

THE IMPACT OF PSYCHOLOGICAL SAFETY ON EMPLOYEE CREATIVITY: THE ROLES OF KNOWLEDGE SHARING, KNOWLEDGE HIDING, AND ORGANIZATIONAL SAFETY CLIMATE

Xiaomei Li^{1*}, Thitinant Wareewanich²

¹Dr., Faculty of Management, Chakrabongse Bhuvanarth International Institute for Interdisciplinary Studies (CBIS), Rajamangala University of Technology Tawan-OK, Thailand, 10400.

Email: xiaomei.li@rmutto.ac.th

²Asst. Prof. Dr., Faculty of Management, Chakrabongse Bhuvanarth International Institute for Interdisciplinary Studies (CBIS), Rajamangala University of Technology Tawan-OK, Thailand, 10400.

Email: thitinant_wa@rmutto.ac.th

ABSTRACT: Employee creativity is crucial for fostering organisational innovation and maintaining competitiveness. This research investigates the relationship between psychological safety (PS) and employee creativity (EC), emphasising the mediating effects of knowledge sharing (KS) and knowledge concealment (KH), grounded in organisational support theory (OST). We hypothesise that PS enhances EC, with KS and KH serving as mediators, and that organisational safety climate (OSC) moderates these relationships. To test these hypotheses, we conducted a survey of 757 skilled workers in Chinese manufacturing firms using a quantitative approach. The direct and indirect relationships between PS and EC, as well as KS and KH, were examined through path analysis using structural equation modelling. The moderating effect of OSC was assessed via regression analysis. The findings indicate that PS positively influences EC, while KS and KH mediate the relationship between the two. This study suggests that fostering psychological security for employees can be effectively approached from the perspective of organisational support theory. Organisations should prioritise employee well-being, enhancing their psychological security to stimulate their initiative and willingness to share knowledge, thereby promoting creativity development. Furthermore, a robust OSC strengthens the positive impact of PS on KS and mitigates its relationship with KH. This moderating effect challenges conventional notions that organisational climate solely influences employee behaviour. By exploring the moderating role of OSC in the relationship between employee PS and both KS and KH, this study offers a more intuitive and systematic insight into the impact of organisational-level factors on EC performance. The study concludes with discussions on both theoretical and practical implications.

Keywords: PS Psychological Safety, Knowledge Sharing, Knowledge Hiding, Organizational Safety Climate, Employee Creativity, Organizational Support.

1. Introduction

Creativity is vital for driving innovation and enhancing competitiveness in today's challenging business landscape. Organisations are increasingly focusing on stimulating employee creativity (EC), where psychological safety (PS) emerges as a key factor closely linked to employees' creative performance. Mura et al. (2016) demonstrated from a social exchange perspective that employees' PS positively influences innovative behaviour. These findings suggest that PS contributes to improving employees' creative thinking. However, there has been limited scholarly exploration of the boundaries of this relationship. This research aims to elucidate the mechanisms underlying this relationship and address the existing gap in the field. Knowledge sharing (KS) and knowledge hiding (KH), as two critical aspects of knowledge flow within organisations, may mediate the relationship between PS and creativity. Prior studies indicate that PS fosters KS behaviour among employees (Rivera, Rodríguez-Aceves, & Mojarro-Duran, 2021).

Moreover, KS is positively associated with creativity

(Carmeli & Paulus, 2015) and enhances employees' learning and innovation capabilities. Conversely, KH can have a detrimental effect on EC (Connelly et al., 2012). Empirical data, including a survey by the Globe and Mail, revealed that 1,292 out of 1,700 readers admitted to concealing knowledge. Employees often resort to KH to protect their resources, power, and status within the organisation (Feng & Wang, 2019; Yao et al., 2020), or even for retaliatory purposes (Pradhan, Srivastava, & Mishra, 2020). Such behaviours impede knowledge sharing and flow, ultimately diminishing learning and innovation capabilities. Therefore, promoting KS and mitigating KH is essential for fostering innovation within businesses. An in-depth examination of the mechanisms involving PS, KS, and KH can significantly contribute to the theoretical understanding of these concepts. OSC refers to employees' perceptions of trust and security within the organisation (Weale, Wells, & Oakman, 2019), which may significantly influence KS and KH behaviours.

Notably, there is a lack of research exploring how OSC moderates the relationship between PS and

KS or KH. Our literature review indicates that OSC primarily promotes physical health and safety (Coyle, Sleeman, & Adams, 1995), often prioritising physical well-being over mental health and security. However, employees in environments valuing OSC tend to feel more psychologically secure and are thus more likely to express themselves and engage in KS (Griffin & Neal, 2000). In contrast, those in environments where OSC is overlooked may experience stress and anxiety, leading to reduced idea expression and increased KH (Sofyan, De Clercq, & Shang, 2023). Thus, OSC may serve as a potential moderating variable influencing the relationship between PS and KS or KH. This study aims to explore OSC's moderating role to deepen our understanding of this complex interplay.

Drawing on social exchange theory, many studies have elucidated the mechanisms involved in PS (Curcuruto, Mearns, & Mariani, 2016), often emphasising employees' loyalty to the organisation while neglecting the reciprocal obligations of organisations to their employees (Lee, 2021). This study investigates how PS affects EC through KS or KH, framed within the context of organisational support theory. Organisational support practices enhance employees' sense of security and trust, thereby reducing perceived work risks. Such an environment encourages employees to express themselves and engage in knowledge sharing, thereby positively impacting EC while diminishing KH. This research aims to reveal the intricate dynamics of the relationship between PS and EC. A clear understanding of how PS influences the creative process, whether KS and KH mediate this effect, and whether OSC plays a moderating role is an under-explored area. The findings from this study will provide valuable insights and suggest new avenues for future research in related domains.

2. Theoretical and Research Hypotheses

2.1. Psychological Safety and Employee Creativity

PS has garnered substantial scholarly attention since the 1990s, with research linking it to individual engagement, group learning, and overall effectiveness (Edmondson, 1999; Kahn, 1990). Kahn (1990) posits that individuals who feel psychologically safe can present themselves authentically within an organisation without fearing detrimental consequences to their career, reputation, or self-esteem. Edmondson (1999) elaborates on PS at the team level, arguing that teams feel secure to engage in risky interpersonal interactions based on shared beliefs among team members. Several studies have highlighted important precursors of PS, such as leadership style, personality traits, and job

characteristics (Donyavi et al., 2023; Frazier et al., 2017). Furthermore, research indicates that PS has significant motivational and facilitative effects on various individual, organisational, and team outcome variables, including psychological well-being (Hasan & Kashif, 2021), psychological empowerment (Jha, 2019), team learning outcomes (Kwon, Han, & Nicolaidis, 2020), and effective organisational decision-making (Barkhi & Kao, 2011; Sierra-Rodríguez, Arroyo-Machado, & Barroso-Hurtado, 2022). However, the impact of PS on EC remains underexplored. While some scholars have examined the role of PS in fostering innovation and creativity, the literature has not adequately addressed the boundary conditions of this relationship. This study aims to fill that gap. Amabile et al. (1996) define creativity as the ability of employees to generate novel and practical perspectives or ideas concerning an organisation's products, services, and management processes. Previous studies have explored creativity across various levels, including organisational, team, and individual (Rouse, 2020; Shin & Zhou, 2007; Woodman, Sawyer, & Griffin, 1993). It is evident that numerous factors at different levels influence individual creative behaviour. Creativity is increasingly relevant to the entire workforce, extending beyond the confines of research and development (Bai, Lin, & Li, 2016). However, new ideas do not always produce the desired outcomes. Thus, the high demand for creativity and innovation underscores the necessity for employees to be creative within their teams and organisations (Al-Harathi et al., 2022; Edmondson & Lei, 2014). Research suggests that employees who feel psychologically secure are more likely to engage in innovative thinking and behaviours (Cao & Zhang, 2020; Mura et al., 2016), leading to greater creative outputs. This leads us to propose the following hypothesis:

H1: PS has a positive and positive effect on EC.

