



The Effects of Transformational Leadership and The Role of Social Connectedness, Team Psychological Safety and SNS Usage Frequency

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Abstract

Purpose – The purpose of this research is to test the impact of social connectedness and team psychological safety on the relationship between transformational leadership and employee performance (job performance and practiced creativity), and moderating role of usage frequency of SNS.

Research design, data, and methodology – A total of 299 questionnaires, completed by Chinese employees, were analyzed using SPSS 22 and AMOS 22. For the assessment of goodness of fit of the models, TLI, CFI, RMSEA indices were used.

Result –The empirical results are as follows. First, social connectedness had a mediating effect in the relationship between transformational leadership and job performance, practiced creativity. Second, team psychological safety had a mediating effect in the relationship between transformational leadership and social connectedness, job performance, practiced creativity. Finally, the moderating effect of frequency of employee SNS usage were not significant.

Conclusion –This study analyzes the mediating role of employee social connectedness and team psychological safety on the relationship between transformational leadership and job performance, practiced creativity, which is helpful for the expansion of related theories and provides practical implications for effective human resource management.

Keywords: Transformational Leadership, Social Connectedness, Team Psychological Safety, Job Performance, practiced Creativity, Usage Frequency of SNS.

JEL Classification Code: D91, M12, M19, M50, M54

1. Introduction

In recent years, many major media have covered the phenomenon known as cocooning (i.e., the self-imposed isolation and seclusion of individuals), which is essentially a form of social regression. Reportedly, more than one million Japanese people were living in “cocooning” as of 2019 (NHK news). This phenomenon reflects the low social connectedness, or even the complete absence of social connectedness, on the part of numerous individuals in modern society. Cocooning affects employee attitudes and employee behaviors, causes brain drain, and even poses serious social problems. People going through this social regression are loners, and in teams, they are outsiders. For these people, maintaining normal interpersonal relationships is difficult. They also have poor interpersonal skills and will use any excuse to avoid social activities, for fear of being refused or rejected (Rook, 1984).

Lee and Robbins (1995) offered a more precise description of the sense of belonging, depicting it as social connectedness, according to the self-psychology theory. Social connectedness places the emphasis on interdependence; that is, the degrees of mutual connections and mutual dependence between an individual and others (Baumeister & Leary, 1995; Marangoni & Ickes, 1989).

Previous studies in the field of organizational behavior focus on how the sense of belonging and communication performance of organizational members affects their job attitudes and job performance (e.g., Skaalvik & Skaalvik, 2011; Zeinab, Khorasan, & Eskandani, 2019). The sense of belonging and communication performance have different characteristics and emphases, but they both reflect, and are affected by, employees’ social connectedness (Lee & Robbins, 1995). An individual with high social connectedness tends to maintain close relationships with others and can easily identify with others, regarding them as friendly and approachable. Such individuals actively participate in group activities (Baker & Baker, 1987). In contrast, an individual with low social connectedness often keeps distance between themselves, others and even the entire world. Such individuals see themselves as outsiders, and they tend to be socially awkward (Lee & Robbins, 1995). Compared to the sense of belonging and communication performance, social connectedness exerts a more typical effect on organization members. This means that social connectedness is also an important factor affecting employees’ job attitudes and job performance, similar to the sense of belonging and communication performance. However, adequate attention has not been paid to social connectedness in the field of organizational behavior.

Social connectedness is a form of self-awareness that varies in degrees in different employees, due to individual differences (Rook, 1984). In the current background of economic globalization and increasingly fierce market competition, individuals’ passive self-moderation is insufficient to deal with the situation of low social connectedness. In other words, external interventions are extremely necessary in face of the low social connectedness of organization members. For teams and team members in an organization, leadership is the core driver and an important factor of external interventions (Shalley & Gilson, 2004). Yukl (2008) defined leadership as the ability to influence followers. That is, the words and deeds of leaders not only affect the attitudes and behaviors of organization members, but they also have a large bearing on the organizational climate and organizational culture (Yukl & Van Fleet, 1992). Leadership can stimulate employees’ inner motivation and potential and influence their attitudes and behaviors by caring about their inner needs (Gibson, Ivancevich, & Donnelly, 1991).

