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# Psychological Empowerment and Innovative Work Behavior: The Role of Transformational Leadership as Moderating Variable

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## Abstract

**Research aims:** The objective of this research is to explore the effect of psychological empowerment on innovative work behavior with transformational leadership as a moderator.

**Design/Methodology/Approach:** This research was designed using a quantitative approach where data was collected using questionnaires distributed to 190 employees of export SMEs in Bali. The gathered data was examined using Smart PLS 3.2.9 software.

**Research findings:** The research found that psychological empowerment and its dimensions positively affected innovative work behavior. In addition, transformational leadership fully moderated the link between psychological empowerment and innovative work behavior. The limitation of the research indicated bias due to self-assessment reports. Meanwhile, the practical implications contribute to expanding understanding of the role of transformational leadership as a moderator. Thus, leaders have a reference in policy making.

**Theoretical Contribution/Originality:** The theoretical contribution of this research contributes to the knowledge of on innovative work behavior by exploring psychological empowerment.

**Practitioners/Policy Implications:** Practical implications contributed to expanding understanding of the moderating role of transformational leadership. Hence, leaders have a reference in policy making.

**Research Limitations/Implications:** The sample used is still limited to the export SME sectors in Bali. This research uses a causality approach. Thus, the data reported is self-assessment.

**Keywords:** Innovative Work Behavior; Psychological Empowerment; Transformational Leadership

## Introduction

Continuous development is a challenge for organizations aiming to overcome the challenges faced, including the level of competition, technological advances, and changes in market demands. This situation requires every organization to find innovative steps to adapt (Sintaasih et al., 2020), including maximizing employee innovative work behavior (henceforth IWB). Consequently, improving the quality of human resources becomes the organization's main priority because it is a source of competitiveness (Iqbal et al., 2018). Innovative behavior also creates

different work structures (Dewi et al., 2023; Lee et al., 2012). Furthermore, IWB helps organizations generate differentiation strategies (Urbancova, 2013). However, the adoption of IWB theory remains low (Roper et al., 2017).

SMEs are one of the economic sectors that require IWB. Through IWB, innovative products and innovative services are produced and offered change distinctively, considering SMEs in producing and distributing products produced independently. Through independence, SMEs enhance their strength. A study conducted by Sulistyono & Siyamtinah (2016) shows that SMEs are crucial to the nations' economic development, especially developing countries like Indonesia. According to the Statistics of Bali Province (Badan Pusat Statistik Provinsi Bali, 2021), SMEs are experiencing declining business trends due to low innovation and creativity. Therefore, SMEs require IWB to survive and meet competitive standards (Tóth et al., 2020).

Developing psychological empowerment (henceforth PE) is one of the keys to enhancing IWB in SMEs. PE is a multidimensional concept. Boley & McGehee (2014) state that empowerment requires social exchange theory to understand the implications of empowerment on the willingness of organizational members to develop SMEs. Subsequently, Cropanzano et al. (2017) develop PE measurement: meaning, competence, self-determination, and impact. PE relates to increased feelings among members through formal practices and informal techniques (Shapira-Lishchinsky & Tsemach, 2014). Meaningful empowerment strengthens the link of organizational members with their current work. Competency empowerment increases opportunities to do work. Self-determination empowerment allows individuals to organize actions. Lastly, it impacts empowerment by recognizing members' contributions to organizational performance. Previous research has used the cognitive perspective (Pradhan et al., 2017; Shahzad et al., 2018). Hence, the research's measurement of PE is again adopted from previous research.

However, psychological empowerment's impact on IWB is occurring. It is inseparable from the results in several previous studies. Helmy et al. (2019) find that PE does not positively impact IWB. Alkhodary (2016) and Singh & Sarkar (2012) state that PE is observed through the dimensions of meaning, competency, self-determination, and impact, which do not influence IWB. To fill the existing gap, the research remeasures this link.

Discussions about PE and IWB are inseparable from leadership interventions. Most previous studies show that positive psychological perceptions and work environments are determined by transformational leadership (henceforth TL) (Aristana et al., 2023; Nielsen and Daniels 2012). Transformational leaders are perceived as having solid, reasonable words and demonstrated actions that impact the organizational climate. Empirical studies also show that subordinates affiliated with transformational leaders feel support and encouragement psychologically and in action (Gooty et al., 2009). Thus, subordinates tend to show IWB. Besides, subordinates who are in TL are weaker, even though they feel job well-being. It leads to deviant behavior in subordinates due to the leader's negative influence and inhibits IWB (Miao & Cao, 2019). Although empirical studies focused on TL predicting IWB (Masood & Afsar, 2017). The researchers interacted with TL variables as a

moderation while exploring contextually to study the effects on the link between empowerment and IWB (Lee et al., 2004).

