The Effect of Regulatory Focus on Employees' Job Performance: Taking Teachers in Chinese Higher Education Institutions as an Example

[1]Siyu Yang and [2*]Vesarach Aumeboonsuke

National Institute of Development Administration, Thailand

*Corresponding Author

E-mail: [1]siyu.yang@stu.nida.ac.th, [2]vesarach.a@nida.ac.th

Received **May 19, 2022;** Revised **May 30, 2022;** Accepted July 15**, 2022**

Abstract

This paper aimed to study the relationship between regulatory focus and job performance based on the mediating role of psychological empowerment. A quantitative research method was employed to design the questionnaire, and non-probability sampling was adopted to select 320 faculty members from Chinese higher education institutions as the study sample. Data analysis conducted using SPSS and Amos yielded results showing that promotion focus had a positive relationship with job performance, while psychological empowerment also had a positive relationship with job performance. Psychological empowerment acts as a mediator between promotion focus and job performance as well as prevention focus and job performance. The promotion focus was positively associated with psychological empowerment, while the prevention focus was negatively associated with psychological empowerment. Meanwhile, the results of the data analysis showed that there was no significant negative impact of the prevention focus on job performance. In conclusion, employers should allocate work to employees by the variety of assignments and the type of regulatory focus. To enhance the level of psychological empowerment of employees, the working environment should be as comfortable and humane as possible.

Keywords: Promotion focus, Prevention focus, psychological empowerment, HEIs, Employees' job performance.

Introduction

In recent years, with the development of modern education worldwide, the concept of performance management has gradually spread from enterprises to higher education institutions (HEIs). For colleges and universities, building a high-quality teaching workforce is a powerful guarantee to achieve strategic objectives. HEIs need to rely more on employees who are committed to organizational targets and values and are willing to make strenuous efforts to stay in the organization (Scott & Davis, 2015). The teaching profession is a special type of work which involves a lot of interpersonal interaction. Research on teachers' thinking patterns and psychological characteristics is essential for a comprehensive understanding of teachers' productive processes and an in-depth analysis of their complex educational behaviors (Du et al., 2022). However, up till now very little is known about the role of person-level qualities, or personality, in the current teacher labor market (Jones, 2016). Under the social background of the COVID-19 pandemic, it is likely that the online and offline hybrid working mode will become the future trend in higher education (Spoel et al., 2020), whereas the existing performance management in HEIs still mostly focuses on the ability and quality of teachers' offline work and rarely pays attention to the online part, which is not compatible with the future development trend of colleges and universities.

During the process of theoretical understanding of improving teacher performance, the rise of behavioral economics since the 1970s led to the gradual recognition that people's behavior is driven not only by interests but also by various psychological factors. Therefore, the analysis of individual characteristics and motivations becomes an important basis for behavioral choices (Heckman, 2011). The antecedent theory of motivation is regulatory focus theory (RFT), which is defined as the style and tendency of dealing with things in the process of realizing one's goals and ideals. RFT plays a very important role in stimulating employees' potential and is thus closely related to job performance (JP) (Neubert et al., 2008). In organizational management, employers should create conditions to achieve a shift from personality traits to behaviors (Molden & Finkel, 2010). Existing research shows that there remains a close and positive relationship between work outcomes and psychological empowerment. (PE) (Spreitzer,1995). It has also been argued that personal characteristics are important prerequisites and play a key role in the effectiveness of psychological empowerment (Liden et al., 2000). For example, Ren (2007) confirmed that the level of psychological empowerment was closely related to employees' positions.

Based on previous research it can be known that the RFT has been widely used in explaining performance–related issues including behavior performance and so forth (van Dijk & Kluger, 2010) Existing studies usually follow the line of research in which the regulatory focus is used as a mediating or moderating variable. However, the specific paths by which the regulatory focus as an independent variable affects employee performance have rarely been revealed (Bozer et al., 2021). To open up this black box, this study will take Chinese teachers in HEIs as the research object and adopt the qualitative analysis method. The regulatory focus will be taken as an independent variable and psychological empowerment as an intermediary variable. Such a setting will help expand the research ideas of regulatory focus and clarify the mechanisms of the two modes of regulatory focus on employee performance. The results will provide theoretical and empirical support for organizations to achieve performance outcomes by selecting individuals with specific regulatory priorities, and also meet the current and future development needs of human resource management in organizations such as universities (Kaufman, 2019).

Research Objectives

1. To study the relationship between regulatory focus and job performance based on the mediating role of psychological empowerment,

2. To discover whether psychological empowerment plays an intermediary role in the correlation between regulatory focus and job performance,

3. To provide suggestions to HEIs about appropriate management practices aimed at the improvement of teachers' work performance.

Literature review

Regulatory focus and job performance

To achieve specific goals, individuals will try to change or control their thoughts and actions, which is called self–regulation (Geers et al., 2005). In the process of self–regulation, the individual will show a particular tendency, that is regulatory focus. In other words, the style and tendency to handle things in the process of achieving one's goals and ideals are defined as a regulatory focus, which has a significant impact on one's feelings, thoughts and actions. It distinguishes between prevention focus (PEF) and promotion focus (POF), whose orientations lead people to different strategies (Brockner & Higgins, 2001). In the 1990s, Tory Higgins came up with the idea of

regulatory focus based on his previous work on self–discrepancy theory. To reduce the difference between the actual self and ideal self, individuals will adopt promotion focus which is closely related to the needs of growth and development; to narrow the gap between actual self and ought–self, individuals will take prevention focus which is concerned with safety needs (Crowe & Higgins, 1997). Those who show promotion focus will actively strive for goals and self–improvement, while those who possess prevention focus will take safety and responsibility as their core elements and focus on maintaining the status quo.