In particular, according to the transformational leadership theory proposed by Bass and Avolio (1994), transformational leadership not only stimulates employees’ inner motivation; transformational leaders also care about their employees’ individual needs and characteristics. Transformational leadership also creates a favorable, supportive work environment for employees (Piccolo & Colquitt, 2006) and enhances their organizational identity (Epitropaki & Martin, 2005; Van Knippenberg et al., 2004). In this sense, it is worth noting that transformational leadership, as an important factor of external interventions, plays a significant role in improving employees’ social connectedness. Besides, the low social connectedness in individuals who fear being refused or rejected (Rook, 1984) suggests that a favorable organizational climate and supportive work environment also help to improve employees’ social connectedness.

Team psychological safety is a psychological state. In this state, employees can discuss their ideas and suggestions freely without fear of any negative consequences that might be brought by the discussion (Kahn, 1990). This state can undoubtedly mitigate employees’ social risks. Team psychological safety can also bring a positive impact on employees’ innovative capabilities and their job performances at work (Lee, Choi, & Kim, 2018; Brown, 1996). This sense of psychological safety comes from the consideration and trustfulness of the leadership. (Choi & Mai-Dalton, 1998; Matteson & Irving, 2006). In organization management, one of the important research topics is how to reduce organizational uncertainty and the risk in interpersonal communication from the individual psychological level. In addition, people use SNS to communicate with those who share similar opinions and to receive social support, in order to avoid feeling lonely (Kwon & Wen, 2010). So, it is certainly worthy of attention

on the topic that whether the usage frequency of SNS has increased the interaction and communication between the employers and the employees, or has it improved the efficiency of the leadership's influence and the employees' social connectedness. Hence, we added team psychological safety and usage frequency of SNS as two variables into this research, to explore the methods of improving transformational leadership more comprehensively.

To sum up, the level of social connectedness not only affects the lives and work of individuals; social connectedness also influences the performance of organization members in team activities. On that basis, this study introduces the social identity theory (SIT) and the self-categorization theory (SCT), which are used to explore the effect of transformational leadership on employees' social connectedness, as well as how social connectedness mediates the effects of transformational leadership on employees' practiced creativity and job performance. On this basis, this study analyzes the effect of organizational climate on social connectedness, according to the social information processing theory.

2. Literature Review and Hypotheses

2.1. Transformational Leadership and Social Connectedness

According to the SIT and SCT, the more common the attributes (such as values and goals) are between an individual and an organization, the stronger the sense of identity with the organization on the part of the individual will be (Dutton, Dukerich, & Harquail, 1994). In addition, individuals have a tendency to categorize people (including themselves) into different types, thus simplifying their social networks (Edwards, 2005). This means that, when an individual sees some common attributes in a group, the individual will be more likely to identify with and blend into that group and establish social relationships in the group.

In fact, transformational leadership is achieved mainly via communication (Holladay & Coombs, 1993). By finding the common attributes between individuals and organizations, and by providing the social cues of self-categorization, transformational leadership ultimately affects employees' attitudes and behaviors.

According to the transformational leadership theory proposed by Bass and Avolio (1994), transformational leadership motivates employees through the exhibiting of organizational visions and goals. Transformational leaders care about their followers' individualized needs, thereby enhancing their identification with common goals and their sense of belonging to the organization. Transformational leadership also drives organization members to support and learn from each other (Zhou & Pan, 2015). Bass (1985) held that transformational leaders not only set common visions and goals for followers, but they also establish emotional connections between them (Amin & Mariani, 2017).

Cameron and McCollum (1993) claimed that interpersonal communication is two-way and that communication not only strengthens leader-employee connections, but also encourages employees to express personal opinions and enhances their sense of belonging and social consensus (White, Vanc, & Stafford, 2010). Thus, transformational leadership is undoubtedly a vital force that drives employees' organizational identity and self-categorization. Transformational leadership certainly contributes to the improvement of employees' social connectedness.

Social connectedness stresses the degrees of mutual connections and mutual dependence between an individual and others. Previous studies have shown that transformational leadership plays a positive role in strengthening both mutual support and dependence between employees (Zhou & Pan, 2015), as well as in enhancing communication within organizations (Men, 2014). On this basis, this study believes that transformational leadership significantly improves employees' social connectedness.