2.2. The Mediating Role of Knowledge Sharing

Davenport and Prusak (1998) define KS as a voluntary behaviour where knowledge owners actively pass on knowledge to others, who can then utilise that knowledge. Employees often view knowledge as a personal resource, status, and advantage, leading to reluctance in voluntarily sharing it (Feng & Wang, 2019). Among the many factors influencing KS, numerous studies affirm the positive role of various leadership styles in promoting KS by enhancing employee motivation and underlying traits (Na-Nan & Arunyaphum, 2021). Additionally, factors such as affective commitment have been shown to positively influence KS (Li et al.,

2015), and PS has been suggested to benefit inter-organisational KS (Rivera et al., 2021). PS can be understood as a state of comfort in which individuals feel accepted and trusted, enabling a conducive environment for knowledge exchange (Kamaluddin, 2023; Rivera et al., 2021). When employees feel safe, they are more likely to be vocal and self-expressive. However, Bogenrieder and Nootboom (2004) note that KS can also have negative consequences for employees, such as diminished personal competitiveness due to the loss of exclusive knowledge or the exposure of their deficiencies. Therefore, employees are more inclined to engage in KS when they perceive a supportive and psychologically safe environment. Prior studies consistently indicate that PS positively contributes to KS (Bunderson & Boumgarden, 2010; Mu & Gnyawali, 2003). This leads us to hypothesise:

H2: Employees' PS has an upbeat positive effect on their Knowledge-Sharing Behaviour.

KS facilitates interaction between knowledge holders and seekers (Luchman & González-Morales, 2013), leading to the exchange of ideas and information that promotes creativity. Through KS, employees frequently communicate with one another, broadening the scope and depth of their knowledge, which in turn increases the likelihood of generating innovative perspectives and ideas (Lu & Liang, 2009). Organisational learning theory suggests that the collective learning of organisational members is continuous, staged, and dynamic (Nootboom et al., 2007), encompassing unidirectional learning, bidirectional learning, and relearning (Argyris & Schön, 1997). This process fosters the flow of knowledge within organisations, emphasising learning interactions and knowledge sharing that contribute to knowledge creation (Mousa, Massoud, & Ayoubi, 2020). Lyman et al. (2020) advocate for applying newly acquired knowledge in real-world contexts to enhance employees' creative performance. Zárraga and Bonache (2003) suggest that knowledge innovation arises from interweaving various types of knowledge among team members, thereby enhancing the innovation capabilities of employees. Accordingly, we hypothesise:

H3: KS has a positive effect on EC.

PS cultivates an environment where employees feel empowered to voice their opinions, share knowledge, and generate new ideas (Roussin, 2008). In this secure environment, employees are more likely to share their experiences, fostering a process that transcends

mere information transfer to promote creative thinking (Kuo, Kuo, & Ho, 2014). Organisational support theory posits that employees perceive support from their organisation when it promotes their opinions, cares for their welfare, seeks their best interests, and provides rewards, training, and enriching job opportunities (Guchait, Paşamehmetoğlu, & Dawson, 2014; Lee, 2021). When employees feel valued, they develop emotional attachments that enhance their commitment to the organisation. This sense of belonging and identity, bolstered by organisational support, mitigates feelings of uncertainty and job risk, thus fostering a supportive environment where employees can express ideas freely. Hence, based on the established positive correlation between PS and KS (Bunderson & Boumgarden, 2010), as well as the beneficial impact of KS on EC (Kuo et al., 2014), we propose:

H4: Employees' knowledge-sharing behaviour mediates the relationship between PS and EC.

2.3. The Mediating Role of Knowledge Hiding

KH refers to the deliberate concealment of knowledge that others require (Connelly et al., 2012). This intentional behaviour can lead to significant organisational losses (Babcock, 2004). Numerous studies have examined factors contributing to KH, indicating that individuals often engage in this behaviour to maintain their competitive edge or due to jealousy (Hernaus et al., 2019; Peng, Bell, & Li, 2021). Factors such as job insecurity (Ali et al., 2021) and abusive supervision (Feng & Wang, 2019) can compel employees to withhold information to avoid negative consequences. Some recent research has begun to explore factors that inhibit KH, such as high-quality leader-member relationships (He et al., 2022) and shared goals (Nadeem et al., 2021), while ethical leadership has been found to reduce KH by fostering equality and open communication (Anser et al., 2021; Sever et al., 2023). However, limited research has focused on the impediments to KH, and we aim to contribute to this gap by linking KH to PS. PS is characterised by mutual regard, acceptance, and trust, alongside a supportive work environment (Rivera et al., 2021). In scenarios where employees experience high PS, they are more willing to express their opinions and ideas. Conversely, those with low PS often lack trust in their colleagues and may fear unfavourable judgement. Therefore, employees with high PS are less inclined to engage in KH as they feel secure from negative repercussions (Gharbi, Touzi, & Aliane, 2023; Jiang et al., 2019). We thus hypothesise:

H5: Employees' PS has a strong negative effect on KH.

Research has demonstrated that KH negatively impacts the concealing individual's capabilities (Černe et al., 2014). Employees who engage in KH tend to limit their communication with colleagues, thereby diminishing the potential for generating new ideas through dialogue. Consequently, KH may adversely affect EC. Connelly et al. (2012) argue from a social exchange theory perspective that KH leads to poor social relations, prompting employees to become more self-focused and excluded from knowledge exchange networks. This can result in two outcomes: either employees must invest considerable effort to acquire knowledge held by colleagues who are unwilling to share (Mudambi & Navarra, 2015), or they may remain unaware of organisational goals, hindering their ability to innovate (Haas, Criscuolo, & George, 2015; Setyowati & Herianto, 2022). In particular, a reluctance to share knowledge can prevent employees from accessing necessary information, stifling the innovation process (Carmeli, Gelbard, & Reiter-Palmon, 2013). Given that KS is vital for creative thinking and innovation, KH may obstruct this process. Therefore, we propose:

H6: KH has a robust negative effect on EC.

PS mitigates the occurrence of KH behaviour. In a supportive environment, employees are encouraged to share ideas without fear of criticism (Liu, Keller, & Bartlett, 2021). Moreover, KH can obstruct innovation (Černe et al., 2017). When employees deliberately withhold knowledge and creativity, they risk losing potential innovation opportunities. Drawing from research indicating the negative relationship between anticipation-based PS and KH (Agarwal, Avey, & Wu, 2022) and the detrimental effects of KH on EC (Syed et al., 2021), we hypothesise that KH plays a critical mediating role. Previous studies have also illustrated how KH mediates relationships between abusive supervision, goal orientation (Jahanzeb et al., 2019; Rhee & Choi, 2017), and EC. Thus, we extend this research by proposing that KH serves as a mediator between PS and EC:

H7: KH mediates the relationship between employee PS and EC.

