leadership style and employees' psychological health ( $\beta = 0.331$ ,  $p < 0.001$ ). Consequently, the findings affirm the support for all hypotheses pertaining to the proposed causal relationships at the  $p < 0.01$  significance level.

**Figure 1. Path analysis of the model**



**Table 8. Results of the path coefficient analysis.**

Hypothesis	Coefficient ( $\beta$ )	S.E.	C.R.(t-value)	p	Decision
Psychological Health <--- Transformational Leadership	0.173	0.044	0.800	***	Supported
Psychological Health <--- Transactional Leadership	0.262	0.039	2.310	***	Supported
Psychological Health <--- Laissez-Faire Leadership	0.331	0.048	11.647	***	Supported
Psychological Health <--- Mindfulness	0.070	0.037	6.710	***	Supported

**4.6. Mediating role of mindfulness**

The current investigation utilised structural equation modelling (SEM) to evaluate the mediation process, choosing SEM as a more fitting approach for mediation analysis compared to regressing equations, as suggested by Baron and Kenny (1986). The specific aim of this analysis was to explore the mediating role of mindfulness in the relationship between the independent variables and employees' psychological health. In conducting this mediation analysis, the bootstrap method (Rucker et al., 2011; Gunzler et al., 2013) was employed with 5,000 bootstraps, offering the advantage of not relying on any distribution assumptions for the indirect effect. As outlined in Table 8, the findings confirm the mediating effect of mindfulness at partial levels. To substantiate this mediation, bias-corrected confidence intervals and percentile confidence intervals were computed at the 95% significance level.

**Table 8. Results of the mediation analysis.**

<b>Paths</b>	<b>Indirect effect (Standardized <math>\beta</math>)</b>	<b>Bias corrected 95% CL</b>	<b>P</b>	<b>Conclusion</b>
TFL--> MIND--> PH	0.040	0.007 - 0.079	***	Partial mediation
TSL--> MIND--> PH	0.082	0.052 - 0.121	***	Partial mediation
LFL--> MIND--> PH	0.123	0.093 - 0.161	***	Partial mediation

## 5. Discussion and conclusion

This study was designed to assess the influence of leadership styles on employees' psychological health. The importance of this has been pronounced in extensive studies (Berger et al., 2019; Khan et al., 2020), mainly based on the fact that it has a direct influence on employees' performance, and the performance of the workforce will determine the overall performance of the company. To attain this objective, 385 valid responses were analysed. The analysis shows that leadership styles have a direct positive influence on employees' psychological health, with laissez-faire leadership styles having the biggest influence, followed by transactional leadership styles, and finally transformational leadership styles. This is probably because laissez-faire empowers employees to do whatever they wish as long as they attain set corporate objectives. However, this is only an assumption and will require further investigation to understand the main reason why laissez-faire leadership styles have the biggest influence on employees' psychological health. Additionally, mindfulness was found to partially mediate this influence, with the introduction of mindfulness increasing the influence of leadership style on employees' performance.

In conclusion, this study has been able to demonstrate that leadership style influences employees' performance, and this influence is mediated by mindfulness. However, there are limitations to the study. First, the study did not specific any particular industry or sector of employees and generalised, making it difficult to narrow the study to any particular sector. Secondly, the majority of the responses were gathered within the south-eastern part of Nigeria, making it difficult to generalise the findings across Nigeria as a whole. Finally, while there are a number of leadership styles, only three were considered, and this limits the understanding of

the influence of other styles on employees' psychological health. Thus, it is recommended that further studies consider these limitations in order to produce a work that can be narrowed down and generalised within specific settings.