Job performance has long been a major topic and an important dependent variable in management studies. Over the past few decades, a great deal of theoretical and empirical research has focused on the development of models related to job performance (Fairburn & Malcomson, 2001). In the academic field, there are two popular perceptions of the definition of individual job performance (Jex, 1998). The first view is that job performance refers to the results or outputs of work, mainly analyzing what tasks were accomplished, what results were achieved, and what outputs were obtained (Hunter & Schmidt, 1996). The second view emphasizes work process and behavior, i.e., behavior is the concentration of job performance, and job performance is equivalent to work behavior and process (Sonnentag et al., 2008). This study adopts both viewpoints, especially the second view, which defines the job performance of university teachers as a kind of performance reflected by the actions and behaviors performed by individual university teachers in talent cultivation, academic research, and social services. It is also based on the overall strategic goals of the HEIs and lies in the individual tasks and job responsibilities of the faculty. This definition is based on the reality that, due to the long–term nature and complexity of higher education, university faculty do not have equal opportunities to complete their work. Many of the results of teachers' work are not necessarily brought about by their work but by other unexpected factors unrelated to the work of individual teachers (Haydon & Hunter, 2011). When excessive focus is placed on job results, it can cause employees to overlook important work processes and interpersonal factors and misunderstand the requirements of the organization, leading to a misdirection of employee behavior (Urhahne, 2015). Hence, the definition of faculty performance in HEIs in this study includes the first perspective provided above, while also placing more emphasis on the second perspective.

Research in the field of motivational psychology has demonstrated the importance of expectations in understanding performance; namely, an individual's performance in a given task is influenced by the value and expectation of the behavioral outcome (Bui & Porter, 2010; Kong et

al., 2015). Even after controlling the past achievements, the individual's expectation of success can still be used to predict future achievements (Marshall & Brown, 2004). Most of the research on the role of expectation focus on promoting motivation, emphasizing that the eagerness strategy can contribute to the achievement of desired outcomes. However, people also set prevention goals, that is, to avoid unintended consequences. At this point, the vigilance strategy can promote success by preventing the current situation from deteriorating. Existing studies have found that people sometimes adopt defensive pessimistic strategies to deliberately lower expectations and succeed by thinking about various possible difficulties (Usher & Schunk, 2017; Zimmerman & LaDuke, 2016). Research on anticipatory regret has reached a similar conclusion, people will deliberately choose worse results to avoid future regret (Oliver, 2014; Byrne, 2016). Since self-improvement is the primary demand of individuals with a promotion focus, individuals with promotion focus care more about future growth and development and have a high level of motivation for continuous progress. The desire to achieve can motivate individuals to challenge themselves, innovate, and pay more attention to income-related information. Individuals focus on the final achievement and tend to adopt a radical work style and constantly make trial and error, which lays the necessary foundation for excellent performance (Buisonje et al., 2017). Individuals with a promotion focus have a strong motivation to innovate and exhibit behaviors that lead to superior results and thus enable better performance. On the contrary, prevention focuses on individuals who have maintenance of safety as their main claim and show higher resistance to risky behaviors (de Cremer et al., 2009). At the same time, prevention-oriented individuals care more about loss-related information, and so their behavior is more conservative. Prevention-oriented individuals will even not hesitate to forgo potential huge benefits just to maintain the existing results (Beersma et al., 2013). Therefore, prevention focus, which takes avoiding punishment as the basic motivation, adopting a relatively safe strategy and striving to put it into the existing work arrangement, is objectively not conducive to achieving a high level of performance (Cappelli & Keller, 2014).

Thus the hypotheses are put forward in this research:

H1: Promotion focus positively relates to job performance.

H2: Prevention focus negatively relates to job performance.

Regulatory focus and psychological empowerment

The concept of psychological empowerment was first proposed by Thomas and Velthouse (1990) based on the perspective of employee cognition. They believed that employees' real sense of power was the prerequisite for their satisfaction and enthusiasm. Thomas and Velthouse also define psychological empowerment as a combination of psychological perception and personal cognition, as well as a comprehensive evaluation of a job that results from the interaction between an individual's perception of a job and other people's perceptions of the same job. Spreitzer (1995) formally introduced a new definition of psychological empowerment, which was widely accepted by scholars. According to Spreitzer (1996), this research defines psychological empowerment as the internal work motivation experienced by employees. Once employees feel psychologically empowered, they often have a strong belief that they have the ability and freedom to choose the pace or method of work to accomplish impactful tasks. In other words, psychological empowerment emphasizes employees' experience and perception during the process of empowerment.

Generally, in studies of psychological empowerment, personal characteristic variables play a dominant role in their associated effects as a prerequisite. Spreitzer (1996) found that the level of empowerment is influenced by an individual's tendency to control and self–esteem. The tendency to control refers to an individual's belief that they can control their lives through themselves rather than their external environment. Individuals with high control tendency tend to have higher sensitivity and initiative towards whether they can accomplish the task. Spreitzer (1996) also verified the correlation between psychological empowerment and employees' gender, age and working hours. The results of the study confirm that length of employment and education level have a significant positive relationship with the level of empowerment. Since the regulatory focus is defined as a particular tendency and a specific way of dealing with things in achieving a goal, it should also be regarded as an individual's trait (Wallace et al., 2016).

Therefore, the hypotheses are proposed:

H3: Promotion focus positively relates to psychological empowerment.

H4: Prevention focus negatively relates to psychological empowerment.