2.4. The Moderating Role of Organizational Safety Climate

The concept of safety climate was first defined as the collective perceptions of employees regarding the environmental hazards associated with operations (Zohar, 1980). Initially, the focus was on the physical health and safety aspects of the workplace. However,

safety climate theory has evolved, demonstrating its influence on employee knowledge and skills through various training methods (Morrison, Upton, & Cordery, 1997) and behaviours in the workplace (Colley, Lincolne, & Neal, 2013). While safety climate has primarily been examined in the context of organisational atmosphere and physical well-being, its implications for mental health and safety remain less explored (Dollard & Bakker, 2010). This study aims to investigate whether the OSC moderates the relationships between PS and KS or KH, thereby addressing gaps in the mental health and safety literature. In conceptualising and measuring OSC, this study considers essential dimensions, including organisational monitoring and enforcement of safety, facilitation of learning and development, and effective communication (Zohar & Luria, 2005). These dimensions reflect the commitment of organisational leaders to safety and serve as a measure of how secure employees feel in their roles. Research has shown that job insecurity hinders KS; when employees perceive job insecurity, negative perceptions abound, leading to reluctance in sharing knowledge (Ali et al., 2021). Conversely, job insecurity fosters KH, as employees may withhold knowledge to protect their competitive status (Hernaus et al., 2019). Thus, OSC plays a crucial role in alleviating job insecurity, which can lead to positive effects on KS or negative effects on KH. However, empirical evidence on how OSC moderates the effects of PS on KS or KH remains scarce. Prior research has demonstrated that PS positively influences employees' knowledge-sharing behaviour (Rivera et al., 2021) and negatively affects their knowledge-hiding behaviour (Artanti, 2023; Jiang et al., 2019). We propose that the extent to which PS impacts employee KS or KH may be moderated by OSC. Therefore, we hypothesise:

H8: OSC moderates the positive relationship of employee PS on KS.

H9: OSC moderates the negative relationship of employee PS on KH.



Figure 1: Theoretical Framework.

3. Research Methodology
3.1. Sample and Data collection

This study employed quantitative research methods, utilising stratified random sampling for questionnaire distribution, both online and offline. The sample comprised skilled workers from large manufacturing enterprises in China. Between September 1 and October 15, 2023, a total of 880 questionnaires were distributed, yielding 778 responses, which corresponds

to a response rate of 88.4%. After excluding 21 responses due to issues such as ignoring counter-questions, incomplete answers, and selecting a single option throughout, 757 valid questionnaires remained, resulting in a validity rate of 86%. Table 1 illustrates that the sample is representative of the general characteristics of skilled workers within the contemporary Chinese manufacturing sector.

Table 1: Sample Profile (N=757).

Designation	Categories	Frequency	Valid Percent	Percent
Gender	male	528	69.749	69.749
	female	229	30.251	100.000
Age	18-25 years	45	5.945	5.945
	26-35 years	286	37.781	43.725
	36-45 years	264	34.875	78.600
	Over 46	162	21.400	100.000
Qualifications	High school and below	423	55.878	55.878
	vocational secondary school	213	28.137	84.016
	three-year college	86	11.361	95.376
	undergraduate	35	4.624	100.000
Working Experience	Less than 1 year	56	7.398	7.398
	1 - 3 years	86	11.361	18.758
	3 - 6 years	101	13.342	32.100
	6 -10 years	178	23.514	55.614
Enterprise Type	More than 10 years	336	44.386	100.000
	nationalized business	122	16.116	16.116
	private business	600	79.260	95.376
	joint venture	35	4.624	100.000

3.2. Measures and Questionnaire Development

The questionnaire comprised three sections. The first section provided a brief introduction, while the second contained five demographic questions about the respondents, including one regarding the nature of their business. The third section, which formed the core of the questionnaire, assessed key variables such as Psychological Safety (PS), Employee Creativity (EC), Knowledge Sharing (KS), Knowledge Hiding (KH), and Organisational Safety Climate (OSC) using a Likert scale based on established research instruments. To ensure the clarity and relevance of the items, five experts evaluated the scale for Item-Objective Congruence (IOC) and provided necessary corrections. The survey was conducted in China, with the original questions written in English. To address potential translation errors arising from linguistic and cultural differences (Brislin, 1970), we employed reverse translation methods (Matsumoto & Juang, 2016). The consistency between the original and

reverse-translated versions confirmed that the items conveyed the intended meanings. Psychological Safety was measured using a five-item scale developed by Carmeli, Reiter-Palmon and Ziv (2010). This scale focuses on the extent to which individual members of an organisation perceive PS, aligning well with the study's individual-level measurement requirements. Sample items included, "I am proficient in asking questions and tough questions" and "This organisation ensures that taking risks is safe." Employee Creativity was assessed using a nine-item scale from Tierney, Farmer and Graen (1999), which innovated upon Ettlíe and O'Keefe's (1982) framework. This scale evaluates creativity primarily through mutual evaluations among employees, featuring statements such as "showing originality in deeper work" and "daring to come up with new ideas at work." Knowledge Sharing was measured with a ten-item scale developed by Bock et al. (2005), which examines willingness and attitudes towards KS based on Fishbein and Ajzen's

(1975) research. In contrast to studies that rely solely on attitude measures (Durand et al., 2022), this study's approach was more comprehensive, including items such as "I effectively communicate my knowledge to other organisational members" and "I intend to provide my work reports and official documents to my organisation's members more frequently in the future." Knowledge Hiding was assessed using a twelve-item scale from Connolly et al. (2012), which is widely utilised in various contexts, including China (Men et al., 2020). This scale features items like "He/she supplies me with alternative information rather than what I asked for" and "He/she behaves as though my request was not understood." Organisational Safety Climate was evaluated using a sixteen-item scale from Zohar and Luria (2005), originally comprising 27 items that were subsequently refined. This scale includes statements such as "Responds quickly to safety hazards when notified" and "Carries out comprehensive and frequent safety audits and inspections." All scales employed a response range from "strongly disagree" (1) to "strongly agree" (5). Control variables included demographic factors such as gender, age, education, years of experience, and the nature of the business. Prior to the main study, the questionnaires were pretested to validate the IOC. A sample of 197 responses was collected for this purpose. The reliability of the data was assessed, with Cronbach's alpha coefficients for the five variables exceeding 0.767 and not exceeding 0.939, indicating good reliability (all coefficients above 0.7). Additionally, exploratory factor analysis (EFA) was conducted, yielding KMO values for PS, EC, KS, KH, and OSC of 0.874, 0.826, 0.913, 0.887, and 0.954, respectively. The significance p-value of Bartlett's test of sphericity was below 0.05, confirming significance. The cumulative contributions of the five variables in the EFA were 70.160%, 74.798%, 69.284%, 73.084%, and 77.620%, respectively. Overall, the study's scales met the necessary criteria for reliability and validity, completing the development of the questionnaire.

4. Results

4.1. Descriptive Statistics and Relevant Analysis

Descriptive statistics serve to analyse the fundamental statistical characteristics of variables (Tong, 1984). In this study, each variable was assessed with 757 observations, devoid of any missing values or outliers, thus facilitating correlation analysis. Table 2 presents the significant correlations

among the variables, revealing positive relationships between Psychological Safety (PS) and Employee Creativity (EC), Knowledge Sharing (KS), and Organisational Safety Climate (OSC), with coefficients of 0.37, 0.392, and 0.137, respectively. Conversely, the correlation coefficient for Knowledge Hiding (KH) is -0.415, indicating a negative relationship. Table 3 illustrates the results of the reliability test, with Cronbach's alpha coefficients recorded at 0.884, 0.858, 0.888, 0.897, and 0.955, respectively. These coefficients, all exceeding 0.8, demonstrate strong internal consistency reliability (Bagozzi & Yi, 1988).

Table 2: Correlation Analyses of Variables.

	PS	EC	KS	KH	OSC
PS	1.000				
EC	.370**	1.000			
KS	.392**	.310**	1.000		
KH	-.415**	-.308**	-.472**	1.000	
OSC	.137**	.118**	.143**	-.320**	1.000

Note: *** p < 0.001 **p < 0.01 *p < 0.05. Reliability and Validity Test

Table 3: Cronbach's Alpha for Variables.