Notably, Bank Indonesia's commitment to the Government is accelerating various policies to accommodate national economic growth. According to Bank Indonesia (2023), the revival of SMEs requires them to be innovative, creative, and adaptive. It helps expand market access and supply chains. Therefore, this research aims to expand the research of Ali et al. (2020) and (Boley & McGehee, 2014) on developing a model of IWB through psychological empowerment. Besides, it clarifies using social exchange theory in measuring and comparing PE and IWB. Simultaneously, this research depicts TL as a moderator as the novelty.

## **Literature Review and Hypotheses Development**

### **Theoretical Review and Hypothesis Development**

#### **Social Exchange Theory**

Social exchange theory is a social exchange process that includes material resources (Zakaria et al., 2013). This theory reflects subordinate behavior in interactions following future expectations (Aristana et al., 2022). Lehmann-Willenbrock et al. (2015) stated that social exchange is the key to the interaction process between subordinates and superiors. This form of exchange is demonstrated by consultation, support, autonomy, and reducing organizational bureaucracy (Kim & Beehr, 2018). Therefore, social exchange theory is applicable in describing psychological empowerment. PE explains an individual attitudes and behavior (Hsieh & Wang, 2015). Fundamentally, PE helps individuals and teams collaborate in achieving organizational goals (M. K. Othman et al., 2020). Moreover, empowerment also strengthens the emotional relationship of subordinates with their leaders (Guinot & Chiva, 2019). Furthermore, continuous empowerment motivates employees to demonstrate innovative behavior during duty performance (Dirks & Ferrin, 2002; Edú-Valsania et al., 2016). Accordingly, social exchange theory becomes the best approach to increasing employees' willingness to voluntarily be motivated by the conformity of their expectations (Kloutsiniotis & Mihail, 2020; N. Othman & Nasurdin, 2019).

#### **Psychological Empowerment**

Organizations have sought many ways to increase organizational effectiveness, including psychological empowerment, which has been considered a decisive step in recent years (Pradhan et al., 2017). Shapira-Lishchinsky & Tsemach (2014) explain PE as increasing feelings among members through formal practices and informal techniques. It aligns with Stanescu et al. (2021), who state that PE is more about the role of responsibility and autonomy given to employees through delegation of power to increase work motivation. Moreover, Lardier et al. (2021) explain PE as a perception of control and critical awareness regarding social issues, specifically for socio-political systems, and how it leads to socio-

political change. The following definition states that LED is motivational cognitions established by the work environment, which describes employees' orientation (Minai et al., 2020). Most empowerment literature focuses on intrapersonal psychological empowerment, with research examining the cognitive component. Previous research has used the cognitive perspective (Helmy et al., 2019; Pradhan et al., 2017; Shahzad et al., 2018). Thus, the measurement of PE in this research will be adopted from previous research.

### **Meaning**

Meaning is individual emotional experiences when they comprehend the work and activities required to complete it. The study by Kustrak Korper, Holmlid, and Patrício (2021) assumes increased meaning is generated from interactions and relationships supported by the formed situations. The contextual boundaries change and produce interactions with new meanings (M. Malik et al., 2021). Therefore, producing an attractive vision will connect employees with a greater purpose and create value for the employees themselves (Minai et al., 2020). Thus, meaning refers to employees' feelings that are appropriate to their work (Alotaibi et al., 2020).

### **Competence**

Competence is individual confidence when performing a job using their skills. Accordingly, competency refers to an individual's behavior and attitudes to complete each job effectively (Subramanian et al., 2016). Ontological competence is considered from the way of life that individual competence is perceived from self-understanding (Pinnington, 2011). It was further explained that individual competence refers to each individual's authority in completing work (Rantesalu et al., 2017). Thus, competency requires the opportunity and freedom of individuals to explore their abilities.