Hypothesis 1: Transformational leadership is positively related with employees' social connectedness.

2.2. Mediating Effect of Social Connectedness

Considering the central part played by leaders in affecting employee behaviors, many studies have examined the positive effect of leaders on employees' practiced creativity and job performance (Mumford et al., 2002; Shalley & Gilson, 2004). On the one hand, transformational leaders improve employees' practiced creativity by caring about their individualized needs (such as motivation, interests, and competence) (e.g., Mumford et al., 2002). On the other hand, transformational leadership drives the improvement of practiced creativity by creating a supportive work environment (including a safe environment and a good learning environment) (Amabile et al., 1996; Jung, Chow & Wu, 2003). Moreover, transformational leaders guide individuals to align their goals with organizational goals, thus improvi

ng their job performance (Bushra, Usman, & Naveed, 2011).

However, whether an individual can give full play to his or her practiced creativity and achieve the expected job performance is still subject to interpersonal relationships. For instance, when an employee cannot blend into the organization or is marginalized by others within the organization, that employee's practiced creativity and job performance will be adversely impacted. Studies on employees' practiced creativity have attracted extensive attention from researchers. It has been found that interpersonal interactions play a critical role in the development of practiced creativity (Ford, 1996; Perry-Smith, 2006). Rejection is a common phenomenon in the workplace. Someone who feels rejected perceives that they are being ignored or marginalized by others at work. Rejection is a manifestation of employees' low social connectedness (Ferri et al., 2008). The negative correlation between workplace rejection and employees' practiced creativity and job performance has been extensively investigated and demonstrated by many studies (Chung & Kim, 2017).

The social capital theory holds that interpersonal interactions or interpersonal collaborations yield benefits. In other words, employees with high levels of social connectedness obtain benefits from work. The essence of social connectedness lies in establishing, maintaining, and enhancing interpersonal relationships, and in achieving sharing, collaboration, or interpersonal interactions. Ultimately, social connectedness contributes to the improvement of employees' practiced creativity and job performance.

A study by Park and Kang(2016) identified a high correlation between individuals' internal motivation (interests, sense of satisfaction, and/or pursuit of goals) and social connectedness. Previous studies have also shown that transformational leadership, the essence of which is caring about employees' individualized needs (such as motivation, interests, and competence) and creating a favorable organizational climate improves employees' communication ability and pushes them to establish their interpersonal relationship networks. Meanwhile, interpersonal communication mediates the effects of transformational leadership on employees' practiced creativity and job performance (Zhou et al., 2015). On this basis, this study presents the following hypotheses:

Hypothesis 2a: Social connectedness mediates the relationship between transformational leadership and employees' practiced creativity.

Hypothesis 2b: Social connectedness mediates the relationship between transformational leadership and employees' job performance.

2.3. Transformational Leadership and Team Psychological Safety

Chinese people are not as participative as westerners (Zhang et al., 2012). Van Dyne, Ang, & Botero (2003) argued that Chinese people have little enthusiasm for self-expression, mainly because they are worried about perceived risks, or because they fear that their statements may be ignored. In this sense, only employees with a strong sense of safety are likely to actively engage in work and express their opinions (Ge, 2020). Previous studies in this field maintain that this sense of safety, or team psychological safety, is a key factor that affects job performance (Edmondson, 1999). However, thus far, studies on team psychological safety have attracted little attention. Team psychological safety is defined as a common belief or a collective of interpersonal relationships contained within a team. This type of safety is a team climate, in which people trust and respect each other and do not get blamed for speaking up (Edmondson, 1999).

The words and deeds of leaders have a large bearing on team psychological safety (Edmondson, 1999; Tyler & Lind, 1992). For instance, a supportive leader that values employees' opinions can create a favorable climate. Members of such a team have a sense of psychological safety and are willing to invest more energy in work and improve their creativity in this process (May, Gilson, & Harter, 2004; Oldham & Cummings, 1996). On the contrary, members of a team under a leader that advocates dictatorial or punitive management tend to take actions targeted at avoiding the risks of interpersonal relationships (Edmondson, 1996).