Variable	Cronbach's Alpha	Item
PS	0.884	5
EC	0.858	9
KS	0.888	10
KH	0.897	12
OSC	0.955	16

The fit of the five variables and their corresponding items was evaluated using a series of validated factor combinations through Confirmatory Factor Analysis (CFA). Table 4 presents the fit indicators for the five-variable models. Notably, the RMSEA values for all models are below 0.08, which is considered good, while the Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), and Incremental Fit Index (IFI) values all exceed 0.9. These indicators meet the established criteria, indicating that the models demonstrate a good fit. Subsequently, a standardized loading analysis was performed, revealing that the standardized factor loadings for all variables were greater than 0.5. The associated p-values were all statistically significant (***, p < 0.01), indicating that the items for each variable are well explained by their respective dimensions. Table 5 further illustrates that the composite reliability (CR) values for each factor exceed 0.7, and the average variance extracted (AVE) values surpass 0.5. These results suggest that all items associated with the five latent variables reliably measure their corresponding constructs, demonstrating strong convergent validity.

Table 4: Model Fit Indicators for Variable Validation Factor Testing.

Norm	CMIN	DF	CMIN/DF	GFI	RMSEA	CFI	NFI	IFI
Ideal Value	-	-	<3	>0.9	<0.08	>0.9	>0.9	>0.9
Standard Value	-	-	<5	>0.8	<0.10	>0.8	>0.8	>0.8
Fitted Value								
PS	21.396	5	4.279	0.989	0.066	0.991	0.989	0.991
EC	41.034	24	1.71	0.988	0.031	0.994	0.986	0.994
KS	53.234	34	1.566	0.986	0.027	0.995	0.986	0.995
KH	60.763	51	1.191	0.987	0.016	0.998	0.988	0.998
OSC	114.229	101	1.131	0.982	0.013	0.999	0.989	0.999

Table 5: Variable AVE and CR Index Results.

Latent Variable	Average Variance Extracted	Composite Reliability
PS	0.605	0.885
EC	0.613	0.826
KS	0.584	0.873
KH	0.646	0.879
OSC	0.714	0.928

4.2. Hypothesis Testing

Structural equation modelling (SEM) involves two primary components: model fit tests and path analysis (Byrne, 2013). Path analysis for direct influence relationships elucidates the main effects, while path analysis for indirect relationships delineates the

mediating effects. Standardized path coefficients typically range from [-1, 1]. Figure 2 illustrates the models depicting both direct and indirect relationships among the variables of psychological safety (PS), employee creativity (EC), knowledge sharing (KS), and knowledge hiding (KH).

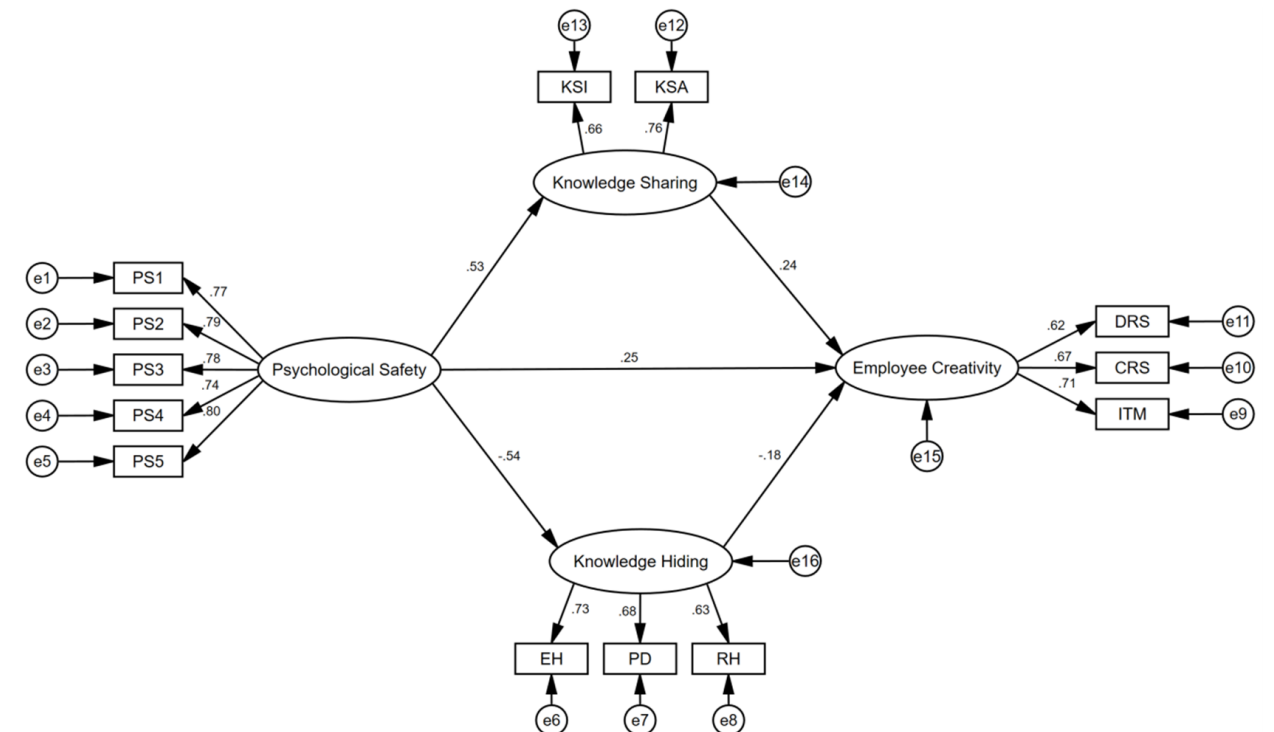


Figure 2: Structural Equation Modelling Diagram.

4.3. Hypothesis Analysis (Direct Effect)

Table 6 presents the fit indicators for the model as

follows: CMIN is 204.191, with a degrees of freedom (DF) of 60, resulting in a CMIN/DF ratio of 3.403, which

is less than the threshold of 5. The RMSEA value is 0.056, which is below the acceptable limit of 0.08. Additionally, the GFI is 0.961, the CFI is 0.959, the NFI is 0.943, and the IFI is 0.959, all exceeding the benchmark of 0.9. These metrics indicate that the model fits the data well. Table 7 details the standardized path coefficients, revealing the following relationships: the coefficient from PS to EC is 0.252 (t = 3.837, p < 0.01), indicating a significant positive effect and supporting Hypothesis 1. The standardized path coefficient from PS to KS is 0.532 (t = 10.816, p < 0.01), demonstrating

a strong positive effect of PS on KS and validating Hypothesis 2. Furthermore, the coefficient from KS to EC is 0.240 (t = 3.767, p < 0.01), confirming that KS positively influences EC, thus supporting Hypothesis 3. The path coefficient from PS to KH is -0.537 (t = -11.147, p < 0.01), reflecting a significant negative effect and thereby validating Hypothesis 5. Lastly, the coefficient from KH to EC is -0.177 (t = -2.982, p = 0.003), indicating that KH adversely impacts EC, which supports Hypothesis 6.

Table 6: Indicators of Model Fit.

NORM	CMIN	DF	CMIN/DF	GFI	RMSEA	CFI	NFI	IFI
Ideal Value	-	-	<3	>0.9	<0.08	>0.9	>0.9	>0.9
Compliance Value	-	-	<5	>0.8	<0.10	>0.8	>0.8	>0.8
Fitted Value	204.191	60	3.403	0.961	0.056	0.959	0.943	0.959

Table 7: Summary of Model Coefficients.

Independent Variable	Implicit Variable	Unstandardized Path Coefficients	Standardized Path Coefficient	Standard Error	z (C.R.)	p
PS	EC	0.268	0.252	0.07	3.837	***
PS	KS	0.471	0.532	0.044	10.816	***
KS	EC	0.288	0.24	0.077	3.767	***
PS	KH	-0.735	-0.537	0.066	-11.147	***
KH	EC	-0.137	-0.177	0.046	-2.982	0.003

Note: ***P < 0.001 **P < 0.01 *P < 0.05

4.4. Hypothesis Analysis (Indirect Effect/Mediation)

Table 8 presents the results of the tests for mediated effects. For the path from PS to KS to EC, the bootstrap confidence interval values ranged from 0.044 to 0.244, excluding zero, while the direct effect was measured at 0.268 (***). This indicates the presence of a mediating effect, confirming that the mediation is partial. Thus, Hypothesis 4 is supported, suggesting

that KS mediates the relationship between PS and EC. In the path from PS to KH to EC, the bootstrap confidence interval values were between 0.031 and 0.173, again excluding zero. The direct effect was similarly recorded at 0.268 (***), indicating a mediating effect that also results in partial mediation. Therefore, Hypothesis 7 is supported, affirming that KH mediates the relationship between PS and EC.