### **Self-determination**

Self-determination is an individual sense of control when starting and managing their work. It is driven by basic psychological needs such as autonomy and connectedness to the environment (Forner et al., 2020). It is comprehensively stated that self-determination is every individual's motivation in doing work (Van den Broeck et al., 2021; Vandenaabeele & Breugh, 2014). Ryan and Deci (2020) explain that this motivation makes employees more independent in all processes, which must be facilitated. It is further said that motivation decreases if it is hindered from achieving these needs.

### **Impact**

Impact is the level at which an individual influences strategy, administration, or operation of work results in the company. According to Shahzad et al. (2018) explain an attitude formed from the empowerment process, which ultimately refers to behavior that is beneficial to the organization. This attitude is contextually determined by the attention given by the organization (Bhatnagar, 2012). Holistically, it is conveyed that PE includes

emotions as the basis for why individuals are willing to contribute at the organizational level (Jha, 2014). Like other dimensions, the impact is primarily determined by the opportunities and autonomy provided. Thus, they determine how the work is performed (Grass et al., 2020; Nikpour, 2018).

### **Innovative Work Behavior**

IWB is related to creating ideas, providing support, and helping their implementation. Akram et al. (2016) define IWB as the individual behavior of accomplishing the initiation and introduction of ideas in a work role, group, or organization that is advanced and useful for developing of processes, products, or procedures and their implementations. Another opinion states that IWB is individual innovation viewed as crucial for increasing competitive advantage (Helmy et al., 2019). Afsar & Umrani (2019) mention IWB as an individual's ability to work outside routine activities, for example, by discovering advanced technology, applying advanced work methods, and performing examinations to apply new ideas. IWB addresses the challenges encountered by employees in enhancing creative personal identity (Usmanova et al., 2020). Accordingly, IWB is designing and implementing advanced product and process ideas, which will later improve personal, team, and organizational performance (Kmieciak, 2021). However, implementing IWB has several critical challenges, i.e., educating and instilling this behavior to support business performance because their creative and innovative mindset is a mechanism for seizing market opportunities (Munir & Beh, 2019).

### **Transformational Leadership**

Leadership theory has developed comprehensively. Further, the broadly discussed type of leadership is TL (Udin & Shaikh, 2022). Burns (1978) initiates this leadership, then (Bass, 1985) develops it. Recently, various studies have discussed TL as one of the pivotal leadership theories (Astuty & Udin, 2020; Udin, 2023). Transformational leaders motivate by vocalizing a vision that provides energy and purpose (Masood & Afsar, 2017). Leaders who challenge followers promote mutual progress through increased morale and higher motivation. Cortellazzo, Bruni, and Zampieri (2019) and Farahnak et al. (2020) expand Burns' work by explaining the influence of transformational leaders in creating positive and valuable change. Shahjehan, Afsar, and Shah (2019) also stated that this leadership requires a visionary and inspiring leader. İşcan et al. (2014) state that TL is a leader who has a positive role in increasing self-confidence and helping subordinates demonstrate their potential. Applying TL adjusts the values and norms of subordinates in achieving performance expectations (Jung et al., 2008), which fosters creative ideas and creates knowledge to develop innovative organizational behavior (Cortellazzo et al., 2019; Farahnak et al., 2020; Udin et al., 2023). TL is perceived to generate awareness and acceptance in encouraging vision, mission, and goals in building work teams (Al-Husseini & Dosa, 2016; Shafi et al., 2020). The four sub-dimensions of TL are idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Eliyana et al., 2019; Henker et al., 2015; Shafi et al. 2020).