It has been suggested that transformational leaders affect employees' attitudes and behaviors through two different channels. First, transformational leaders affect employees by caring about their individualized needs (such as motivation, attitudes, competence, and interests), so as to improve their practiced creativity and job performance (e.g., Mumford et al., 2002). Secondly, transformational leaders have a positive effect on employees by creating a favorable work environment (group factor) (Amabile et al, 1996; Jung et al, 2003).

The transformational leadership theory proposed by Bass (1985) introduced four dimensions. Guided by this theory, this study holds that transformational leaders can help create a safe interpersonal communication environment and/or organizational climate, in which employees believe that it is proper and safe to exchange ideas and raise challenging questions. This is consistent with the SIP(social information processing) (Salancik & Pfeffer,

1978), which states that people form their views on values, norms, and acceptable behaviors based on the environmental cues in their surrounding environment. To be specific, when transformational leaders promote mutual trust and support between employees by emphasizing the importance of common goals, employees will feel a consensus (rather than competition) between colleagues; they will follow the example of their transformational leaders and respect individual differences and individualized needs. In this case, employees believe that they can receive help and support from colleagues; they understand that they will not be marginalized or embarrassed for the expression of personal opinions (Zhou & Pen, 2015). On this basis, this study proposes the following hypothesis:

Hypothesis 3: Transformational leadership is positively related with employees' team psychological safety.

2.4. Mediating Effect of Team Psychological Safety

Previous studies have confirmed that transformational leadership significantly improves employees' practiced creativity and job performance (Mumford et al., 2002; Shalley & Gilson, 2004). Employees' inner incentives have been found to mediate the effect of transformational leadership on employees' creativity (Zhou & Pen, 2015) or job involvement (Aryee et al., 2012).

The SIP theory (Salancik & Pfeffer, 1978) holds that employees do not have to receive intensive training, as social and environmental cues affect employees' inner values and behavioral norms. Environmental factors prompt employees to voluntarily moderate their behaviors and job attitudes. Therefore, researchers suggest that interactions between environmental and individual factors affect employees' job performance (Amabile, 1983; Woodman, Sawyer, & Griffin, 1993). In other words, environmental factors affect employees' job performance. This is because the goals, norms, attitudes, and behaviors of employees are subject to the influence of environmental factors (Amabile, 1996; Woodman et al., 1993). Furthermore, most studies based on the social exchange theory have identified a negative correlation between job insecurity and job performance (e.g. De Cuyper et al., 2019; Cheng & Chan, 2008; Shoss, 2017).

A high level of the perception of team psychological safety greatly encourages employees to share their thoughts and opinions, and urges them to support and learn from each other (Edmondson, 1999). This not only improves employees' practiced creativity, but also strengthens interpersonal relationships and mutual dependence between employees.

Transformational leaders promote the formation of the sense of team psychological safety through the setting of common goals and by adopting them as common behavioral norms for team members. Team psychological safety significantly improves employees' self-expression and enthusiasm in participation (Kahn, 1990). Therefore, this study believes that team psychological safety mediates the effects of transformational leadership on social connectedness, practiced creativity, and job performance.

Hypothesis 4a: Team psychological safety mediates the relationship between transformational leadership and employees' practiced creativity.

Hypothesis 4b: Team psychological safety mediates the relationship between transformational leadership and employees' job performance.

Hypothesis 4c: Team psychological safety mediates the relationship between transformational leadership and employees' social connectedness.

2.5. Social Networking Services (SNS) Usage Frequency

Social connectedness produces benefits for both individuals and groups (Bandiera et al., 2008). Such benefits, referred to as social capital, can serve as a strong driver for establishing and maintaining social connectedness (Adler & Kwon, 2002). Different modes of modern communication (such as WeChat) have also offered important measures for the development, maintenance, and strengthening of social connectedness, and have been employed to maintain and develop physical and offline social connectedness and social activities. As of 2020, the scale of use of SNS (represented by WeChat) in China had reached 1.21 billion (data source: southmoney.com).