Table 8: Results of the Test for Mediating Effects.

Path Relationships	Total Effect	Direct Effect	Indirect Effect	Bias-Corrected (95%)		P	Conclusion
				Lower Bounds	Upper Bounds		
PS --> KS--> EC	0.404	0.268(***)	0.136	0.044	0.244	0.005	partial mediation
PS--> KH--> EC	0.369	0.268(***)	0.101	0.031	0.173	0.006	partial mediation

Note: ***P < 0.001 **P < 0.01 *P < 0.05

4.5. Hypothesis Analysis (Regression/Moderation)

The test for the moderating effect was conducted using regression analysis. Table 9 reveals that in Model 1, the independent variable PS is significant (t=11.186, p<0.01), indicating that PS has a substantial positive

effect on KS. In Model 3, the interaction term PS × OSC is also significant (t=3.291, p<0.01), suggesting that the moderator variable OSC significantly influences the relationship between PS and KS. This finding confirms the presence of a moderating effect, where OSC

enhances the main effect. Hypothesis 8 is supported, indicating that as the OSC increases, the impact of

PS on KS becomes more pronounced. Conversely, when OSC is lower, this effect diminishes.

Table 9: Moderated Effects Analysis Results (Dependent Variable: KS).

Independent Variable	Dependent Variable (Knowledge Sharing)		
	Model1	Model2	Model3
Constant	1.970**(10.843)	1.830**(9.696)	1.807**(9.628)
Gender	-0.055(-0.930)	-0.054(-0.922)	-0.058(-0.981)
Age	-0.009(-0.281)	-0.010(-0.326)	-0.008(-0.256)
Educational Level	0.068*(2.105)	0.065*(2.014)	0.059(1.833)
Work Experience	0.021(0.992)	0.021(0.979)	0.019(0.932)
PS	0.383**(11.186)	0.371**(10.794)	0.387**(11.212)
OSC		0.066**(2.619)	0.058*(2.304)
PS×OSC			0.093**(3.291)
R ²	0.161	0.169	0.180
Adjusted R ²	0.155	0.162	0.173
F	F=28.801 p=0.000	F=25.331 p=0.000	F=23.544 p=0.000

* p<0.05 ** p<0.01. Inside the parentheses is the value of t.

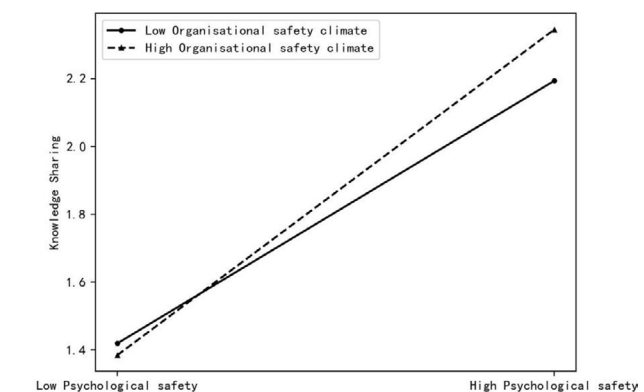


Figure 3: Moderated Effects Slope Plot (Dependent Variable: KS).

Table 10 indicates that in Model 1, the independent variable PS is significant (t=-12.310, p<0.01), suggesting that PS has a substantial negative effect on KH. In Model 3, the interaction term PS × OSC is also significant (t=2.650, p<0.01), implying that the moderator variable OSC significantly moderates the effect of PS on KH. This finding confirms the existence of a moderating effect, where OSC reduces the strength of the negative relationship between PS and KH. Hypothesis 9 is thus supported, indicating that when OSC is higher, the adverse effect of PS on KH is diminished. Conversely, when OSC is lower, the negative impact of PS on KH is intensified.

Table 10: Results of Moderated Effects Analysis (Dependent Variable: KH).

Independent Variable	Dependent Variable (Knowledge Hiding)		
	Model1	Model2	Model3
Constant	5.012**(20.147)	5.598**(22.541)	5.573**(22.515)
Gender	-0.064(-0.787)	-0.067(-0.858)	-0.070(-0.904)
Age	-0.073(-1.699)	-0.067(-1.633)	-0.065(-1.581)
Educational Level	-0.025(-0.564)	-0.012(-0.279)	-0.018(-0.433)
Work Experience	0.010(0.332)	0.011(0.402)	0.010(0.360)
PS	-0.577**(-12.310)	-0.528**(-11.667)	-0.512**(-11.242)
OSC		-0.277**(-8.326)	-0.285**(-8.577)
PS×OSC			0.099**(2.650)
R ²	0.176	0.246	0.253
Adjusted R ²	0.171	0.240	0.246
F	F=32.138 p=0.000	F=40.772 p=0.000	F=36.231 p=0.000

Note: * p<0.05 ** p<0.01 Inside the parentheses is the value of t

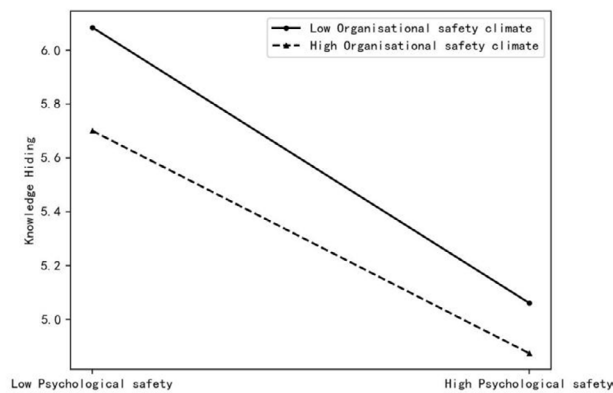


Figure 4: Moderated Effects Slope Plot (Dependent Variable: KH).

5. Discussion

5.1. Findings

This study investigates the mechanisms through which psychological safety (PS) influences employee creativity (EC) in the manufacturing sector. The findings reveal that PS significantly enhances EC, confirming its role as a vital factor in fostering creativity among skilled workers, consistent with Javed et al. (2019). Additionally, the study demonstrates that knowledge sharing (KS) and knowledge hiding (KH) partially mediate the relationship between PS and EC. This highlights the importance of promoting KS while minimizing KH in organizational settings. Unlike prior research, which primarily focused on external factors influencing creativity, this study emphasizes the significance of employees' psychological experiences, suggesting that nurturing PS can effectively stimulate creative potential. The investigation also explores the boundary conditions of PS's effects on KS and KH. The results indicate that a stronger organizational safety climate enhances the positive impact of PS on KS while reducing its negative impact on KH. This insight contributes to our understanding of how organizational culture can facilitate knowledge exchange.

5.2. Theoretical Contribution

The first contribution of this study lies in its exploration of the mechanisms by which PS affects EC, clarifying the roles of KS and KH as mediators. This sheds light on the intricate relationship between PS and creativity, enhancing our comprehension of employee innovation. Secondly, by integrating organizational support theory, the research highlights the moderating role of organizational safety climate (OSC) in the relationships among PS, KS, and KH. This framework offers a comprehensive understanding of how organizational culture shapes employee behaviour, providing managers with actionable strategies for fostering a supportive

environment. Lastly, the comparative analysis of the effects of PS on both KS and KH is a novel contribution that enriches the discourse on psychological safety. This comparison not only deepens our understanding of PS but also offers practical insights for promoting KS and mitigating KH in the workplace.