Psychological empowerment and job performance

Psychological empowerment began with individual psychology, which studied individuals' perceptions or attitudes toward their roles in the workplace and viewed empowerment as an

inherently psychologically motivating process. Thus, it can be seen that improving the psychological empowerment of employees at work is essentially motivating them to work, and work motivation is the driving force of individual behavior. The study of empowerment from a motivation-oriented perspective centers on the effects of empowerment on individual behavior based on self-determination theory. According to Thomas and Velthouse (1990), the core component of empowerment is to create all the conditions for employees to enhance their self-efficacy and, ultimately, their motivation. Thomas and Velthouse (1990) pointed out that psychological empowerment was a synthesis of an individual's experience of empowerment, which was a gestalt of four kinds of cognition: meaning (MN), self-efficacy or competence (CP), self-determination (SD) as well as impact (IP). The meaning of work stands for the individual's cognition of the value of work goal according to his or her value system and standard. Self-efficacy means individuals' cognition of their ability to complete the work. Self-determination refers to an individual's ability to control work activities. Impact stands for the extent to which an individual could influence the strategy, administration, management and operation of the organization (Thomas and Velthouse (1990)). Deci and Ryan (1985) argue that the motivation to achieve excellent work results comes from a combination of internal and external factors, while internal factors often play a decisive role and can contribute significantly to individual innovation. The key factor in the process of achieving excellent work performance is the intrinsic reason that motivates the body of work. Strengthening the internal motivation of the main body can fundamentally improve work performance. Psychological empowerment has a positive relationship with high-performance behavior (Hechanova et al., 2006). As knowledge workers are influenced by their psychological characteristics, university teachers are more influenced by intrinsic work motivation than ordinary employees.

Therefore, the hypothesis is proposed:

H5: Psychological empowerment positively influences job performance.

The mediating role of psychological empowerment

Menon (1999) argued that psychological empowerment is a combination of psychological perceptions of personal control, competence, and internalization of goals and that employees with high perceptions of empowerment are more motivated compared to those with low perceptions of empowerment. Li et al., (2006) proved that psychological empowerment was positively correlated with employees' behavior at work. Madrid (2015) proved through empirical research that when

employees felt that they were not valued by the organization, they would produce negative emotions such as silence. HEI teachers' behavior at work is affected by their psychological factors. According to the research of Bhatnagar (2012) and Singh & Sarkar (2012), psychological empowerment affects HEI teachers' work engagement. As HEI faculty have high levels of psychological empowerment, they will feel a higher sense of meaning and self–determination in their work and experience a greater sense of self–efficacy to increase their work engagement. Moreover, perceived organizational support also affects the psychological empowerment of HEI teachers. Instruments and emotional support from the organization bring care, trust and encouragement to teachers, giving them higher psychological empowerment and leading to willingness and energy to work. Conversely, inadequate organizational support makes faculty members in HEIs feel less psychologically empowered and become reluctant to devote time and energy to their work. Taken together, the regulatory focus as an independent variable is a personality trait and personal tendency that moderates employees' attitudes toward things and are one of the influencing factors of job performance. When the individual shows promotion focus, he or she would actively strive for the goal and focus on improving his or her value, which affects the dependent variable through greater psychological empowerment, and vice versa. Therefore, regulatory focus can affect the job performance of knowledge workers by interacting with psychological empowerment.

The hypotheses are proposed as follows:

H6: Psychological empowerment acts as a mediator between promotion focus and job performance.

H7: Psychological empowerment acts as a mediator between prevention focus and job performance.

Conceptual Framework

In conclusion, this study aims to explore the influence mechanism between HEI teachers' regulatory focus and their job performance. The conceptual framework is established to construct a visual model in an attempt to directly exhibit the studied variables and relations. Figure 1 shows the conceptual framework of the study.

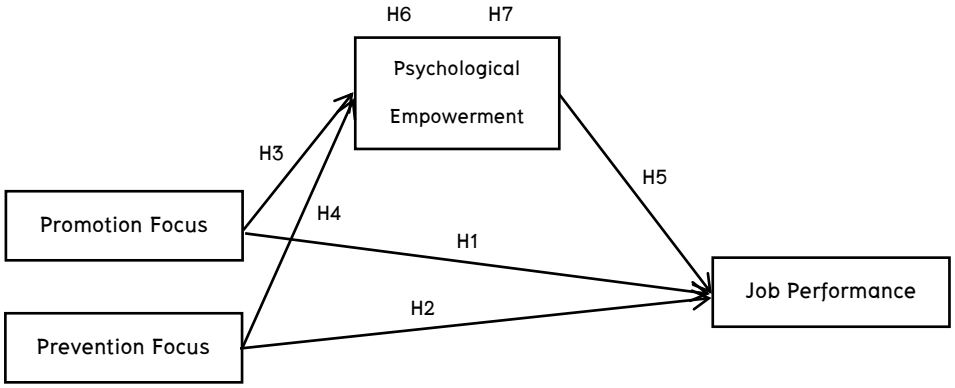

Fig. 1 The conceptual framework

Research Methodology

Sample collection and data analysis

320 full–time teachers undertaking the responsibility of both teaching work and academic research work in Chinese HEIs constitute the research objects. Two non–probability sampling methods, namely snowball sampling and convenience sampling, were used in the study due to the feature of low cost and ease of operation (Michal, 2011). The snowball sampling method was conducted using the researcher's membership in a national education association that has many channels of contact with higher education faculty in China. The main step was to send emails with questionnaires to these collaborators, inviting them to fill out the questionnaires and helping to distribute questionnaires to other teachers whom they knew. As for the convenience sampling method, since the researcher is a lecturer at a Chinese university, the data were also collected through a questionnaire distributed online through a professional Internet survey website in China. The survey was uploaded to the website and a link to the questionnaire was sent to potential respondents via social media platforms. 341 questionnaires were returned, 320 of which were valid.