## Hypothesis Development

### Psychological Empowerment and Innovative Work Behavior

The literature describes how PE and organizational innovation have developed comprehensively. The empowerment perspective has developed, Krishnan (2012) states that empowerment is the implementation of delegating control and power to employees. The organization's innovative capability relies on management's ability to empower employees (Bantha & Nayak, 2020; Sulistyo & Siyamtinah, 2016). Nikpour (2018) confirms that PE positively impacts innovative behavior. In addition, empowerment is crucial in developing innovative behavior and an innovative climate (Liu et al., 2021; Waheed et al., 2018; Yamin 2020) that involves leaders in empowerment activities. Grass et al. (2020) explain that the empowerment construct improves the innovation process. Improving the innovation climate begins with increasing employees' innovative behavior (Afsar & Umrani, 2019; Nikpour, 2018). Through empowerment, leaders encourage innovative employee behavior (Abukhait et al., 2019; Minai et al., 2020; Yamin, 2020). Kmiecik et al. (2012) and Grošelj et al. (2021) revealed that innovation activities are related to empowerment and the innovation climate that is built in the organization. Accordingly, empowerment is significantly related to innovation (Bhatnagar 2012; Sinha et al., 2016), extracting thoughts from existing theories about empowerment (Inceoglu et al., 2018; Náfrádi et al., 2017). Cropanzano et al. (2017) describe PE as intrinsic motivation derived from four cognitions (meaning, competence, self-determination, and impact). In an organizational context, leaders are expected to empower people by delegating tasks, providing authority, and providing freedom in work performance (Stander & Rothmann, 2010). Psychologically empowered employees exert effort at work and linger in the organization (Mufti et al., 2020). This topic is further strengthened by the results (Alotaibi et al., 2020) stating that employees who are empowered meaningfully increase their engagement with the work they provide and often display innovative behavior (S. Y. Malik et al., 2020). Besides, competently empowered individuals will seek ways to work more effectively (Rantesalu et al., 2017; Roscoe et al., 2019). Individuals with high self-determination become more independent, resulting in innovative behavior (Van den Broeck et al., 2021). Finally, attitude refers to behavior that impacts the work (Grass et al., 2020). Consequently, the researchers develop the first hypothesis:

*H<sub>1</sub>: PE has a positive effect on IWB.*

*H<sub>1a</sub>: Meaning positively affects IWB.*

*H<sub>1b</sub>: Competence positively affects IWB.*

*H<sub>1c</sub>: Self-determination positively affects IWB.*

*H<sub>1d</sub>: Impact positively affects IWB.*

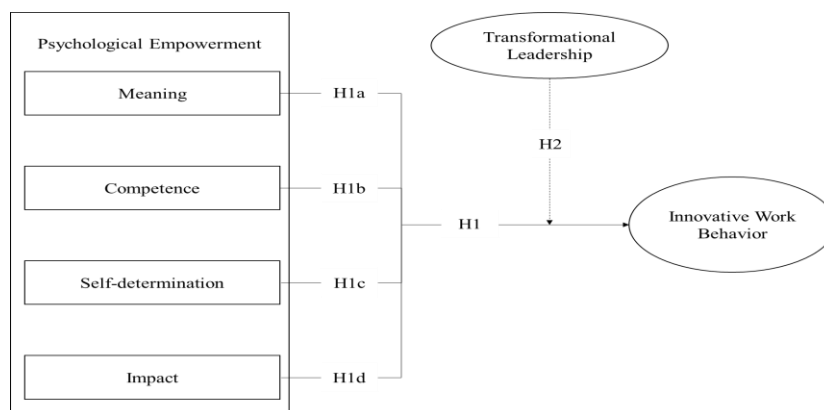
### Transformational Leadership as Moderation

The development literature states that for leaders to develop innovation in the organization, it is pivotal to increase the innovative behavior of subordinates (Iftikhar et al., 2021). Henker et al. (2015) find that TL influences the work environment. TL consists of idealized influence, inspiration motivation, intellectual stimulation, and individualized consideration encourage PE (Kelloway et al. 2012; Maquieira et al., 2020; Minai et al. 2020). Generally, transformational leaders generate employee strength through empowerment to improve their work results (Al-Husseini & Dosa, 2016; Jha, 2014). Gyensare et al. (2016) provide personal attention, treating each employee individually, training, and advising to make subordinates feel valued and make them feel personally close to their leaders. (Masood & Afsar, 2017) explain that leadership is the basis for successful innovation. Conceptually, TL supports discussing innovation behavior and ultimately improving company performance (Sattayaraksa & Boon-Itt, 2015). Matzler et al. (2008) find TL the most appropriate approach to improving company management. Transformational leaders contribute the highest percentage to increasing employee innovative behavior (Arsawan et al. 2022; Nusair et al., 2012). Leaders encourage PE to increase employees' innovative behavior (Abukhait et al., 2019; Yamin, 2020).