5.3. Practical Implication

This study offers valuable implications for organizations seeking to cultivate a positive culture, drive innovation, and improve knowledge management efficiency. Organizations should focus on fostering an environment that encourages PS, characterized by openness, safety in expression, and tolerance for failure. This approach enhances employee trust and perceived organizational support. To promote KS and prevent KH, organizations should invest in leadership development, establish platforms for knowledge exchange, encourage open communication, and implement incentives for sharing. Supporting innovative team-building initiatives is also crucial. Managers can strengthen OSC by clarifying organizational values, enhancing communication, optimizing structures, and fostering a culture of respect and support. Leadership should exemplify these values to reinforce a climate of openness. Organizational culture and safety climates should be regularly assessed and adapted to the evolving internal and external environments. Ongoing attention to employee development and learning is essential for sustaining support, promoting KS, and stimulating EC.

5.4. Limitations and Future Research

This study has several limitations that suggest avenues for future research. The focus on skilled manufacturing workers in China may limit the generalizability of the findings. Future research should explore these dynamics across various cultural and industrial contexts, such as education, finance, and IT. Reliance on self-reported measures introduces potential bias. Future studies could incorporate objective indicators or utilize mixed methods to enhance the robustness of findings. The cross-sectional approach may not capture the evolving nature of PS, KS, and EC. Longitudinal studies could provide deeper insights into how these variables interact over time. Future research should consider individual characteristics and leadership styles, which may significantly influence PS, KS, and creativity. Additionally, exploring OSC as a potential mediator between PS and creativity via KS could yield further insights. By addressing these limitations, future studies can build upon the findings of this research and contribute to a more comprehensive understanding of

the interplay between psychological safety, knowledge dynamics, and creativity in the workplace.

References

- Agarwal, U. A., Avey, J., & Wu, K. (2022). How and when abusive supervision influences knowledge hiding behavior: evidence from India. *Journal of Knowledge Management*, 26(1), 209-231. <https://doi.org/10.1108/JKM-10-2020-0789>
- Al-Harthi, M., Alshahrani, H. J., Hamed, D. M., & Ibrahim, W. M. (2022). Evidentials, Code Glosses, Hedges and Boosters in Academic Articles: A Cross-Disciplinary Study. *Eurasian Journal of Applied Linguistics*, 8(3), 181-200. <https://ejal.info/menuscript/index.php/ejal/article/view/391>
- Ali, M., Ali, I., Albort-Morant, G., & Leal-Rodríguez, A. L. (2021). How do job insecurity and perceived well-being affect expatriate employees' willingness to share or hide knowledge? *International Entrepreneurship and Management Journal*, 17(1), 185-210. <https://doi.org/10.1007/s11365-020-00638-1>
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the Work Environment for Creativity. *Academy of Management Journal*, 39(5), 1154-1184. <https://doi.org/10.5465/256995>
- Anser, M. K., Ali, M., Usman, M., Rana, M. L. T., & Yousaf, Z. (2021). Ethical leadership and knowledge hiding: an intervening and interactional analysis. *The Service Industries Journal*, 41(5-6), 307-329. <https://doi.org/10.1080/02642069.2020.1739657>
- Argyris, C., & Schön, D. A. (1997). Organizational Learning: A Theory of Action Perspective. *Reis: Revista Española de Investigaciones Sociológicas*, (77/78), 345-348. <https://doi.org/10.2307/40183951>
- Artanti, G. D. (2023). Analysis of Food Consumption Patterns as a Step for Mapping Future Food Needs Based on the Potential of Local Food. *Future of Food: Journal on Food, Agriculture and Society*, 11(3). <https://doi.org/10.17170/kobra-202210056948>
- Babcock, P. (2004). Shedding Light on Knowledge Management. *HR Magazine*, 49(5), 46-51. <https://www.shrm.org/topics-tools/news/hr-magazine/shedding-light-knowledge-management>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Bai, Y., Lin, L., & Li, P. P. (2016). How to enable employee creativity in a team context: A cross-level mediating process of transformational leadership. *Journal of Business Research*, 69(9), 3240-3250. <https://doi.org/10.1016/j.jbusres.2016.02.025>

- Barkhi, R., & Kao, Y.-C. (2011). Psychological climate and decision-making performance in a GDSS context. *Information & Management*, 48(4), 125-134. <https://doi.org/10.1016/j.im.2011.02.003>
- Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate. *MIS Quarterly*, 29(1), 87-111. <https://doi.org/10.2307/25148669>
- Bogenrieder, I., & Nooteboom, B. (2004). Learning Groups: What Types are there? A Theoretical Analysis and an Empirical Study in a Consultancy Firm. *Organization Studies*, 25(2), 287-313. <https://doi.org/10.1177/0170840604040045>
- Brislin, R. W. (1970). Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*, 1(3), 185-216. <https://doi.org/10.1177/135910457000100301>
- Bunderson, J. S., & Boumgarden, P. (2010). Structure and Learning in Self-Managed Teams: Why "Bureaucratic" Teams Can Be Better Learners. *Organization Science*, 21(3), 609-624. <https://doi.org/10.1287/orsc.1090.0483>
- Byrne, B. M. (2013). *Structural Equation Modeling with Mplus: Basic Concepts, Applications, and Programming*. Routledge. <https://doi.org/10.4324/9780203807644>
- Cao, F., & Zhang, H. (2020). Workplace friendship, psychological safety and innovative behavior in China. *Chinese Management Studies*, 14(3), 661-676. <https://doi.org/10.1108/CMS-09-2019-0334>
- Carmeli, A., Gelbard, R., & Reiter-Palmon, R. (2013). Leadership, Creative Problem-Solving Capacity, and Creative Performance: The Importance of Knowledge Sharing. *Human Resource Management*, 52(1), 95-121. <https://doi.org/10.1002/hrm.21514>
- Carmeli, A., & Paulus, P. B. (2015). CEO Ideational Facilitation Leadership and Team Creativity: The Mediating Role of Knowledge Sharing. *The Journal of Creative Behavior*, 49(1), 53-75. <https://doi.org/10.1002/jocb.59>
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive Leadership and Employee Involvement in Creative Tasks in the Workplace: The Mediating Role of Psychological Safety. *Creativity Research Journal*, 22(3), 250-260. <https://doi.org/10.1080/10400419.2010.504654>
- Černe, M., Hernaus, T., Dysvik, A., & Škerlavaj, M. (2017). The role of multilevel synergistic interplay among team mastery climate, knowledge hiding, and job characteristics in stimulating innovative work behavior. *Human Resource Management Journal*, 27(2), 281-299. <https://doi.org/10.1111/1748-8583.12132>