The methods employed in this study included literature research, questionnaires, and statistical analysis. For data analysis, this research uses SPSS21.0 and Amos21.0 software from IBM, both of which are powerful statistical programs providing a set of useful functions to extract actionable insights from data (Ho, 2006). Instruments for data analysis include frequency analysis, reliability analysis, validity analysis, factor analysis, structural equation modelling (SEM) as well as bootstrapping method. Frequency analysis demonstrates the basic background and characteristics of the studied sample. Reliability analysis, validity analysis and factor analysis exhibit whether the

questionnaire design is scientific and reasonable through quantitative calculation and prove the statistical significance of the studied sample. SEM and bootstrapping methods are mainly adopted to test the proposed hypotheses.

Measurement

Building on the regulatory focus theory founded by Crowe & Higgins, (1997), the independent variables in this study included a prevention focus and a promotion focus, which orientations led people to adopt different strategies. Promotion focus is defined as a motivational state concerning aspirations and ideals (growth and advancement more generally) with an eager strategy (Brodscholl et al., 2006), focusing more on gains/non–gains. Based on the context of this research, the nine measurement items of promotion focus are all adapted from Lockwood et al. (2002). As for prevention focus, it is defined as a motivational state concerning obligations and oughts (safety and security more generally) with a vigilant strategy (Brodscholl et al., 2007), focusing more on non–losses/losses. Similarly, the nine measurement items are also adapted from Lockwood et al. (2002).

Since the criteria for assessing job performance may vary across industries, in this study, the dependent variable, i.e., the job performance of Chinese university faculty, will be measured by subjective self–evaluation (Befort & Hattrup, 2003). According to Borman and Motowidlo's (1993) performance theory, the behaviors that constitute job performance can be divided into two sorts: task performance and contextual performance (Borman & Motowidlo 1993). In the context of the study, the performance of faculty at HEIs was defined as part of what is typically considered faculty work. Interpersonal and voluntary behaviors contribute directly to the technical core of an institution of higher education and the broader social environment in which it must function to be maintained (Coleman & Borman, 2000). The performance scales developed by Wang et al. (2011) and van Scotter & Motowidlo (1996) were used to test the job performance of university teachers, while the questionnaire was fine–tuned to ensure its suitability for Chinese HEIs in the context of the study (Hanif et al., 2011). There are a total of nineteen question items, four aim to measure task performance and fifteen aim to measure contextual performance. It is noted that with the emergence of in–depth research on job performance, scholars have found that the connotations of contextual performance can be interpreted in more specific ways. Scotter & Motowidlo (1996) attempted to refine the construct of contextual performance by dividing it into two narrower constructs, interpersonal facilitation and job dedication, and other scholars have provided additional empirical evidence based on their findings (Witt et al., 2002; Aryee et al.,

2008). In this study, task performance (TP), interpersonal facilitation (IF), and job dedication (JD) are considered subordinate factors of job performance, and each of them can provide a theoretical basis for explaining job performance to some extent, so a second–order factor analysis model of job performance will be used in the later data processing.

The cognitive model of empowerment was originally proposed by Thomas & Velthouse (1990). Later Spreitzer (1995) argued that psychological empowerment was a collection of four cognitive motivations. Numerous researchers have applied the definition proposed by Spreitzer in their studies of teachers' psychological empowerment (Schermuly et al. 2011; Lee & Nie 2014). According to Spreitzer (1995), this research defines the psychological empowerment of HEI teachers in China as a motivational structure, which is embodied in four cognition dimensions including meaning, competence, self–determination and impact. Together, these four kinds of cognition reflect a positive, rather than a passive, orientation to the work role. Positive orientation refers to the orientation that an individual wishes and feels able to shape his or her work role and working environment. This research adopts the psychological empowerment scale of Spreitzer (1995) to specify a comprehensive, sufficient cognitive set which includes the four dimensions mentioned above. For each dimension, there are three question items respectively.

Research Result

Descriptive statistics

Frequency analysis could provide information about the basic background and features of the studied sample. As can be seen from Table 1, out of 320 valid samples 46.3% are male and 53.8% are female. In terms of age, the group 30–39 years old has the highest share of 39.1%, followed by the group 40–49 years old at 27.5%, the group 50–59 years old at 18.8%, group 29 years old or younger at 10.6% and group 60 years or older 4.1%. As for the educational background, 38.4% of respondents have a master's degree, 35.0% have an undergraduate degree and below and 26.6% possess doctor degree. Concerning years of working, 39.4% of respondents have been working for 4 to 6 years, 30.0% for 7 to 9 years, 15.6% for 10 years and more, and 15.0% for 1 to 3 years. When it comes to job rank, 34.7% of respondents have a middle rank, 31.6% have a sub–senior rank, 19.7% have a junior rank and 14.1% possess a senior rank. Last but not least, for average monthly income 35.6% of respondents could earn 6,000 to

7,999 yuan per month, 28.7% earn 8,000 to 9,999 yuan, 13.8% earn 10,000 yuan or higher while 8.8% earn 3,999 yuan or lower.

It can be drawn from Table 2 that with the aid of SPSS21.0, a descriptive statistical analysis of the four studied variables is conducted to help form a basic cognition of the scale. With N equals 320 and the minimum and maximum values are between 1 and 5, the mean values all turn out to be higher than 3 and standard deviations higher than 0.6, which indicates that the sample size of this research is adequate, the samples are widely distributed, and the sampling methods are scientifically sound.