Furthermore, previous research suggests using TL as a moderator in IWB models (Iftikhar et al., 2021). It is inseparable from subordinates who feel more supported by organizations with transformational leaders (Sungu et al., 2019). We argue that TL empowers individuals to demonstrate IWB. Subordinates with low TL practices tend to doubt and worry about their organization (Miao & Cao, 2019; Riana et al., 2020). The process of increasing subordinates' IWB with the process of PE (meaning, competence, self-determination, and impact) (Basu et al., 2017; Helmy et al. 2019; Shahzad et al. 2018), will increase if it is further improved with the intervention of TL. Accordingly, the researchers develop the second hypothesis:

*H<sub>2</sub>: TL positively moderates the link between PE and IWB.*

### Research Conceptual Framework



**Figure 1** Research Conceptual Framework

## Research Methods

### Population and Sample

This research was performed on export-oriented craft SMEs in Bali. Currently, there are 42 export-oriented craft SMEs. The criteria for industries involved in the research are businesses that have been consistently in business in five years, own a business license, and are registered with the Bali Provincial Trade Service. To determine the sample size, this research refers to Krejcie & Morgan (1970):

$$n = \frac{X^2 \cdot N \cdot P (1 - 0,5)}{d^2 \cdot (N - 1) + X^2 \cdot P (1 - P)}$$

$$n = \frac{3,841.42.0,5 (1 - 0,5)}{0,05^2 \cdot (42 - 1) + 3,841.0,5 (1 - 0,5)}$$

$$n = 37,95/38 \text{ industries}$$

Information:

$n$  = sample size;  $N$  = population size;  $X^2$  = Chi-square value (0.841);  $d$  = estimation error (0.05);  $P$  = population proportion (0.5)

The number of samples that contributed was 38 businesses selected randomly. The respondents for this research were selected from five employees in each business. Hence, the total number of respondents involved was 190 respondents. Data collection was performed using an online questionnaire by Google Forms and a manual questionnaire when visiting SMEs. The research was conducted from February – June 2023. Data collection was performed in two steps. The first steps was to test the instrument by conducting validity and reliability tests by administering questionnaires to 30 respondents and analyzed using SPSS IBM 21. After the instrument was declared valid by meeting the calculated  $r > 0.3$  ( $r > 0.3$ ) and Cronbach's alpha reliability of 0.6 ( $CA > 0.6$ ). Then, data collection continues to the second stage, i.e., sharing questionnaires following the selected number. Further, it was examined using the Smart PLS 3.2.9 application.

### Measurements

This research analyzes three main variables: PE, IWB, and TL. To assess each variable, a five-point Likert scale was used (1 strongly disagree – 5 strongly agree). The PE was described by four dimensions with twelve statements adopted from (Alotaibi et al., 2020; Siegall & Gardner, 2000) meaningful and work activities were meaningful. Competence was measured by confidence in abilities, self-confidence, and appropriate skills. Self-determination was measured by autonomy, decision-making, and opportunities. Impact was measured by impact on the organization, control over the organization, and responsibility for the organization. The IWB was explained by nine statements from (Janssen, 2000; Vandavasi et al., 2020): creating new ideas, new work instruments, generating solutions, supporting innovative ideas, approving innovative ideas,



enthusiasm, changing ideas, introducing ideas and evaluating the usefulness of innovative ideas. TL was measured using seven statements adopted from (Sudibjo & Prameswari, 2021): explaining the vision and mission, inviting cooperation, showing creativity, behavior with organizational values, responsibilities, opportunities, and motivating employees.

## Results and Discussion

### Result

Following the collected questionnaires, information was obtained about the characteristics of respondents who contributed to the data research (see Table 1). The analysis demonstrated that most respondents were female, aged 31 to 40, with a senior high school education and 11 to 20 years of experience.

**Table 1** Respondent Characteristics

Respondent Characteristics (N=190)	Frequency	Percent (%)
Gender		
Male	82	43.16
Female	108	56.84
Age (years)		
≤ 20	4	2.11
21 - 30	32	16.84
31 - 40	101	53.16
41 - 50	47	24.74
> 50	6	3.16
Education		
Senior High School	130	68.42
Diploma	25	13.16
Bachelor	10	5.26
Postgraduate	25	13.16
Experience (years)		
1 - 10	5	2.63
11 - 20	119	62.63
21 - 30	66	34.74

### Evaluation of measurement models

This measurement aimed to determine data quality for each construct used. The structural model possessed several criteria that must be met (Hair et al., 2013). First, it was convergent validity with an outer loading threshold of 0.6 ( $OL > 0.6$ ). Second, it was discriminant validity by comparing the average variance extracted (VAVE) root value with other constructs, which was declared significant with a value more significant than 0.5 (sig. > 0.5). Third, the composite reliability of the construct was evaluated by observing Cronbach's alpha and composite reliability values more significant than 0.7 ( $CA/CR > 0.7$ ).