Social connectedness can describe interpersonal relationships and social activities between team members (Riedl et al., 2013). The frequency and amount of communication on SNS drive the development of social relationships in important ways (Rettie, 2003). According to previous studies, active information sharing between team members can strengthen social connectedness (Köbler et al., 2010); the more online interactions between people there are, the

stronger the psychological and emotional connections between them there will be. A high correlation has been observed between social connectedness and the sense of social presence produced by interpersonal interactions (Riedl et al., 2013). Hackman and Johnson (1996) pointed out that one essential feature of transformational leadership lies in strengthening interactions and connections between organization members. Transformational leadership affects employees mainly through communication (Holladay & Coombs, 1993). Considering the role of SNS as a convenient and widely-used mode of modern communication, it is worth exploring whether SNS usage frequency can moderate the effect of transformational leadership on employees' social connectedness. In this context, this study believes that SNS usage frequency moderates the effect of transformational leadership on employees' social connectedness. As such, the following hypothesis is suggested:

Hypothesis 5: SNS usage frequency moderates the relationship between transformational leadership and social connectedness.

2.5. Research Model

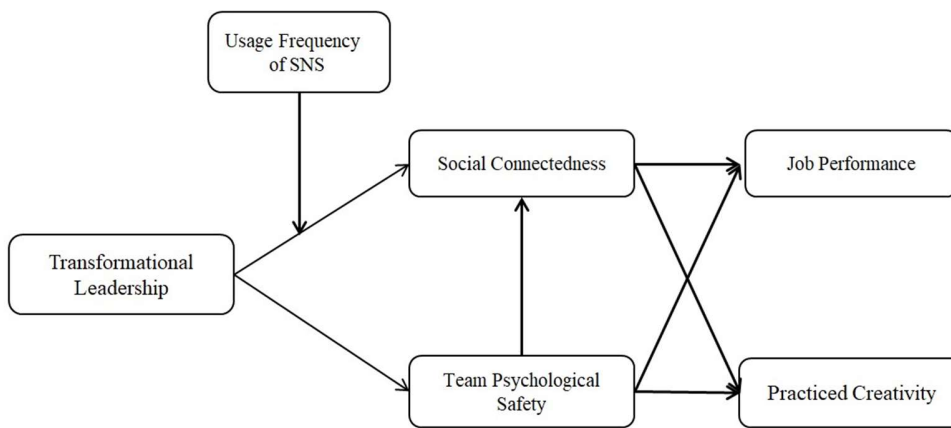


Figure 1: Research Model

3. Methodology

3.1. Data

Among 400 written questionnaires collected from Chinese employees, 299 questionnaires were ultimately used for the analysis after excluding invalid and incomplete questionnaires. The 299 respondents included 125 males (41.8%) and 174 females (58.2%). In terms of age, the respondents were divided into four age groups, i.e., 20-29 (11.4%), 30-39 (25.8%), 40-49 (23.1%), and above 50 (39.8%). In terms of educational level, junior high school degree (10%), senior high school degree (16.4%), vocational school degree (28.1%), bachelor's degree (35.1%), master's degree (7.4%), and doctoral degree (3%). In terms of service length, less than one year (1.3%), 1-3 years (6.7%), 4-5 years (10%), 6-10 years (16.4%), 11-20 years (14.7%) and more than 20 years (50.8%).

3.2. Methods

For the convenience of analysis, all measures previously confirmed as being effective and credible in previous studies were adopted for use in this study. All the questions were based on the 5-point Likert scale (1=highly disagree, 5=highly agree).

3.2.1. Transformational Leadership

Transformational leadership was measured using the Multifactor Leadership Questionnaire (MLQ) scale developed by Bass and Avolio (2004). Development was conducted in the four dimensions introduced in Bass’s (1995) transformational leadership theory, including idealized influence (behavior) (such as respondents talking about their most important values and beliefs); inspirational motivation (such as discussing the future with a positive attitude); intellectual stimulation (such as solving problems in different ways), and individualized consideration (such as spending time on teaching and coaching).

3.2.2. Team Psychological Safety

Edmondson’s (1999) seven-item scale for team psychological safety was employed to measure the team psychological safety of organization members. For instance, “Members in our team can raise challenging questions or thorny doubts”.

