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PSYCHOLOGICAL EMPOWERMENT AND EMPLOYEE CREATIVITY IN VIETNAM TELECOMMUNICATION ENTERPRISES: THE MEDIATING ROLE OF INTRINSIC WORK MOTIVATION

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ABSTRACT

Employee creativity contributes to increasing the competitiveness of enterprises, especially enterprises with high requirements for innovation such as telecommunication enterprises. This study focuses on understanding the relationship among psychological empowerment, intrinsic work motivation, and employee creativity. By simultaneously using the qualitative method through in-depth interviews and the quantitative method with a large-scale survey of 420 employees of telecommunications businesses, the research results show that psychological empowerment has a significant relationship with intrinsic work motivation and employee creativity, and intrinsic work motivation has a positive effect on employee creativity, at the same time, intrinsic work motivation plays a mediating role in the relationship between psychological empowerment and employee creativity. Based on research results, the author makes implications for managers including focusing on employee empowerment mentality and promoting intrinsic work motivation to enhance employee creativity in Vietnam telecommunication enterprises.

Keywords: *Employee creativity, Intrinsic work motivation, Psychological empowerment, Telecommunication enterprises, Vietnam.*

INTRODUCTION

Today, in a dynamic and highly challenging business environment, organizations must be flexible, absorb and adapt to new knowledge, new technologies and new processes to research and develop products and services that have competitive advantages in terms of cost and time (Zubair *et al.*, 2015). Creativity is found to be essential for organizations to gain a competitive advantage (Oldham & Cummings, 1996). Creativity is the use of an array of skills, diverse abilities, knowledge, perspectives, and experiences to contribute to the formation of new ideas for solving arising problems, and task completion in effective ways (Cheung & Wong, 2011). Thus, creativity is practiced widely in the service industry as employees often work in groups to contribute to a common understanding of the customer and service market design (Chen & Chang, 1993).

Over the past years, the telecommunications industry has developed strongly in width and contributed significantly to the socio-economic development of the country with stable growth,

resulting in revenue of approximately 472,300 billion Vietnam dong, an increase of 18 % compared to 2018, mostly coming from telecommunications services (Nguyen, 2019). However, in the age of advanced technology with the continuous introduction of modern technology techniques, telecommunications enterprises are constantly facing many challenges to maintain their competitive advantage (Tushman & Anderson, 2004) and innovation is considered to be an extremely significant factor for organizational performance (Begonja *et al.*, 2016). Competition among telecommunications enterprises today lies in innovation to respond to changes in customer needs, and a number of telecommunications enterprises in Vietnam are finding many solutions to overcome this problem (Nham *et al.*, 2020). Empowerment contributes to the development of teams and organizational performance (Bennis & Nanus, 1985). Among them, psychological empowerment has a significant impact on employee performance-related outcomes such as creativity (Sun *et al.*, 2012; Tung, 2016), innovative performance (Singh & Sarkar, 2012) and innovative behavior (Luoh *et al.*, 2014). However, up to now, there have been many questions about how individual differences affect the relationship between psychological empowerment, employee creativity and interpersonal psychological mechanisms linking psychological empowerment with employee creativity in telecommunications enterprises.

Intrinsic work motivation is defined as the degree to which a person is willing to engage in a job for the sake of the job itself (Ambrose & Kulik, 1999). Intrinsic work motivation makes employees work more flexibly and persistently (McGraw & Fiala, 1982). Intrinsic work motivation has been used to elucidate cognitive processes of psychological empowerment on employee performance and creativity (Amabile, 1996), but, in fact, there is little empirical evidence investigating this mechanism (Zhang & Bartol, 2010).

This study was conducted with the following objectives. Firstly, considers the relationship between three factors: psychological empowerment, employee creativity, and intrinsic work motivation. Secondly, explore the mediating role of intrinsic work motivation in the relationship between psychological empowerment and employee creativity. Thirdly, clarify the effectiveness of psychological empowerment in telecommunications enterprises in a emerging economy like Vietnam.

Theoretical Background and Hypotheses

Psychological Empowerment and Employee Creativity

Thomas and Velthouse (1990) argue that psychological empowerment includes four dimensions: meaning, competence, self-determination, and impact. Meaning reflects the perception of work in relation to the beliefs of the performer. Competence refers to the degree to which a person can successfully perform a task given the skills and abilities possessed. Self-determination refers to the autonomy or ability of the performer to control his or her own work. Impact represents the extent to which a person believes he or she can improve an organization's performance.