## 6. Conflict of interest

Authors declare no conflict of interest

## 7. Funding

Authors received no funding for this research work

## 8. References

- Annuar, S., Yusof, H. M., & Malek, N. S. N. (2023). The Relationship Between Leadership Style and Employee Psychological Well-Being at a Palm Oil Estate in Tawau, Sabah. *Sains Humanika*, 15(3), 01-09. [DOI: <https://doi.org/10.11113/sh.v15n3.1961>]
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6(2), 199-218.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462.
- Avolio, B. J., Waldman, D. A., & Yammarino, F. J. (1991). Leading in the 1990s: The Four I's of Transformational Leadership. *Journal of European Industrial Training*, 15(4), 9-16.
- Avolio, B., Walumbwa, F., & Weber, T. (2009). Leadership Current Theories, Research, and Future Directions. *Annual Review of Psychology*, 60, 421-449.
- Bacon, D. R., Sauer, P. L., and Young, M. (1995). Composite reliability in structural equations modeling. *Educational and Psychological Measurement*, 55(3), 394-406. doi: 10.1177/0013164495055003003
- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). 'Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills.' *Assessment*, 11, 191-206. doi: 10.1177/1073191104268029
- Baron, R. M., and 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, 1173-1182. doi: 10.1037/0022-3514.51.6.1173
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment*, 9(1-2), 9-30.
- Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49-80). San Diego, CA, USA: Academic Press, Inc.
- Bass, B. M., & Avolio, B. J. (Eds.). (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates Publishers. <https://doi.org/10.4324/9781410617095>

- Bass, B. M., & Avolio, B. J. (1994). *Transformational Leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Bass, B. M., and Avolio, B. J. (1995). *Multifactor leadership questionnaire for research: Rater form (5× short)*. Palo Alto, CA: Mind Garden.
- Bass, B. M., and Avolio, B. J. (1997). *Full range leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Mind Garden.
- Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *Applied Psychology: An International Review*, 45(1), 5-34.
- Berger, R., Czakert, J. P., Leuteritz, J. P., & Leiva, D. (2019). How and when do leaders influence employees' well-being? Moderated mediation models for job demands and resources. *Frontiers in psychology*, 10, 2788. <https://doi.org/10.3389/fpsyg.2019.02788>
- Bonett, D. G., & Wright, T. A. (2015). Cronbach's Alpha Reliability: Interval Estimation, Hypothesis Testing, and Sample Size Planning. *Journal of Organizational Behavior*, 36, 3–15. doi: 10.1002/job.1960
- Breevaart, K., and Zacher, H. (2019). Main and interactive effects of weekly transformational and laissez-faire leadership on followers' trust in the leader and leader effectiveness. *J. Occup. Organ. Psychol.*, 92, 384–409. doi: 10.1111/joop.12253
- Brown, K. W., & Ryan, R. M. (2003). 'The benefits of being present: Mindfulness and its role in psychological wellbeing.' *Journal of Personality and Social Psychology*, 84, 822–848. doi: 10.1037/0022-3514.84.4.822
- Brown, T. A. (2015). *Confirmatory Factor Analysis for Applied Research*. New York, NY: Guilford Publications.
- Burns, J. M. (2012). *Leadership*. Open Road Media.
- Chang, A., & Nguyen, T. L. (2018). The mediating effects of time structure on the relationships between time management behavior, job satisfaction, and psychological well-being. *Australian Journal of Psychology*, 63(4), 187-197. DOI: 10.1111/j.1742-9536.2011.00008. x
- Chaudhry, A. Q., and Javed, H. (2012). Impact of transactional and laissez-faire leadership style on motivation. *Int. J. Bus. Soc. Sci.*, 3, 258–264.
- Chen, Y., & Liu, S. (2021). 'The Dark Side of Transactional Leadership': Employee Silence on Safety Issues. *Safety Science*, 133, 105019.
- Cho, E., & Kim, S. (2015). Cronbach's Coefficient Alpha: Well Known but Poorly Understood. *Organizational Research Methods*, 18, 207–230. doi: 10.1177/1094428114555994
- Cortina, J. M. (1993). What Is Coefficient Alpha? An Examination of Theory and Applications. *Journal of Applied Psychology*, 78, 98–104. doi: 10.1037/0021-9010.78.1.98
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16, 297–334. doi: 10.1007/BF02310555
- Diener, E., & Biswas-Diener, R. (2008). *Happiness: Unlocking the Mysteries of Psychological Wealth*. Blackwell, Malden, MA.



- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the Use of Exploratory Factor Analysis in Psychological Research. *Psychological Methods*, 4, 272–299. doi: 10.1037/1082-989X.4.3.272
- Fiaz, M., Su, Q., Amir, I., and Saqib, A. (2017). Leadership styles and employees' motivation: perspective from an emerging economy. *J. Dev. Areas*, 51, 143–156. doi: 10.1353/jda.2017.0093
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). 'Mindfulness at Work.' *Research in Personnel and Human Resources Management*, 30, 115–157.
- Good, D. J., Lyddy, C. J., Glomb, T. M., Bono, J. E., Brown, K. W., Duffy, M. K., et al. (2016). 'Contemplating mindfulness at work: An integrative review.' *Journal of Management*, 42, 114–142. doi: 10.1177/0149206315617003
- Gorsuch, R. L. (1990). Common factor analysis versus component analysis: some well- and little-known facts. *Multivariate Behavioral Research*, 25, 33–39. doi: 10.1207/s15327906mbr2501\_3.
- Gunzler, D., Chen, T., Wu, P., and Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai Archives of Psychiatry*, 25, 390–394.
- Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73(4), 695–702.
- Heo, M., Kim, N., & Faith, M. S. (2015). Statistical Power as a Function of Cronbach Alpha of Instrument Questionnaire Items. *BMC Medical Research Methodology*, 15:86. doi: 10.1186/s12874-015-0070-6
- Hinkin, T. R., and Schriesheim, C. A. (2008). An examination of “nonleadership”: from laissez-faire leadership to leader reward omission and punishment omission. *Journal of Applied Psychology*, 93, 1234–1248. doi: 10.1037/a0012875
- Hu, B., Harold, C. M., and Kim, D. (2022). Stealing time on the Company's dime: examining the indirect effect of laissez-faire leadership on employee time theft. *J. Bus. Ethics*. doi: 10.1007/s10551-022-05077-2
- Hu, S. (2020). Do front-line employees in the Chinese commercial banks have the rights to experience psychological well-being? *International Journal of Human Right in Healthcare*, 14(1), 58-73. DOI: 10.1108/IJHRH-06-2020-004
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal*, 20(2), 195-204. doi: 10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.0.CO;2-7
- Hülshager, U. R., Feinholdt, A., & Nübold, A. (2015). 'A low-dose mindfulness intervention and recovery from work: Effects on psychological detachment, sleep quality, and sleep duration.' *Journal of Occupational and Organizational Psychology*, 88, 464–489. doi: 10.1111/joop.12115
- Hülshager, U. R., Lang, J. W., Depenbrock, F., Fehrmann, C., Zijlstra, F. R., & Alberts, H. J. (2014). 'The power of presence: The role of mindfulness at work for daily levels and change trajectories of psychological detachment and sleep quality.' *Journal of Applied Psychology*, 99, 1113–1128. doi: 10.1037/a0037702

- Jamali, A., Bhutto, A., Khaskhely, M., and Sethar, W. (2022). Impact of leadership styles on faculty performance: moderating role of organizational culture in higher education. *Manag. Sci. Lett.*, 12, 1–20. doi: 10.5267/j.msl.2021.8.005
- Judge, T. A., and Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768. doi: 10.1037/0021-9010.89.5.755
- Kabat-Zinn, J. (2005). *Wherever You Go There You Are: Mindfulness Meditation in Everyday Life*. New York, NY: Hyperion.
- Kapp, E.A. (2012). 'The influence of supervisor leadership practices and perceived group safety climate on Employee Safety Performance', *Safety Science*, 50(4), 1119–1124.
- Khan, H., Rehmat, M., Butt, TH, Farooqi, S., & Asim, J. (2020). Impact of transformational leadership on work performance, burnout and social loafing: a mediation model. *Future Business Journal*, 6(1), 1-13.
- Kim, H. D., & Cruz, A. B. (2022). Transformational Leadership and Psychological Well-Being of Service-Oriented Staff: Hybrid Data Synthesis Technique. *International Journal of Environmental Research and Public Health*, 19(13), 8189. <https://doi.org/10.3390%2Fijerph19138189>
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*. New York, NY: The Guilford Press.
- Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28, 227–261. doi: 10.1111/isj.12131.
- Kozak, M. A., & Uca, S. (2008). Effective Factors in the Constitution of Leadership Styles: A Study of Turkish Hotel Managers. *Anatolia*, 19(1), 117-134. DOI: 10.1080/13032917.2008.9687057
- Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610. doi: 10.1177/001316447003000308.
- Land, K. C. (1969). Principles of path analysis. *Sociological Methodology*, 1, 3–37. doi: 10.2307/270879
- Lim, E., & Boger, E. (2005). Management requires leadership. *Consortium Journal of Hospitality & Tourism*, 9(1), 59-66.
- Lindert, L., Zeike, S., Choi, K. E., & Pfaff, H. (2022). Transformational Leadership and Employees' Psychological Wellbeing: A Longitudinal Study. *International Journal of Environmental Research and Public Health*, 20(1), 676. <https://doi.org/10.3390%2Fijerph20010676>
- Lingard, H., Zhang, R.P., & Oswald, D. (2019). 'Effect of leadership and communication practices on the safety climate and behavior of construction workgroups': *Engineering, Construction and Architectural Management*, 26(6), 886-906.
- Lu, C. S., & Yang, D. S. (2010). 'Effects of Leadership Styles on Organizational Innovation': The Mediating Effect of Knowledge Management Capacity. *African Journal of Business Management*, 4(18), 3838-3846.