Table 1 Demographics

Control Variables		Frequency	Percent	Mean	Sd
Gender	Male	148	46.3%	1.54	0.50
	Female	172	53.8%		
Age	29 years old or younger	34	10.6%	2.67	1.03
	30-39 years old	125	39.1%		
	40-49 years old	88	27.5%		
	50-59 years old	60	18.8%		
	60 years old or more	13	4.1%		
Education	Undergraduate degree and below	112	35.0%	1.92	0.78
	Master degree	123	38.4%		
	Doctor degree	85	26.6%		
Worktime	1~3 years	48	15.0%	2.46	0.93
	4~6 years	126	39.4%		
	7~9 years	96	30.0%		
	10 years and more	50	15.6%		
Job rank	Junior	63	19.7%	2.40	0.96
	Middle	111	34.7%		
	Sub-senior	101	31.6%		
	Senior	45	14.1%		
Income	¥3999 or lower	28	8.8%	3.26	1.12
	¥4000-5999	42	13.1%		
	¥6000-7999	114	35.6%		
	¥8000-9999	92	28.7%		
	¥10000 or higher	44	13.8%		

Table 2 Descriptive statistical analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation
POF	320	1.11	4.89	3.68	0.77
PEF	320	1.00	5.00	3.71	0.86
PE	320	1.17	4.83	3.83	0.84
JP	320	1.46	4.96	3.73	0.64

Reliability Analysis

Reliability analysis could provide information about correlations among scale items and help researchers explore the characteristics of measurement scales and items. Cronbach's coefficient alpha (α) is one of the most frequently used indicators to evaluate reliability, which is a model of internal consistency based on the average inter–item correlation. To assess reliability, a lower limit for α value of 0.7 is routinely recognized (Hair et al., 2010), whereas a high α value often implies a strong correlation among items. In addition, Hair et al. (2010) argue that item–to–total correlation could serve as another approach to assessing the correlation among items and the total scale scores. In this case, a correlation value above 0.5 implies reliability (Hatcher & Stepanski, 1994). It can be seen from Table 3 that the Cronbach's α value of all latent variables is higher than 0.8, indicating a high degree of internal consistency for each questionnaire item and each latent variable can be adequately measured by its corresponding items. Furthermore, the corrected item–total correlation is between 0.5 and 0.9, illustrating that all questionnaire items are reasonably set. As for Cronbach's α, if an item is deleted, the numbers are all higher than 0.7 and it can be seen that the questionnaire reliability could not be improved after deleting any variable. In other words, the questionnaire reliability is good enough and the measurement questions of each latent variable have adequate reliability.

Table 3 Reliability analysis

Latent Variable		Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
POF	/	POF1	0.871	0.902	0.921
		POF2	0.77	0.909	
		POF3	0.714	0.913	
		POF4	0.813	0.906	
		POF5	0.615	0.919	
		POF6	0.651	0.917	
		POF7	0.671	0.916	
		POF8	0.713	0.913	
		POF9	0.655	0.917	
PEF	/	PEF1	0.919	0.945	0.955
		PEF2	0.821	0.95	
		PEF3	0.753	0.953	
		PEF4	0.808	0.951	
		PEF5	0.796	0.951	
		PEF6	0.816	0.95	
		PEF7	0.812	0.95	
		PEF8	0.81	0.951	
		PEF9	0.833	0.949	
PE	MN	PE1	0.808	0.828	0.981
		PE2	0.778	0.855	
		PE3	0.778	0.852	
	CP	PE4	0.83	0.805	0.89
		PE5	0.778	0.849	
		PE6	0.755	0.87	
	SD	PE7	0.805	0.895	0.914
		PE8	0.854	0.854	
		PE9	0.826	0.879	
	IP	PE10	0.735	0.813	0.863
		PE11	0.713	0.832	
		PE12	0.773	0.776	
JP	TSP	JP1	0.842	0.889	0.921
		JP2	0.81	0.9	
		JP3	0.786	0.908	
		JP4	0.835	0.891	
	IF	JP5	0.736	0.892	0.907
		JP6	0.721	0.893	
		JP7	0.698	0.896	
		JP8	0.72	0.893	
		JP9	0.748	0.89	
		JP10	0.705	0.895	
		JP11	0.721	0.893	
	JD	JP12	0.733	0.907	0.918
		JP13	0.729	0.907	
		JP14	0.733	0.907	
		JP15	0.716	0.908	
		JP16	0.716	0.908	
		JP17	0.738	0.906	
		JP18	0.699	0.909	
		JP19	0.752	0.905	

Validity Analysis

Exploratory factor analysis

When the KMO value is bigger than 0.7 and Bartlett's test of sphericity turns significant ($p < 0.05$), factor analysis is expected to be appropriate (Tabachnick & Fidell, 2012), as is shown in Table 4 where the KMO value is 0.902 and the approximate chi–square statistic of Bartlett's test of sphericity equals 11437.99 with a corresponding p–value of 0.000<0.001.

Table 4 Results of KMO and Bartlett's Test

Kaiser–Meyer–Olkin Measure of Sampling Adequacy.		0.902
Bartlett's Test of Sphericity	Approx. Chi–Square	11437.99
	df	1176
	Sig.	0.000

Then it can be drawn from Table 5 that nine common factors are extracted, and the cumulative sum of rotation squares reaches 72.079%, higher than 60%. It can also be seen that each factor loading is above 0.5, indicating that the extracted factors represent comprehensive information and there is no case of cross–factor loading. Based on the above it can be concluded that the scale used in this research has good construct validity.