Psychological empowerment gives employees confidence in their own ability to change and independent thinking to be ready to innovate (Bin Saeed *et al.*, 2019). Psychologically empowered employees perceive themselves as capable and influence their work and work environment in a certain way that take the initiative and act independently (Spreitzer, 1995). Empowered people have a greater sense of impact and others in the workplace are seen as those who can accomplish goals that make a significant difference in their work environment (Shah



et al., 2019). If employees have autonomy, they are more likely to engage in positive behaviors within the organization and express creativity at work (Shu *et al.*, 2022). An employee believes that they will be able to perform a task successfully when they have a certain degree of self-determination in the performance of the job and can shape the desired outcome through their behavior (Deci & Ryan, 1991; Spreitzer, 1995). An employee with these characteristics will be willing to take risks, explore new knowledge and be excited about creative ideas (Amabile *et al.*, 1996). Psychological empowerment is the result of individual awareness (perception) of competence, meaning, self-determination and ability to influence organizational results (Malik *et al.*, 2021)

In addition, Thomas and Velthouse (1990) argue that current traditional organizational methods make employees low productivity and unable to promote their creativity. Not being psychologically empowered stifles employee creativity (Zhang & Bartol, 2010). Employees reluctantly comply with the policies of the organization and do not brainstorm to find new solutions to solve existing problems of enterprises (Bin Saeed *et al.*, 2019). Consistent with the literature, we propose the following hypothesis:

H1. Psychological empowerment has a positive influence on employee creativity in Vietnam telecommunication enterprises.

Psychological Empowerment and Intrinsic Work Motivation

Ambrose and Kulik (1999) show that intrinsic work motivation is a set of intrinsic work motivations that contribute to inspiring work processes. Intrinsic motivation causes individuals to see themselves as the initiators of their own behavior and to choose ways to achieve their goals (Demircioglu & Chen, 2019). The intrinsic motivation of people depends on three factors: competence, autonomy and satisfaction of related needs (Deci & Ryan, 1985).

According to psychological empowerment theory, when employees perceive empowerment, intrinsic work motivation will be stimulated (Mishra & Spreitzer, 1998). Thomas and Velthouse (1990) assert that psychological empowerment and intrinsic work motivation have a positive relationship. From the above analysis, the authors put forward the following hypothesis:

H2. Psychological empowerment has a positive influence on intrinsic work motivation in Vietnam telecommunication enterprises.

Intrinsic Work Motivation and Employee Creativity

Employee creativity is useful ideas related to products, services, methods and work processes that contribute to the growth of the organization (Amabile, 1988; Shalley, 1991; Oldham, 2003). Creativity is based on a combination of contextual factors and employee characteristics (Woodman *et al.*, 1993). Employee creativity is a complex process related to intellectual capacity and social conditioning (Sarac *et al.*, 2014). Creativity is the generation of new ideas for products, services, and processes that are likely to benefit an organization's success (Amabile *et al.*, 1996). When employees show interest in the task at hand, they will be creative by finding new and more effective ways of doing it (Amabile *et al.*, 1996). Employees with an intrinsic work motivation may be more flexible and attractive to results because they can find many alternative approaches, using non-traditional ways to solve organizational issues (Shin & Zhou, 2003). Research on intrinsic motivation is all the more necessary because intrinsic motivation has a



positive relationship with creativity, persistence, and happiness (Ryan & Deci, 2000). Consequently, the following hypothesis attempts to synthesize the previous arguments:

H3. Intrinsic work motivation has a positive influence on employee creativity in Vietnam telecommunication enterprises.

Intrinsic Work Motivation as A Mediator

When employees in organizations have autonomy or the opportunity to make decisions for their tasks, their creativity is facilitated (Amabile *et al.*, 1996). Self-determination theory states that when employees have autonomy, their intrinsic work motivation can enhance, leading to their creativity to be motivated, because intrinsic work motivation is a powerful source of creativity (Zhang & Bartol, 2010).

In addition, psychological empowerment promotes employees' internal motivation, which in turn leads to employee creativity (Spreitzer, 1995). When people are empowered, they often put more effort into their work and achieve better results (Ryan & Deci, 2000). These empowered employees are both stronger and more passionate, with a commitment to goals and confidence, helping them to show their initiative and creativity. Furthermore, intrinsic motivation is one of the most significant factors for creativity and the type of motivation that strongly influences employees' creative work (Amabile *et al.*, 1996). With the arguments shown, the authors put forward the following final hypothesis:

H4. The relationship between psychological empowerment and employee creativity is mediated by intrinsic work motivation.