- Mah, R. (2022). 'The role of mindfulness practices in mediating leadership styles and employee well-being - boon or bane?' LinkedIn. Retrieved from: <https://www.linkedin.com/pulse/role-mindfulness-practices-mediating-leadership-styles-rebecca-mah>
- Matthes, J. M., and Ball, A. D. (2019). Discriminant validity assessment in marketing research. *International Journal of Marketing Research*, 61, 210–222. doi: 10.1177/1470785318793263
- Md Rami, A. A., Zaremohzzabieh, Z., Aziz, F., Ismail, I. A., and Abdullah, H. (2022). Moderating role of extrinsic and intrinsic motivations in the relationship between community leadership and social capital in rural Malaysia. *Sustainability*, 14:16375. doi: 10.3390/su142416375
- Memon, M. A., Ting, H., Cheah, J. H., Thurasamy, R., Chuah, F., and Cham, T. H. (2020). Sample size for survey research: review and recommendations. *Journal of Applied Structural Equation Modeling*, 4, 1–20. doi: 10.47263/JASEM.4(2)01.
- Mohammed, Y. G., Fernando, M., & Caputi, P. (2013). Transformational leadership and work engagement. *Leadership & Organisation Development Journal*, 34(6), 532-550.
- Molnar, K. J., Zhang, J., & Mitra, R. (2019). 'Fear and Trembling in the Workplace': The Impact of Transformational Leadership, Safety Compliance, and Safety Citizenship Behaviors on Job Stress and Job Dissatisfaction. *Journal of Applied Psychology*, 104(10), 1311-1321.
- Montano, D., Reeske, A., Franke, F., & Hüffmeier, J. (2017). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. *Journal of Organisational Behavior*, 28, 327–350.
- Oprea, B., Miulescu, A., and Iliescu, D. (2022). Followers' job crafting: relationships with full-range leadership model. *Curr. Psychol.*, 41, 4219–4230. doi: 10.1007/s12144-020-00950-7
- Pahi, M. H., Shaikh, S. S., Abbasi, Z. A., Bin, A. B., and Hamid, K. (2018). Effects of laissez-faire leadership on commitment to service quality. *St. Theresa J. Humanit. Soc. Sci.*, 4, 110–124.
- Parker, K. D., et al. (2020). 'The Impact of Transactional Leadership on Employee Stress and Job Satisfaction': A Longitudinal Study. *Journal of Occupational Health Psychology*, 25(2), 115-127.
- Parveen, K., Phuc, T. Q. B., Kumar, T., and Habib Shah, A. (2022). Impact of principal leadership styles on teacher job performance: an empirical investigation. *Front. Educ.*, 7:814159. doi: 10.3389/educ.2022.814159
- Pater, R. (2004). Leadership and cultural keys to world-class safety [Paper presentation]. *The Achieving World-Class Safety*, Portland.
- Reb, J., Chaturvedi, S., Narayanan, J., & Kudesia, R. S. (2018). 'Leader mindfulness and employee performance: A sequential mediation model of LMX quality, interpersonal justice, and employee stress.' *Journal of Business Ethics*. doi: 10.1007/s10551-018-3927-x

- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). 'Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance.' *Mindfulness*, 5, 36–45. doi: 10.1007/s12671-012-0144-z
- Roche, M., Haar, J. M., & Luthans, F. (2014). 'The role of mindfulness and psychological capital on the well-being of leaders.' *Journal of Occupational Health Psychology*, 19, 476–489. doi: 10.1037/a0037183
- Roscoe, J. T., and Byars, J. A. (1971). An investigation of the restraints with respect to sample size commonly imposed on the use of the chi-square statistic. *Journal of the American Statistical Association*, 66, 755–759. doi: 10.1080/01621459.1971.10482341.
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., and Petty, R. E. (2011). Mediation analysis in social psychology: current practices and new recommendations. *Social and Personality Psychology Compass*, 5, 359–371. doi: 10.1111/j.1751-9004.2011.00355.x
- Shonin, E., Van Gordon, W., Dunn, T., Singh, N., & Griffiths, M. (2014). 'Meditation awareness training (MAT) for work-related wellbeing and job performance: A randomised controlled trial.' *International Journal of Mental Health and Addiction*, 12, 806–823. doi: 10.1007/s11469-014-9513-2
- Skogstad, A., Hetland, J., Glasø, L., and Einarsen, S. (2014). Is avoidant leadership a root cause of subordinate stress? Longitudinal relationships between laissez-faire leadership and role ambiguity. *Work Stress*, 28, 323–341. doi: 10.1080/02678373.2014.957362
- Smith, T.D., Eldridge, F., & DeJoy, D.M. (2016). 'Safety-specific transformational and passive leadership influences on firefighter safety climate perceptions and safety behavior outcomes', *Safety Science*, 86, 92–97.
- Srivastava, S., McGonigal, K., Richards, J., Butler, E., & Gross, L. (2006). Optimism in Close Relationships: How Seeing Things in a Positive Light Makes Them So. *Journal of Personality and Social Psychology*, 91, 143-153. [DOI: 10.1037/0022-3514.91.1.143]
- Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48, 1273–1296. doi: 10.1007/s11165-016-9602-2
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. doi: 10.5116/ijme.4dfb.8dfd.
- Tong, Y. (2020). The influence of entrepreneurial psychological leadership style on organizational learning ability and organizational performance. *Front. Psychol.*, 11, 1679. doi: 10.3389/fpsyg.2020.01679
- Walsh, M, M. & Arnold, A, K. (2020). 'The bright and dark sides of employee mindfulness: Leadership style and employee well-being.' *Stress & Health*, 36(3). Retrieved from: <https://onlinelibrary-wiley.com.libproxy1.nus.edu.sg/doi/full/10.1002/smi.2926>
- West, M., Dawson, J., Admasachew, L., & Topakas, A. (2011). NHS staff management and health service quality: results from the NHS staff survey and related data. Retrieved April 13, 2022, from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/215455/dh\\_129656.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215455/dh_129656.pdf)

- Wright, T. A., & Bonett, D.G. (2007). Job satisfaction and psychological well-being as nonadditive predictors of workplace turnover. *Journal of Management*, 33(2), 141-160. DOI: 10.1177/0149206306297582
- Yammarino, F. J., & Bass, B. M. (1990). Transformational leadership and multiple levels of analysis. *Human Relations*, 43(10), 975-995.
- Yang, F. F., & Zhao, Y. (2018). The effect of job autonomy on psychological well-being: the mediating role of personal initiative. *Open Journal of Social Sciences*, 11(6), 234-248. DOI: 10.4236/jss.2018.611017
- Zareen, M., Razzaq, K., and Mujtaba, B. G. (2015). Impact of transactional, transformational and laissez-faire leadership styles on motivation: a quantitative study of banking employees in Pakistan. *Public. Organ. Rev.*, 15, 531–549. doi: 10.1007/s11115-014-0287-6