Table 5 Rotated Component

	Component								
	1	2	3	4	5	6	7	8	9
PEF1	0·933								
PEF9	0·867								
PEF2	0·857								
PEF6	0·854								
PEF7	0·854								
PEF8	0·849								
PEF4	0·844								
PEF5	0·84								
PEF3	0·805								
POF1		0·891							
POF4		0·853							
POF2		0·812							
POF8		0·761							
POF7		0·742							
POF3		0·741							
POF6		0·696							
POF9		0·672							
POF5		0·662							
JP19			0·809						
JP14			0·783						
JP17			0·775						
JP12			0·773						
JP18			0·762						
JP15			0·759						
JP13			0·757						
JP16			0·756						
JP9				0·789					
JP10				0·788					
JP11				0·776					
JP8				0·772					
JP5				0·771					
JP6				0·763					
JP7				0·73					
JP2					0·86				
JP4					0·857				
JP1					0·854				
JP3					0·836				
PE4						0·879			
PE5						0·842			
PE6						0·837			
PE8							0·859		
PE9							0·851		
PE7							0·808		
PE3								0·835	
PE2								0·821	
PE1								0·811	
PE12									0·868
PE10									0·847
PE11									0·786
Total % of Variance	6·759	5·791	5·213	4·563	3·188	2·504	2·497	2·433	2·371
Cumulative %	13·793	11·819	10·638	9·312	6·506	5·11	5·097	4·965	4·838
	13·793	25·613	36·251	45·562	52·069	57·179	62·276	67·241	72·079

Matrix

Confirmatory factor analysis

Convergent validity is used to testify whether constructs that are meant to be related are related, which can be verified when composite reliability (CR) is over 0.7 and the average variance extracted (AVE) value is above 0.5 (Fornell & Larcker, 1981). Discriminant validity is used

to test relationships between the construct and an unrelated measure, which illustrates that the construct is not related to something unexpected. It represents the degree of difference between different dimensions in the measurement scale, which is verified by testing whether the correlation coefficient of each dimension is less than the square root of the AVE value. It can be seen from Table 6, Table 7 and Figure 3 that the AVE value of each dimension is over 0.5, the CR value is greater than 0.7 and the square root of AVE is greater than the correlation coefficient of each dimension, all of which indicate that each item explains its dimension well and the research scale has good convergent and discriminant validity.

Table 6 Convergent validity

Path			Std. Estimate	CR	AVE
POF1	<---	POF	0.916		
POF2	<---	POF	0.816		
POF3	<---	POF	0.75		
POF4	<---	POF	0.869		
POF5	<---	POF	0.638	0.922	0.57
POF6	<---	POF	0.663		
POF7	<---	POF	0.688		
POF8	<---	POF	0.724		
POF9	<---	POF	0.681		
PEF1	<---	PEF	0.946		
PEF2	<---	PEF	0.843		
PEF3	<---	PEF	0.767		
PEF4	<---	PEF	0.831		
PEF5	<---	PEF	0.816	0.856	0.707
PEF6	<---	PEF	0.84		
PEF7	<---	PEF	0.829		
PEF8	<---	PEF	0.832		
PEF9	<---	PEF	0.851		
PE01	<---	MN	0.893		
PE02	<---	MN	0.837	0.892	0.734
PE03	<---	MN	0.839		
PE04	<---	CP	0.912		
PE05	<---	CP	0.845	0.893	0.735
PE06	<---	CP	0.812		
PE07	<---	SD	0.86		
PE08	<---	SD	0.914	0.915	0.783
PE09	<---	SD	0.88		
PE10	<---	IP	0.818		
PE11	<---	IP	0.796	0.865	0.681
PE12	<---	IP	0.86		
JP1	<---	TSP	0.898		
JP2	<---	TSP	0.848	0.921	0.746
JP3	<---	TSP	0.821		
JP4	<---	TSP	0.885		
JP5	<---	IF	0.782		
JP6	<---	IF	0.766		
JP7	<---	IF	0.741		
JP8	<---	IF	0.76	0.907	0.583
JP9	<---	IF	0.792		
JP10	<---	IF	0.741		
JP11	<---	IF	0.763		
JP12	<---	JD	0.77		
JP13	<---	JD	0.765		
JP14	<---	JD	0.768		
JP15	<---	JD	0.752	0.92	0.583
JP16	<---	JD	0.754		
JP17	<---	JD	0.777		
JP18	<---	JD	0.731		
JP19	<---	JD	0.788		

Table 7 Discriminant validity

	POF	PEF	MN	CP	SD	IP	TSP	IF	JD
POF	0.755								
PEE	-0.03	0.841							
MN	.209**	-.215**	0.857						
CP	.315**	-0.076	.412**	0.857					
SD	.327**	-0.091	.466**	.386**	0.885				
IP	.240**	-.131*	.390**	.236**	.464**	0.825			
TSP	.368**	-.133*	.251**	.215**	.168**	.171**	0.864		
IF	.272**	-0.001	.171**	.167**	.185**	.178**	.257**	0.764	
JD	.226**	-0.038	.236**	.132*	.158**	.172**	.263**	.417**	0.764
AVE	0.57	0.707	0.734	0.735	0.783	0.681	0.746	0.583	0.583