Multicollinearity was also observed by observing the VIF value. Based on (Hair et al., 2016), the VIF value was lesser than 5 (VIF<5). The results are illustrated in Table 2.

**Table 2** Construct validity and reliability

Variable	Indicator	Outer Loading	VIF	CA	rho_A	CR	AVE
Meaning	MN1	0.864	1.446	0.753	0.753	0.859	0.670
	MN2	0.780	1.623				
	MN3	0.810	1.944				
Competence	COM1	0.781	2.595	0.767	0.776	0.866	0.683
	COM2	0.807	2.854				
	COM3	0.888	3.080				
Self-Determination	SD1	0.855	1.230	0.773	0.783	0.868	0.688
	SD2	0.777	3.110				
	SD3	0.854	3.260				
Impact	IP1	0.773	2.387	0.782	0.784	0.872	0.694
	IP2	0.850	2.490				
	IP3	0.874	2.163				
Innovative Work Behavior	IWB1	0.829	2.760	0.925	0.937	0.937	0.624
	IWB2	0.774	3.150				
	IWB3	0.837	2.691				
	IWB4	0.761	1.811				
	IWB5	0.798	1.394				
	IWB6	0.752	1.568				
	IWB7	0.743	1.693				
	IWB8	0.794	1.457				
	IWB9	0.816	1.688				
Transformational Leadership	TL1	0.804	3.180	0.892	0.902	0.916	0.609
	TL2	0.824	3.236				
	TL3	0.837	4.535				
	TL4	0.776	2.668				
	TL5	0.744	2.144				
	TL6	0.796	3.155				
	TL7	0.669	1.813				

The analysis demonstrated that all outer loading values more significant than 0.6 were in the range of 0.669 – 0.888. Discriminant validity followed the results of the Fornell-Larcker Criterion test showing an  $\sqrt{AVE}$  value more significant than 0.5 (see Table 3).

**Table 3** Discriminant validity (Fornell-Larcker Criterion)

Variable	COM	IMP	IWB	MN	SD	TL
Competence	0.827					
Impact	0.658	0.833				
Innovative Work Behavior	0.446	0.673	0.790			
Meaning	0.750	0.745	0.462	0.819		
Self-Determination	0.790	0.794	0.500	0.875	0.829	
Transformational Leadership	0.498	0.615	0.563	0.479	0.525	0.780

Cronbach's alpha and composite reliability showed values more significant than 0.6 with no multicollinearity because the VIF value was lesser than 5 (Table 2). Accordingly, all constructs were free from random errors and appropriate for further testing.

### Evaluation of structural models

Structural model evaluation also took several testing stages. First, the model's feasibility was assessed by observing the R square ( $R^2$ ) value. Based on (Hair et al., 2017), the  $R^2$  value was divided into categories, i.e., strong (0.67), medium (0.33), and weak (0.19). The results showed that the  $R^2$  value was 0.438, and the Adjusted  $R^2$  was 0.429 in the moderate category. Second, the goodness-of-fit (GoF) calculation was obtained at 0.538 (high category), and the model was declared fit. Third, calculating the value of Q predictive relevance ( $Q^2$ ) had a predictive value of 0.262 (good) because it possessed a positive value more significant than zero (Chin, 2010; Hair et al., 2018).

### Hypothesis Testing

Testing the research hypothesis on the effect of PE and IWB as moderated by TL is illuminated in Table 4 and Figure 2.