3.2.3. Social Connectedness

Employees’ social connectedness was measured using the operational definition of social connectedness given by Lee and Robbins (1995); specifically, the emotional distances or connections between self and others (including friends and society). The 20-item scale developed by Lee, Draper, and Lee (2001) was adopted as the measurement tool. Sample items were “I do not really feel that I belong here, even when surrounded by people I know.” “There is always a sense of distance between myself and others.”

3.2.4. Job Performance

Employees’ job performance was measured with the six-item scale developed by Bouchkenooghe, Raja and Butt (2011). Sample item was “My job competence can meet the formal job performance requirements.”

3.2.5. Practiced Creativity

Employees’ practiced creativity was measured with the 17-item Creative Potential and Practiced Creativity (CPPC-17) scale developed by DiLiello and Houghton (2008). The scale is based on the concept of “practical creativity”, i.e., the opportunities for employees to use their skills or creativity at work (DiLiello & Houghton, 2008), as originally proposed by Hinton (1968, 1970). For instance, “My job can give full play to my potential.”

3.2.6. SNS Usage Frequency

Employees’ usage frequency of SNS (such as WeChat and QQ) was measured with the usage frequency scale developed by Hamilton, Ratner and Thompson (2011). Sample items were “I use them at least once a week”, and “I use them at least once every day.”

4. Analysis

4.1. Reliability and Validity

The Cronbach’s alpha coefficients of the transformational leadership scale (MLQ), the team psychological safety scale, the social connectedness scale, the job performance scale, and the practiced creativity scale were 0.963, 0.644, 0.884, 0.759, and 0.873 respectively. They were all bigger than 0.6, suggesting that the measurements of all these scales are reliable.

The subsequent preliminary factor analysis revealed that Bartlett’s test produced a significant result, with KMO > 0.6, making it suitable for factor analysis. Bilateral significance was observed at the level of p=.000. AMOS 22 was adopted to perform confirmatory factor analysis (CFA) on the model fitting of the scale, and the list fitting indices, as detailed in Table 1.

Table 1: Goodness-of-Fit of the Measurement Model

X ² /df	RFI	NFI	IFI	TLI	CFI	RMSEA
2.670	0.756	0.772	0.845	0.831	0.845	0.075

As can be seen from Table 1, the inherent quality of the measurement model meets the criteria, meaning that the measurement model has a good inherent quality and that its preliminary fit criteria also fall within the acceptable range. Among the indices for the overall goodness of fit of the measurement model, the chi-square value reached a significance level ($p < 0.05$). After referring to other indices, it was found that the statistical quantities produced by the indices of goodness of fit all reached standard values. Clearly, the overall goodness of fit of the model proposed in this study is acceptable. That is, the path diagram of the measurement model fits well with the observed data, and the construct validity of the scale is supported by statistics.

4.2. Correlation Analysis

The correlation between variables was analyzed before testing the proposed hypotheses, as shown in Table 2. As expected, the correlation coefficients between variables are significant. Namely, transformational leadership is correlated with both social connectedness and team psychological safety. Transformational leadership is also correlated with practiced creativity and job performance. Furthermore, social connectedness and team psychological safety are both closely related to practiced creativity and job performance.

Table 2: Result of Correlation Analysis

Factors	AVG	S.D	(1)	(2)	(3)	(4)	(5)	(6)
(1) Transformational leadership	4.123	0.729	1					
(2) Social connectedness	3.664	0.393	0.627**	1				
(3) Team psychological safety	3.351	0.470	0.492**	0.635**	1			
(4) Practiced creativity	3.855	0.585	0.692**	0.631**	0.524**	1		
(5) Job performance	4.000	0.548	0.463**	0.572**	0.460**	0.584**	1	
(6) Usage frequency of SNS	7.413	2.958	0.111	0.295**	0.155**	0.106	0.186**	1

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.3. Hypotheses Test

As shown in Table 3, this study performed a regression analysis and adopted the three-stage method proposed by Baron and Kenny (1986). The purpose is to validate that: transformational leadership significantly improves employees' practiced creativity and job performance; employees, social connectedness and team psychological safety mediate the effects of transformational leadership on employees' practiced creativity and job performance; team psychological safety mediates the relationship between transformational leadership and employees' social connectedness.