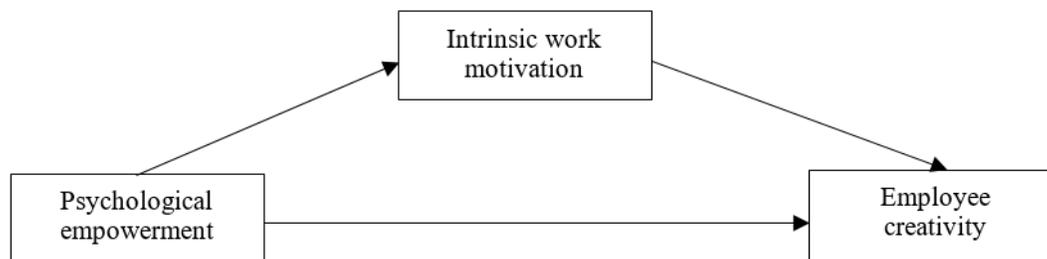


Figure 1. The conceptual model

MATERIALS AND METHODS

Sample and Procedure

Based on an overview and research model, the author conducted in-depth interviews with five managers and five employees of telecommunications enterprises to clarify the psychological empowerment, employee creativity and intrinsic work motivation. The results of the in-depth interview show the relationship between the three core factors of the research model and the suitability of the items to measure. After that, the author proceeded to build a questionnaire to serve the survey on a large scale. The scales in the research model with items are inherited from previous studies. The author has contacted a number of telecommunications businesses in all three regions of the North, Central and South. The survey questionnaire was sent directly to employees of Vietnamese telecommunications businesses between October and December 2019.



The author obtained 500 questionnaires from 21 telecommunication enterprises in Vietnam. After the screening was conducted, 420 questionnaires were used for the study. In terms of gender, there are 188 male employees, accounting for 44.8% and 232 female employees, accounting for 55.2%. In terms of age, 64.5% of employees are between 20 and 30 years old; 30.2% of employees are between 31 and 40 years old. In terms of educational qualification, the majority of respondents have college/university degree, accounting for 79.8%. In terms of work experience, the majority of participants had 1 to 5 years of work experience, accounting for 55.6%, followed by 17.9% of those with 6 to 10 years of work experience.

Measures

12 items of Spreitzer (1995) divided into 4 dimensions (meaning, competence, self-determination and impact) to measure psychological empowerment (PE), the scale with acceptable confirmatory factor analysis (CFA) results ($\chi^2 = 67.303$, $df = 50$, $p < 0.001$; CFI = 0.990, GFI = 0.987, RMSEA = 0.029); 13 items of Zhou and George (2001) to measure employee creativity (EC), EC6 and EC7 were removed from the EC scale because item-total correlation coefficient is less than 0.4; 3 items of Amabile (1985) and Tierney *et al.* (1999) to measure intrinsic work motivation (IWM). Each item was rated from 1 (strongly disagree) to 5 (strongly agree).

RESULTS AND DISCUSSION

Descriptive Analysis and Confirmatory Factor Analysis

Cronbach's alpha coefficients of psychological empowerment, employee creativity, and intrinsic work motivation ($\alpha = 0.810$, 0.885 and 0.758 respectively) are all greater than 0.7, ensuring the reliability of the scales (Nunnally & Bernstein, 1994). **Table 1** shows the means, standard deviations and correlation coefficient among the scales of the research model. The results indicated that psychological empowerment had a positive correlation with employee creativity and intrinsic work motivation ($r = 0.120$ and 0.178 respectively, $p < 0.05$), intrinsic work motivation had a positive correlation with employee creativity ($r = 0.305$, $p < 0.01$).

Table 1. Means, standard deviations and correlations

	Mean	Std. Deviation	PE	EC	IWM
PE	3.5036	0.69380	1	0.120*	0.178**
EC	3.6549	0.51588	0.120*	1	0.305**
IWM	3.6730	0.87146	0.178**	0.305**	1

The next step, the authors conducted confirmatory factor analysis (CFA). The results show that the model's indexes are all within the allowable limits ($\chi^2 = 473.448$, $df = 269$, $p < 0.001$, CFI = 0.955, GFI = 0.915, RMSEA = 0.042), showing the overall fit of data has been collected.

Three important indexes, factor loadings (standardized estimates), average variance extracted (AVE), and composite reliability (CR) were used to converge evaluatent validity. The results show that the standardized estimates of each construct range from 0.667 to 0.846 and reach statistical significance (p-values). AVE ranges from 0.505 to 0.623 and CR ranges from 0.758 to 0.918.

Thus, both AVE and CR indexes meet the requirements to demonstrate the validity and convergence of the scales (**Table 2**).