** Correlation is significant at the 0.1 level (2 tailed).
* Correlation is significant at the 0.05 level (2 tailed).

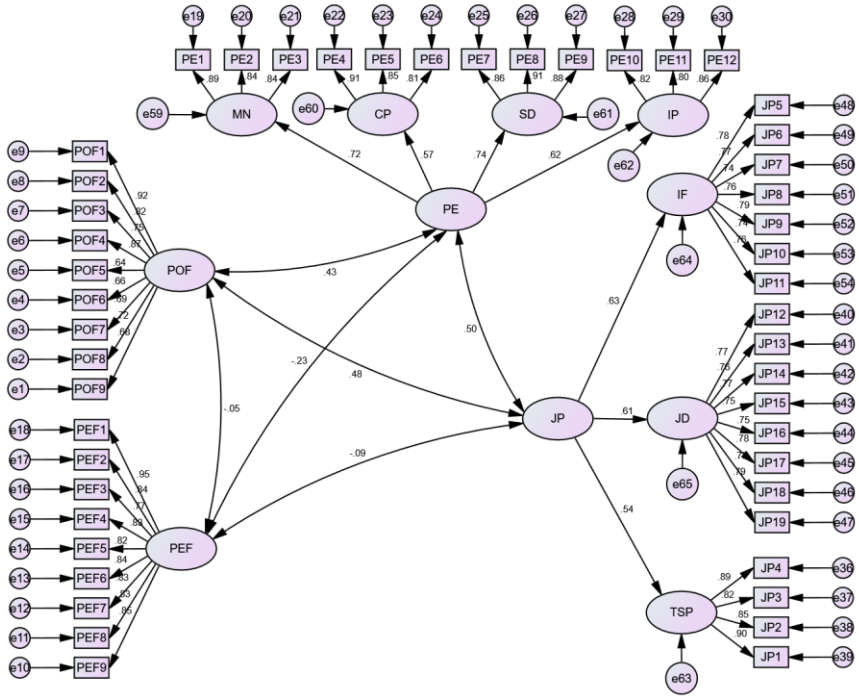

Fig. 3 Confirmatory factor analysis model

Hypothesis test

The structural equation model is established by Amos21.0 based on Figure 1 with promotion focus (POF) and prevention focus (PEF) as independent variables, psychological empowerment (PE) as mediating variables and job performance (JP) as the dependent variable, as is shown in Figure 4. Then from Table 8, it can be seen that the value of GFI, CFI and NFI are all above the recommended values, while the value of RMSEA and RMR are all below the reference values. All of these figures imply high model fitness, which indicates that the data fit the model adequately, or in other words, the established model can effectively measure the latent variables.

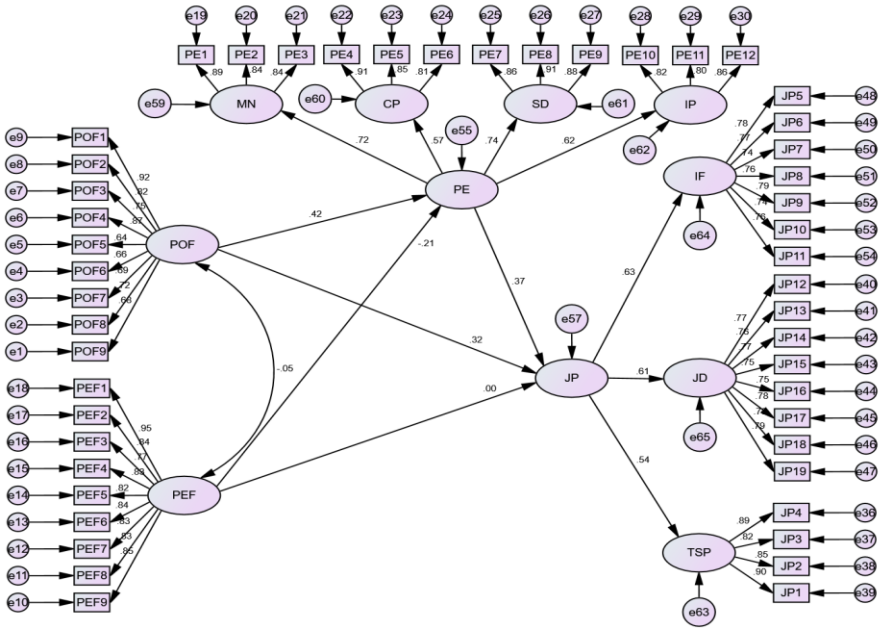

Fig. 4 Structural equation modelling of the study

Table 8 Model fit index

Model fit	Recommended values	Measurement model
CMIN	–	1452.178
DF	–	1114
CMIN/DF	<3	1.304
RMR	<0.08	0.057
GFI	>0.8	0.846
AGFI	>0.8	0.830
NFI	>0.8	0.880
RFI	>0.8	0.873
IFI	>0.8	0.969
TLI	>0.8	0.967
CFI	>0.8	0.969
RMSEA	<0.08	0.031

It can be drawn from Table 9 that if the significance value (p–value) is less than 0.05, the hypothesis is supposed to be valid. Therefore, H1, H3, H4 and H5 are verified while H2 is rejected. Thus, promotion focus will be positively related to job performance and psychological empowerment, prevention focus will be negatively related to psychological empowerment and psychological empowerment will be positively related to job performance. Nevertheless, prevention focus has no significant negative effect on job performance. To test the mediating effect, the

bootstrapping method is applied in the following analysis due to its accuracy in calculating confidence intervals. In this research, since the sample size is less than 500, the bootstrapping method is adopted in Amos21.0 to run 5000 times and the level values of bias-corrected and percentile at 95% confidence are obtained. The assessment criterion is if 0 is not contained in the bootstrap confidence interval, the corresponding mediating effect exists. As is shown in Table 10, there are two mediating paths whose upper and lower intervals do not contain 0, which verifies H6 and H7. In other words, psychological empowerment acts as a mediator between promotion focus and job performance as well as prevention focus and job performance.