**Table 4** Hypothesis test

Link between Variables	$\beta$	Mean	STDEV	T Statistics	p-values	Information
PE -> IWB	0.378	0.381	0.064	5.889	0.000	Supported
MN -> PE	0.253	0.252	0.010	24.808	0.000	Supported
COM -> PE	0.267	0.268	0.014	19.479	0.000	Supported
SD -> PE	0.266	0.267	0.009	28.540	0.000	Supported
IP -> PE	0.315	0.315	0.014	23.197	0.000	Supported
PE*TL -> IWB	-0.143	-0.140	0.045	3.207	0.001	Supported

The hypothesis testing showed that PE directly positively affected IWB with  $\beta = 0.378$ ,  $t = 5.889$ , and  $p = 0.000$  (H1 supported). Subsequently, the testing demonstrated the dimension of PE means with  $\beta = 0.253$ ,  $t = 24.808$ , and  $p = 0.000$  (H1a supported). Further, it was dimensional PE competence with  $\beta = 0.267$ ,  $t = 19.479$ , and  $p = 0.000$  (H1b supported). The result signified the PE dimension of self-determination with  $\beta = 0.266$ ,  $t = 28.540$ , and  $p = 0.000$  (H1c supported). Then, it revealed that dimensional PE impact with  $\beta = 0.315$ ,  $t = 23.197$ , and  $p = 0.000$  (H1d supported). Eventually, TL was found to play a moderating role (pure moderation) with  $\beta = -0.143$ ,  $t = 3.207$ , and  $p = 0.001$  (H2 supported).

### Discussion

The research aims to conceptualize IWB with PE and its dimensions with TL as a moderator. The results signify that PE and its dimensions positively had a significant influence. Consequently, it is interpreted that the more PE and its dimensions: meaning, competence, self-determination, and impact, the more IWB increases. This result supports previous research (Abukhait et al., 2019; Minai et al., 2020; Yamin, 2020). As

explained in social exchange theory, PE fundamentally helps employees to demonstrate work behavior (Forner et al., 2020; Hsieh & Wang, 2015). Practically, these results provide an overview for SMEs regarding the mechanisms that increase IWB as a business development strategy. Furthermore, increasing IWB helps SMEs design successful products. It is suitable for intensive competition, making the products produced quickly obsolete. Therefore, these results fill the gaps in previous research (Kmieciak et al., 2012). Conceptually, there are still limited studies that explore the link between PE and IWB.

Another result of this research is that TL moderates PE and IWB. These results show that TL influences IWB behavior and intervenes in the link between PE and IWB, which supports the previous study (Iftikhar et al., 2021). It emphasizes the role of a leader as the highest policyholder and an agent of change in the organization (Aristana et al., 2020; Carmeli & Paulus, 2015). In addition, employees feel more supported by TL in contributing to their organization (Sungu et al., 2019). Consequently, if support is low, TL tends to cause worry (Helmy et al., 2019; Miao & Cao, 2019; Pradhan et al., 2017; Shahzad et al., 2018). The research results are explained by social exchange theory, where behavior is determined by the interaction process between employees and superiors (Kim & Beehr, 2018; Zakaria et al., 2013). Simultaneously, these results became a reference for managers in determining policy direction for SMEs.