In the first stage, the independent variable transformational leadership significantly improved employees' team psychological safety and social connectedness(model 1). Moreover, the higher the transformational leadership was ($\beta = 0.517$, $\beta = 0.643$), the higher the levels of employees' team psychological safety and social connectedness were. The explanatory powers of transformational leadership were 26.2% and 40%, respectively. Thus, H1 and H3 are established.

In the second stage, the independent variable transformational leadership ($P < 0.001$) significantly improved employees' practiced creativity and job performance(model 2). Moreover, the higher the transformational leadership was ($\beta = 0.482$, $\beta = 0.698$), the higher the levels of employees' practiced creativity and job performance were. The explanatory powers of transformational leadership were 23.2% and 48%, respectively.

In the third stage, employees' team psychological safety and social connectedness significantly improved employees' practiced creativity and job performance. Transformational leadership significantly improved employees' job performance ($\beta = 0.169$, $p < 0.01$). Transformational leadership also significantly improved employees' practiced creativity ($\beta = 0.464$, $p < 0.001$). However, the effect of transformational leadership had declined in this stage, compared to the effect in the second stage. This indicates that employees' team psychological safety and social connectedness mediate the effects of transformational leadership on employees' job performance and practiced creativity. That is, employees' team psychological safety and social connectedness exert partial mediating effects. Thus, H2a, H2b, H4a, and H4b are supported.

Table 3: Results of Regression Analysis

Variables	Model 1				Model 2				Model 3			
	TPS		SC		PC		JP		JP		PC	
	β	t	β	t	β	t	β	t	β	t	β	t
Constant		-0.793		-0.631		0.008		0.008		-0.937		0.335
TL	0.517	9.941***	0.643	13.714***	0.698	16.002***	0.482	9.081***	0.169	2.672**	0.464	8.799***
TPS									0.124	2.016*	0.138	2.681**
SC									0.387	5.652***	0.254	4.437***
Adj R ²	0.262		0.400		0.480		0.232		0.364		0.555	
F	26.123(p<0.001)		48.921(p<0.001)		67.915(p<0.001)		22.257(p<0.001)		27.847(p<0.001)		60.750(p<0.001)	

Note: n=299, *p<.05, ** p<.01, *** p<.001, TL : Transformational Leadership, TPS: Team Psychological Safety, SC: Social Connectedness, SNS: Usage Frequency of SNS, PC: Practiced Creativity, JP: Job Performance

Besides, adopting Model 6 of the PROCESS procedure for SPSS proposed by Hayes (2018), this study set a confidence interval of 95% and a bootstrapping sample of 5,000, in order to validate the mediating effects of employees’ social connectedness and team psychological safety, as provided in Table 4. According to the results of the mediating effect test using bootstrapping, 0 was not contained in the confidence interval of H2a, H2b, H4a, H4b, or H4c. Therefore, the mediating effect is supported. Table 3 and Table 4 provide the results of the mediating effect test using the three-stage validation method proposed by Baron and Kenny (1986) and by Model 6 of the PROCESS procedure for SPSS proposed by Hayes (2018). The results indicate that employees’ team psychological safety and social connectedness have mediating effects, thus H2a, H2b, H4a, H4b, and H4c are supported.

Table 4: Result of PROCESS procedure

Path	B	S.E	LLCI	ULCL
TL→TPS→PC	0.052	0.025	0.003	0.104
TL→SC→PC	0.084	0.027	0.039	0.146
TL→TPS→SC→PC	0.043	0.014	0.018	0.073
TL→TPS→JP	0.052	0.024	0.005	0.097
TL→SC→JP	0.121	0.029	0.068	0.180
TL→TPS→SC→JP	0.062	0.016	0.036	0.101

Note: n=299, Bootstrap sample=5,000

Table 5: Moderating Effect of SNS Usage Frequency

Variables	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
TL	0.339	13.886***	0.325	13.817***	0.349	5.514***
SNS			0.030	5.238***	0.030	5.165***
TL*SNS					-0.003	-0.404
Adj R ²	0.394		0.445		0.445	
F	129.825***		118.714***		78.974***	

Note: Dependent Variable = Social Connectedness

According to Table 5, transformational leadership ($\beta=0.339, p<0.001$) and SNS usage frequency ($\beta=0.03, p<0.001$) significantly are positively related with employees’ social connectedness. However, transformational leadership*SNS usage frequency ($\beta=-0.003, p>0.05$) was not significant. That is, SNS usage frequency failed to moderate the ef

fect of transformational leadership on employees' social connectedness. Thus, H5 was not supported.