Table 9 Path coefficient

Path	Std. Estimate	Estimate	S.E.	C.R.	P
JP<---POF	0.321	0.273	0.077	3.565	***
JP<---PEF	0.002	0.001	0.043	0.029	0.977
PE<---POF	0.423	0.470	0.081	5.804	***
PE<---PEF	-0.206	-0.163	0.050	-3.269	0.001
JP<---PE	0.366	0.280	0.080	3.480	***

*, p<0.05; **, p<0.01; ***, p<0.001

	Hypothesis	Support or reject
H1	POF will be positively related to JP.	Support
H2	PEF will be negatively related to JP.	Reject
H3	POF will be positively related to PE.	Support
H4	PEF will be negatively related to PE.	Support
H5	PE will be positively related to JP.	Support

Table 10 Mediating effect analysis

	Parameter	Bias-Corrected 95%		Percentile 95%	
		Lower	Upper	Lower	Upper
Indirect effect	POF-PE-JP	0.055	0.263	0.068	0.291
	PEF-PE-JP	-0.150	-0.013	-0.165	-0.022

	Hypothesis	Support or reject
H6	PE acts as a mediator between POF and JP.	Support
H7	PE acts as a mediator between PEF and JP.	Support

Discussion

Nowadays, the introduction of a supervisory focus in the intense teaching work of universities is an important research direction, which will help teachers fully utilize their motivation and promote their work autonomy. Based on RFT, this research discusses the variances in psychological empowerment and job performance of university teachers with different regulatory focuses. Through data analysis of 320 samples, the results showed that teachers' promotion style and tendency to handle things in achieving their goals and ideals, as well as their psychological empowerment, would be positively related to job performance, and that psychological empowerment mediated the relationship between promotion focus and job performance. The negative relation between prevention focus and job performance is not significant, whereas psychological empowerment also plays an intermediary role between them. Namely, the independent variable prevention focus influences the dependent variable job performance mainly through the mediating variable psychological empowerment (Preacher & Hayes, 2008). The conclusions are consistent with the research findings of Luthans and other scholars (Luthans et al., 2007), and verify the previous theoretical deduction that teachers' regulatory focus, especially promotion focus, is the internal driving force behind teachers' behaviors, plays a huge role in determining the results of their educational behaviors.

The RFT is expanded and enriched by the research finding. First, this study breaks through established frameworks of specific mental states to discuss the impact of different regulatory focus on psychological empowerment, which both traces and drives RFT. Second, instead of using regulatory focus as a mediator or moderator, this study found the effect of regulatory focus as an independent variable on individual job performance, which deepens the understanding of regulatory focus. Lastly, this study found that the effect of regulatory focus on job performance was achieved by influencing individuals' psychological empowerment. In other words, promotion–focused teachers, tend to be aggressive, sensitive to rewards and goals, and actively strive for them. Promotion–focused teachers' proactive psychological state can constitute an internal incentive to promote the efficiency of their educational activities and increase the output of their work behavior. At the same time, positive emotions of teachers can promote dynamic interpersonal communication between teachers and colleagues as well as students, which is conducive to the formation of positive and harmonious interpersonal relationships and organizational climate. The result will improve resource utilization by individual teachers, which in

turn will lead to better task and contextual performance. The findings also revealed that for prevention–focused teachers, the degree to which they perceived their work as meaningful, the degree of confidence in dealing with the unknown; the degree of autonomy in their work; and the degree of impact of their work were all lower, while the impact of the prevention focus on job performance needs to be further explored.

New knowledge from research

The paper offers practical suggestions for college management by combining regulatory focus and psychological empowerment theories. Existing studies examine the relationship between moderated orientation and job performance, mostly using moderated orientation as a mediating or moderating variable to construct research models, and then conclude that there is a correlation between moderated orientation and job performance, but rarely further explain how it is related. This paper fills the gap by using regulatory orientation as an independent variable and introducing psychological empowerment as a mediating variable to find the specific pathway by which regulatory orientation affects job performance. In addition, this paper collected hundreds of quantitative data for a model of the moderated orientation–job performance relationship mediated by psychological empowerment, expanding the sample size, increasing sample diversity, and providing empirical data support for studies related to moderated orientation, psychological empowerment, and job performance.

Conclusion

The discussion highlights the differences between the two regulatory focuses, which implies that future research could make a further comparative analysis of their influence mechanism and results. Based on the results and discussion, the researcher proposed appropriate management recommendations.

1. The relationship between regulatory focus and job performance implies the importance of aligning organizational people with jobs. HEIs should assign work to teachers based on the task kinds as well as teachers' regulatory focus type. HEI is changing under the influence of the COVID–19 pandemic, so there should be corresponding changes in the understanding of what constitutes faculty performance.

2. In organizational management, managers should create conditions for the transformation of motivational traits of individuals into motivational behaviors, thus paving the way for the transformation from motivation to fulfillment. Higher education institutions should create a favorable atmosphere of psychological empowerment to allow teachers to feel empowered from the bottom of their hearts, which requires a comfortable and spacious working environment, timely communication between labor and management, and a more humane and flexible work system design.

Suggestions

In this study, faculty members from Chinese HEIs were used as the study participants. In the future, the same study and analysis could be conducted in other countries with respondents from different occupations. In addition, the online distribution of the questionnaire was limited to Internet users and considering that some people still do not have regular access to the Internet, paper–based questionnaires could be included in future studies. Besides, given the questionnaire approach used in this study, the measure of regulation focus was more focused on individuals' long–term orientation rather than their situational regulation focus. No relationship has been found between situational regulatory focus and psychological empowerment as well as job performance, so subsequent studies can use experimental methods to initiate regulatory focus and explore the role of situational regulatory focus. Although this study took a questionnaire and quantitative analysis to conduct an empirical study, future researchers may consider taking a qualitative approach to obtain further in–depth information. Other factors can be introduced as mediating or moderating variables in future studies to enrich the theory of regulatory focus.

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