Table 2. The measurement model

Construct	Item	Standardized estimates	AVE	CR	p-value				
PE_M	PE1	0.763	0.623	0.832	0.000				
	PE2	0.756							
	PE3	0.846							
PE_C	PE4	0.786	0.569	0.798	0.000				
	PE5	0.757							
	PE6	0.719							
PE_S	PE7	0.710	0.521	0.764	0.000				
	PE8	0.781							
	PE9	0.669							
PE_I	PE10	0.692	0.591	0.811	0.000				
	PE11	0.844							
	PE12	0.763							
EC	EC1	0.687	0.505	0.918	0.000				
	EC2	0.690							
	EC3	0.699							
	EC4	0.730							
	EC5	0.693							
	EC8	0.754							
	EC9	0.719							
	EC10	0.712							
	EC11	0.756							
	EC12	0.708							
	EC13	0.667							
	IM	IM1				0.680	0.511	0.758	0.000
		IM3				0.731			
IM2		0.733							

Hypotheses Analysis

The authors tested the research hypotheses using hierarchical regression analysis to investigate the relationship between the variables listed in **Table 3**. In model 1, psychological empowerment and employee creativity has a positive relationship ($\beta = 0.120$, $p < 0.05$), hypothesis H1 is accepted. Psychological empowerment also has a positive relationship with intrinsic work motivation ($\beta = 0.178$, $p < 0.001$), hypothesis H2 is accepted. In model 2, intrinsic work motivation has a significant influence on employee creativity ($\beta = 0.305$, $p < 0.001$), hypothesis H3 is accepted. Thus, all three hypotheses H1, H2 and H3 of the research model are supported by research data.



The mediating effect of intrinsic work motivation was following the procedures by Baron and Kenny (1986) and hypotheses H1, H2 and H3 were all supported, suggesting that preliminary conditions have been met to test this effect. Model 3 shows that psychological empowerment and employee creativity have no relationship with each other when intrinsic work motivation is added to the research model ($\beta = 0.068$, $p > 0.05$), whereas intrinsic work motivation had a significant positive effect on employee creativity ($\beta = 0.293$, $p < 0.001$). Intrinsic work motivation had a mediating effect on the relationship between psychological empowerment and employee creativity, supporting the mediating effect. Therefore, hypothesis H4 is accepted.

Table 3. Results of regression analysis

Variables	Model 1		Model 2	Model 3
	Employee creativity	Intrinsic work motivation	Employee creativity	Employee creativity
Psychological empowerment	0.120*	0.178***		0.068
Intrinsic work motivation			0.305***	0.293***
R ²	0.012	0.030	0.091	0.093

Notes: n = 420; * $p < 0.05$; *** $p < 0.001$

Discussion

The purpose of the study is to understand the relationship between psychological empowerment, employee creativity, and intrinsic work motivation together with a mediating effect of intrinsic work motivation on the relationship between psychological empowerment and employee creativity. All research hypotheses are supported with the data of the research model.

Firstly, psychological empowerment is positively related to employee creativity, this conclusion is acknowledged in Aslam (2017), Javed *et al.* (2017), and Tung (2016). Psychologically empowered subordinates find themselves shaping job roles and job contests (Spreitzer, 1995), and they are motivated to find new ways to solve problems and perform tasks (Sun, 2012).

Secondly, psychological empowerment positively affects intrinsic work motivation. This statement agrees with some previous studies by Aslam (2017), Hahm (2018), and Zhang and Bartol (2010).

Thirdly, intrinsic work motivation has a positive relationship with employee creativity. This assertion is recognized in some studies such as Coelho *et al.* (2011), and Zhang and Bartol (2010). Significant evidence shows that intrinsic work motivation is important for creativity in organizations and demonstrates the positive relationship between intrinsic work motivation and employee creativity (Amabile, 1996).

Fourthly, this study confirms the mediating effect of intrinsic work motivation on the relationship between psychological empowerment and employee creativity. This claim is consistent with previous research on the mediating role of intrinsic work motivation (Hahm, 2018).

Implications

My study has important connotations for managers of Vietnam telecommunication enterprises: Firstly, by demonstrating that psychological empowerment has a positive correlation on intrinsic work motivation and employee creativity, the author argues that managers should strive to promote the psychological aspects of empowerment and inculcate a sense of freedom and the will among their followers to transform the organization's vision and put into their daily tasks and work context, thereby boosting intrinsic work motivation and employee creativity in Vietnam telecommunication enterprises. Managers should allow employees to have the right to actively use resources to make decisions related to their work and not interfere deeply in employees' work (Nguyen & Doan, 2021).

Secondly, managers should apply many other measures to promote intrinsic work motivation such as rewards, job advancement, and work environment because intrinsic work motivation acts as a mediating role in the relationship between psychological empowerment and employee creativity.

CONCLUSION

The research results show that psychological empowerment has a positive relationship with intrinsic work motivation and employee creativity and intrinsic work motivation has a positive relationship with employee creativity. In addition, intrinsic work motivation plays a mediating role in the relationship between psychological empowerment and employee creativity. Therefore, the author argues that managers should strive to promote the psychological aspects of empowerment and inculcate a sense of freedom and will among their followers to change the vision of the organization and take into account their daily tasks and work context; apply many other measures to promote intrinsic work motivation such as reward, job advancement, and working environment.

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