5. Conclusions

5.1. Results and Implications

The purpose of this study is to empirically test the following: that transformational leadership significantly improves employees' social connectedness and team psychological safety; that social connectedness and team psychological safety mediate the effects of transformational leadership on employees' practiced creativity and job performance; that team psychological safety mediates the effect of transformational leadership on employees' social connectedness. In recent years, SNS and other modes of modern communication have offered important social networking tools. In this background, this study explores and validates the role of SNS usage frequency in employee outward-bound training and social connectedness maintenance. The study finds that SNS usage frequency significantly improves employees' social connectedness but is unable to moderate the effect of transformational leadership on employees' social connectedness.

First, according to the transformational leadership theory proposed by Bass (1985), transformational leadership actively promotes employees' social connectedness and team psychological safety through motivating employees, caring about their individualized needs, and setting common goals. Second, this study elaborates on the causes and consequences of changes in employees' social connectedness in organizations, according to SIT and SCT. According to the findings of this study, employees are willing to establish and maintain sound interpersonal relationships (social connectedness) with other members in the organization, if and when they can identify with organizational goals and the words and deeds of the organization's leaders. Employees' social connectedness can mediate the effects of transformational leadership on employees' practiced creativity and job performance. This further proves the view of Holladay & Coombs (1993); that is, transformational leadership is realized through interpersonal communication. In fact, the role of transformational leadership can be brought into full play only when sound interpersonal relationships and effective communication have been established. In addition, a supportive work environment also constitutes a key factor that affects employees' social connectedness, practiced creativity, and job performance. This study also finds that team psychological safety mediates the effects of transformational leadership on employees' social connectedness, practiced creativity, and job performance. Third, driven by the rapid development of mobile communication technologies, the use of SNS (represented by WeChat) is playing an increasingly important role in developing and maintaining interpersonal relationships and in strengthening individuals' social connectedness. However, SNS usage frequency is unable to moderate the effect of transformational leadership on employees' social connectedness. The result of this research indicates that the usage frequency of SNS does not have a moderating effect. According to Dholakia, Bagozzi, and Pearo (2004), many motivations influence people's usage of SNS, to seek social support and maintaining interpersonal communications are part of the motivations. Obtaining valuable information, personal recreation and other factors are also important motivations that drive people to use SNS. In consideration of the complexity of people's purposes of using SNS, the frequency of SNS usage cannot adjust the impact of transformational leadership on social connectedness.

Considering that little attention has been paid thus far to employees' social connectedness in previous studies of human resources and organizational behavior, this study probes into the role of employees' social connectedness with organization members. In this way, the study offers some inspiration about how to increase organizational efficiency by giving full play to the positive role of transformational leadership. In addition, according to the findings of further analyses on the effect of supportive team climate, team psychological safety not only improves employees' practiced creativity and job performance, but also enhances the effects of transformational leadership. Team psychological safety also plays a positive role in improving employees' social skills and communication performance. The findings of this study offer some implications for building corporate culture and organizational climate in the future. Seeing that mobile communication technologies are receiving more and more attention, this study also explores the role of SNS usage frequency; a foundation is also laid for employee outward-bound training and interpersonal relationship maintenance in the future.

5.2. Limitations and Future Research Directions

The limitations of this study are mainly concentrated in the following aspects: First, the data were collected by means of "self-reporting" by respondents. As such, this study is open to criticism for its lack of "objectivity". In future

research, researchers need to include both “self-reporting” and “third-party observations”, in order to reduce the biases of “subjective answers”. Second, social connectedness refers to the mutual connections and mutual dependence between one individual and others. This includes interpersonal relationships between members of organizations, as well as between employees and their families, friends, or other external parties. This study has not paid sufficient attention to the interactions between different interpersonal relationship networks. Therefore, future research should expand the objects and scope of study and incorporate social and family factors as well, so as to more comprehensively reflect the effect of social connectedness on organizations or individuals.

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