- Černe, M., Nerstad, C. G. L., Dysvik, A., & Škerlavaj, M. (2014). What Goes Around Comes Around: Knowledge Hiding, Perceived Motivational Climate, and Creativity. *Academy of Management Journal*, 57(1), 172-192. <https://doi.org/10.5465/amj.2012.0122>
- Colley, S. K., Lincolne, J., & Neal, A. (2013). An examination of the relationship amongst profiles of perceived organizational values, safety climate and safety outcomes. *Safety Science*, 51(1), 69-76. <https://doi.org/10.1016/j.ssci.2012.06.001>
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations. *Journal of Organizational Behavior*, 33(1), 64-88. <https://doi.org/10.1002/job.737>
- Coyle, I. R., Sleeman, S. D., & Adams, N. (1995). Safety climate. *Journal of Safety Research*, 26(4), 247-254. [https://doi.org/10.1016/0022-4375\(95\)00020-Q](https://doi.org/10.1016/0022-4375(95)00020-Q)
- Curcuruto, M., Mearns, K. J., & Mariani, M. G. (2016). Proactive role-orientation toward workplace safety: Psychological dimensions, nomological network and external validity. *Safety Science*, 87, 144-155. <https://doi.org/10.1016/j.ssci.2016.03.007>
- Davenport, T. H., & Prusak, L. (1998). *Working Knowledge: How Organizations Manage What They Know*. Harvard Business Press.
- Dollard, M. F., & Bakker, A. B. (2010). Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement. *Journal of Occupational and Organizational Psychology*, 83(3), 579-599. <https://doi.org/10.1348/096317909X470690>
- Donyavi, S., Flanagan, R., Assadi-Langroudi, A., & Parisi, L. (2023). Optimising the use of Materials for Construction MSMEs: Building a Comprehensive Framework for Decision-Making and Resource Allocation through an Analytic Hierarchy Process. *International Journal of Construction Supply Chain Management*, 13(1), 50-74. <https://ijcscm.com/menu-script/index.php/ijcscm/article/view/194>
- Durand, F., Bourgeault, I. L., Hebert, R. L., & Fleury, M.-J. (2022). The role of gender, profession and informational role self-efficacy in physician–nurse knowledge sharing and decision-making. *Journal of Interprofessional Care*, 36(1), 34-43. <https://doi.org/10.1080/13561820.2021.1890006>
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2), 350-383. <https://doi.org/10.2307/2666999>
- Edmondson, A. C., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23-43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Ettlie, J. E., & O'Keefe, R. D. (1982). Innovative Attitudes, Values, and Intentions in Organizations. *Journal of Management Studies*, 19(2), 163-182. <https://doi.org/10.1111/j.1467-6486.1982.tb00066.x>
- Feng, J., & Wang, C. (2019). Does abusive supervision always promote employees to hide knowledge? From both reactance and COR perspectives. *Journal of Knowledge Management*, 23(7), 1455-1474. <https://doi.org/10.1108/JKM-12-2018-0737>
- Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley. <https://people.umass.edu/ajzen/f&a1975.html>
- Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological Safety: A Meta-Analytic Review and Extension. *Personnel Psychology*, 70(1), 113-165. <https://doi.org/10.1111/peps.12183>
- Gharbi, H., Touzi, W., & Aliane, N. (2023). Exploring the relationship between procedural justice and turnover intention: The mediating effects of social influence and psychological Safety. *The Journal of Modern Project Management*, 11(2), 98-113. <https://journalmodernpm.com/manuscript/index.php/jmpm/article/view/663>
- Griffin, M. A., & Neal, A. (2000). Perceptions of Safety at Work: a Framework for Linking Safety Climate to Safety Performance, Knowledge, and Motivation. *Journal of Occupational Health Psychology*, 5(3), 347-358. <https://doi.org/10.1037//1076-8998.5.3.347>
- Guchait, P., Paşamehmetoğlu, A., & Dawson, M. (2014). Perceived supervisor and co-worker support for error management: Impact on perceived psychological safety and service recovery performance. *International Journal of Hospitality Management*, 41, 28-37. <https://doi.org/10.1016/j.ijhm.2014.04.009>
- Haas, M. R., Criscuolo, P., & George, G. (2015). Which Problems to Solve? Online Knowledge Sharing and Attention Allocation in Organizations. *Academy of Management Journal*, 58(3), 680-711. <https://doi.org/10.5465/amj.2013.0263>
- Hasan, F., & Kashif, M. (2021). Psychological safety, meaningfulness and empowerment as predictors of employee well-being: a mediating role of promotive voice. *Asia-Pacific Journal of Business Administration*, 13(1), 40-59. <https://doi.org/10.1108/APJBA-11-2019-0236>
- He, P., Sun, R., Zhao, H., Zheng, L., & Shen, C. (2022). Linking work-related and non-work-related supervisor–subordinate relationships to knowledge hiding: a psychological safety lens. *Asian Business & Management*, 21(4), 525-546. <https://doi.org/10.1057/s41291-020-00137-9>
- Hernaus, T., Cerne, M., Connelly, C., Poloski Vokic, N., & Škerlavaj, M. (2019). Evasive knowledge hiding in academia: when competitive individuals are asked to collaborate. *Journal of Knowledge Management*, 23(4), 597-618. <https://doi.org/10.1108/JKM-11-2017-0531>
- Jahanzeb, S., Fatima, T., Bouckennooghe, D., & Bashir, F. (2019). The knowledge hiding link: a moderated mediation model of how abusive supervision affects employee creativity. *European Journal of Work and Organizational Psychology*, 28(6), 810-819. <https://doi.org/10.1080/1359432X.2019.1659245>
- Javed, B., Naqvi, S. M. M. R., Khan, A. K., Arjoon, S., & Tayyeb, H. H. (2019). Impact of inclusive leadership on innovative work behavior: The role of psychological safety. *Journal of Management & Organization*, 25(1), 117-136. <https://doi.org/10.1017/jmo.2017.3>
- Jha, S. (2019). Determinants of employee retention: a moderated mediation model of abusive leadership and psychological empowerment. *Industrial and Commercial Training*, 51(7/8), 373-386. <https://doi.org/10.1108/ICT-05-2019-0047>
- Jiang, Z., Hu, X., Wang, Z., & Jiang, X. (2019). Knowledge hiding as a barrier to thriving: The mediating role of psychological safety and moderating role of organizational cynicism. *Journal of Organizational Behavior*, 40(7), 800-818. <https://doi.org/10.1002/job.2358>
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.5465/256287>
- Kamaluddin, A. (2023). The Role of Rice Cultivation Techniques, Farm Management and Natural Resources on Agricultural Development in Indonesia: Moderating Role of Government Support. *AgBioForum*, 25(2), 23-31. <https://agbioforum.org/manuscript/index.php/agb/article/view/237>
- Kuo, Y.-K., Kuo, T.-H., & Ho, L.-A. (2014). Enabling innovative ability: knowledge sharing as a mediator. *Industrial Management & Data Systems*, 114(5), 696-710. <https://doi.org/10.1108/IMDS-10-2013-0434>
- Kwon, C.-k., Han, S.-h., & Nicolaidis, A. (2020). The impact of psychological safety on transformative learning in the workplace: a quantitative study. *Journal of Workplace Learning*, 32(7), 533-547. <https://doi.org/10.1108/JWL-04-2020-0057>
- Lee, H. (2021). Changes in workplace practices during the COVID-19 pandemic: the roles of emotion, psychological safety and organisation support. *Journal of Organizational Effectiveness: People and Performance*, 8(1), 97-128. <https://doi.org/10.1108/JOEPP-06-2020-0104>
- Li, J., Yuan, L., Ning, L., & Li-Ying, J. (2015). Knowledge sharing and affective commitment: the mediating role of psychological ownership. *Journal of Knowledge Management*, 19(6), 1146-1166. <https://doi.org/10.1108/JKM-01-2015-0043>
- Liu, Y., Keller, R. T., & Bartlett, K. R. (2021). Initiative climate, psychological safety and knowledge sharing as predictors of team creativity: A multilevel study of research and development project teams. *Creativity and Innovation Management*, 30(3), 498-510. <https://doi.org/10.1111/caim.12438>
- Lu, L., & Liang, X. (2009). A Study of the Mediating Role of Knowledge Sharing Between Interpersonal Interaction and Innovation. *Nankai Management Review*, 12(1), 118-123. <https://doi.org/10.3969/j.issn.1008-3448.2009.01.016>
- Luchman, J. N., & González-Morales, M. G. (2013). Demands, Control, and Support: A Meta-Analytic Review of Work Characteristics Interrelationships. *Journal of Occupational Health Psychology*, 18(1), 37-52. <https://doi.org/10.1037/a0030541>
- Lyman, B., Biddulph, M. E., Hopper, V. G., & Brogan, J. L. (2020). Nurses' experiences of Organisational learning: A qualitative descriptive study. *Journal of Nursing Management*, 28(6), 1241-1249. <https://doi.org/10.1111/jonm.13070>
- Matsumoto, D., & Juang, L. (2016). *Culture and Psychology*. Cengage Learning.
- Men, C., Fong, P. S. W., Huo, W., Zhong, J., Jia, R., & Luo, J. (2020). Ethical Leadership and Knowledge Hiding: A Moderated Mediation Model of Psychological Safety and Mastery Climate. *Journal of Business Ethics*, 166(3), 461-472. <https://doi.org/10.1007/s10551-018-4027-7>
- Morrison, D. L., Upton, D. M., & Cordery, J. (1997). Organizational Climate and Skill Utilization. In *12th Annual Conference of the Society for Industrial and Organizational Psychology*, St. Louis, MO.
- Mousa, M., Massoud, H. K., & Ayoubi, R. M. (2020). Organizational learning, authentic leadership and individual-level resistance to change. *Management Research: Journal of the Iberoamerican Academy of Management*, 18(1), 5-28. <https://doi.org/10.1108/MRJIAM-05-2019-0921>
- Mu, S., & Gnyawali, D. R. (2003). Developing Synergistic Knowledge in Student Groups. *The Journal of Higher Education*, 74(6), 689-711. <https://doi.org/10.1080/00221546.2003.11780864>
- Mudambi, R., & Navarra, P. (2015). Is Knowledge Power? Knowledge Flows, Subsidiary Power and Rent-Seeking within MNCs. In J. Cantwell (Ed.), *The Eclectic Paradigm: A Framework for Synthesizing and Comparing Theories of International Business from Different Disciplines or Perspectives* (pp. 157-191). Palgrave Macmillan UK. https://doi.org/10.1007/978-1-137-54471-1_7