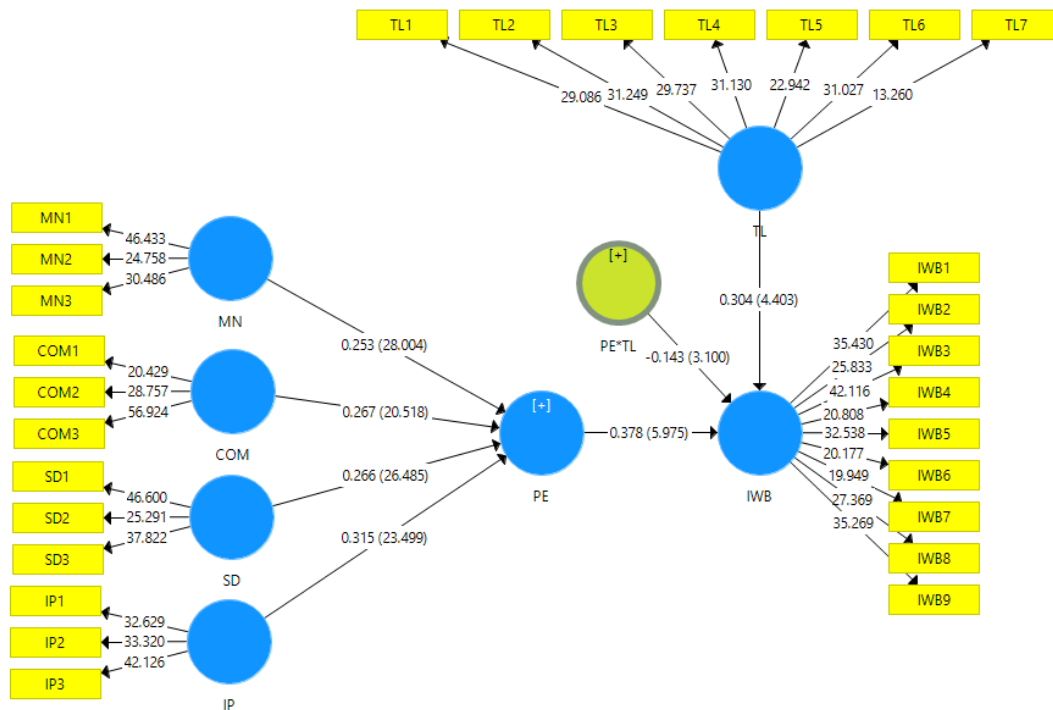


Figure 2 Bootstrapping SmartPLS Models

Furthermore, this research complements social exchange theory, which aims to increase understanding of the existence of SMEs in developing IWB. It is inseparable from IWB as an individual ability. Accordingly, to maximize this ability, social interaction is needed between subordinates and their leaders (Afsar & Umrani, 2019). Therefore, social

exchange theory supports exchanging ideas and materials (Zakaria et al., 2013). Hence, the research emphasizes that social exchange theory overcomes obstacles to maximizing subordinates' roles (de Guimarães et al., 2018). Moreover, social exchange theory helps managers perform effective empowerment processes in achieving predetermined goals (Tran et al., 2021; Zhang et al., 2019). However, this process is primarily determined by the type of leadership applied. Referring to this, the type of leader with a transformational approach is a choice that suits the conditions of SMEs (Budur & Demir, 2022; Erkutlu, 2008; Tajasom et al., 2015)—noting this leadership approach subordinates personally (Noruzy et al., 2013; Puni et al., 2021).

## **Conclusion**

SMEs currently face various challenges in developing their businesses. Developing IWB in employees is a significant effort. The research shows that the best step taken is to increase psychological empowerment, explained by meaning, competence, self-determination, and impact. Besides, this empowerment also requires the role of a leader. The results signified that TL fully moderates empowerment by increasing IWB. Furthermore, a personal approach as a TL characteristic directly affects employee motivation to contribute to the organization.

This research provides theoretical contributions. First, it expands the existing literature on the role of TL, specifically regarding its demonstrated moderating role. To the best of the researchers' knowledge, this research has rarely been performed in previous empirical research. Second, this research provides a different perspective on PE in improving employee work behavior. Every employee has potential. Thus, appropriate empowerment is required to maximize their abilities. Third, the dimensions of psychological empowerment: meaning, competence, self-determination, and impact show a positive contribution. Increasing IWB is achieved by paying attention to subordinates' understanding of work, personal abilities, self-control, and the influence they demonstrate.

We provide implications to enhance leaders' and employees' insights. First, it increases IWB in managing craft SMEs, which requires psychological empowerment. Second, it significantly impacts the increase of IWB. It is inseparable from the employees' attitude to provide benefits to the organization, which is demonstrated through innovative behavior at work. Third, leaders should consider TL more in encouraging innovative behavior in completing their work.

Future researchers could incorporate designs capable of providing causality assessments by considering questions from leaders' and employees' perceptions. Hence, the results are comprehended effectively as a context for organizational management from multiple perspectives and simultaneously reveal the complexity of formed links. Researchers need to consider the positive and negative links between TL, empowerment, and innovative behavior and consider appropriate mediators in the models we measure. Ongoing

research in this field requires understanding how and when TL impacts employee behavior, leading to recommendations from the empirical evidence.

### Limitations

Regardless of the research's contributions, the limitations are presented. First, the sample used is focused on the export SME sectors in Bali. Consequently, it has the potential to gain more in-depth results when performed on a broader generalization area. Second, increasing IWB is only focused on PE. Therefore, this research focuses on developing subordinates' innovative behavior, excluding other variables, such as organizational culture, organizational support, organizational commitment, and others that increase innovative behavior from an organizational perspective. Third, the research employs a causality approach. Thus, the data reported is self-assessment. Accordingly, the data obtained certainly has several weaknesses, such as bias effects; future studies are expected to use a longitudinal approach to address the obstacle comprehensively.

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