- Mura, M., Lettieri, E., Radaelli, G., & Spiller, N. (2016). Behavioural operations in healthcare: a knowledge sharing perspective. *International Journal of Operations & Production Management*, 36(10), 1222-1246. <https://doi.org/10.1108/IJOPM-04-2015-0234>
- Na-Nan, K., & Arunyaphum, A. (2021). Effect of employees' work engagement and knowledge sharing as mediators of empowering leadership and innovative work behaviour. *Industrial and Commercial Training*, 53(4), 313-330. <https://doi.org/10.1108/ICT-08-2020-0100>
- Nadeem, M. A., Liu, Z., Ghani, U., Younis, A., & Xu, Y. (2021). Impact of shared goals on knowledge hiding behavior: the moderating role of trust. *Management Decision*, 59(6), 1312-1332. <https://doi.org/10.1108/MD-09-2019-1197>
- Nooteboom, B., Van Haverbeke, W., Duysters, G., Gilsing, V., & van den Oord, A. (2007). Optimal cognitive distance and absorptive capacity. *Research Policy*, 36(7), 1016-1034. <https://doi.org/10.1016/j.respol.2007.04.003>
- Peng, H., Bell, C., & Li, Y. (2021). How and when intragroup relationship conflict leads to knowledge hiding: the roles of envy and trait competitiveness. *International Journal of Conflict Management*, 32(3), 383-406. <https://doi.org/10.1108/IJCM-03-2020-0041>
- Pradhan, S., Srivastava, A., & Mishra, D. K. (2020). Abusive supervision and knowledge hiding: the mediating role of psychological contract violation and supervisor directed aggression. *Journal of Knowledge Management*, 24(2), 216-234. <https://doi.org/10.1108/JKM-05-2019-0248>
- Rhee, Y. W., & Choi, J. N. (2017). Knowledge management behavior and individual creativity: Goal orientations as antecedents and in-group social status as moderating contingency. *Journal of Organizational Behavior*, 38(6), 813-832. <https://doi.org/10.1002/job.2168>
- Rivera, A. E., Rodríguez-Aceves, L., & Mojarro-Duran, B. I. (2021). Enabling knowledge sharing through psychological safety in inter-organisational arrangements. *Journal of Knowledge Management*, 25(5), 1170-1193. <https://doi.org/10.1108/JKM-04-2020-0241>
- Rouse, E. D. (2020). Where You End and I Begin: Understanding Intimate Co-creation. *Academy of Management Review*, 45(1), 181-204. <https://doi.org/10.5465/amr.2016.0388>
- Roussin, C. J. (2008). Increasing Trust, Psychological Safety, and Team Performance Through Dyadic Leadership Discovery. *Small Group Research*, 39(2), 224-248. <https://doi.org/10.1177/1046496408315988>
- Setyowati, R. N., & Herianto, E. (2022). Multicultural education in Indonesia as a function of curriculum development strategies, students' cultural competencies and globalization. *Przestrzeń Społeczna (Social Space)*, 22(2), 114-136. <https://socialspacejournal.eu/menu-script/index.php/ssj/article/view/57>
- Sever, S., Dogan, C. D., Kamis, O., & Sever, G. (2023). Psychometric properties and standard-setting study of the Piano Performance Test for prospective teachers. *Electronic Journal of Music in Education*, (52), 18-37. <https://doi.org/10.7203/LEEME/52.27217>
- Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams? Transformational leadership as a moderator. *Journal of Applied Psychology*, 92(6), 1709-1721. <https://doi.org/10.1037/0021-9010.92.6.1709>
- Sierra-Rodríguez, A., Arroyo-Machado, W., & Barroso-Hurtado, D. (2022). Twitter and Human Trafficking: Purposes, Actors and Topics in the Spanish-speaking Scene. *Comunicar*, 30(71), 79-91. <https://doi.org/10.3916/C71-2022-06>
- Sofyan, Y., De Clercq, D., & Shang, Y. (2023). Detrimental effects of work overload on knowledge hiding in competitive organisational climates. *Asia Pacific Journal of Human Resources*, 61(2), 324-354. <https://doi.org/10.1111/1744-7941.12317>
- Syed, F., Naseer, S., Akhtar, M. W., Husnain, M., & Kashif, M. (2021). Frogs in boiling water: a moderated-mediation model of exploitative leadership, fear of negative evaluation and knowledge hiding behaviors. *Journal of Knowledge Management*, 25(8), 2067-2087. <https://doi.org/10.1108/JKM-11-2019-0611>
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An Examination of Leadership and Employee Creativity: The Relevance of Traits and Relationships. *Personnel Psychology*, 52(3), 591-620. <https://doi.org/10.1111/j.1744-6570.1999.tb00173.x>
- Tong, J. (1984). Introduction to Statistics (XI). *Mathematical Statistics and Management*, (5), 25-29.
- Weale, V. P., Wells, Y. D., & Oakman, J. (2019). The work-life interface: a critical factor between work stressors and job satisfaction. *Personnel Review*, 48(4), 880-897. <https://doi.org/10.1108/PR-09-2016-0226>
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a Theory of Organizational Creativity. *Academy of Management Review*, 18(2), 293-321. <https://doi.org/10.5465/amr.1993.3997517>
- Yao, Z., Zhang, X., Luo, J., & Huang, H. (2020). Offense is the best defense: the impact of workplace bullying on knowledge hiding. *Journal of Knowledge Management*, 24(3), 675-695. <https://doi.org/10.1108/JKM-12-2019-0755>
- Zárraga, C., & Bonache, J. (2003). Assessing the team environment for knowledge sharing: an empirical analysis. *The International Journal of Human Resource Management*, 14(7), 1227-1245. <https://doi.org/10.1080/0958519032000114282>
- Zohar, D. (1980). Safety Climate in Industrial Organizations: Theoretical and Applied Implications. *Journal of Applied Psychology*, 65(1), 96-102. <https://doi.org/10.1037/0021-9010.65.1.96>
- Zohar, D., & Luria, G. (2005). A multilevel model of safety climate: cross-level relationships between organization and group-level climates. *The Journal of Applied Psychology*, 90(4), 616-628. <https://doi.org/10.1037/0021-9010.90.4.616>