

When empowering leadership links to team work outcomes: Encouraging the expression of psychological empowerment and knowledge sharing

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Abstract—Integrating theories of empowering leadership, psychological empowerment, knowledge sharing and performance, this study aims to understand how knowledge sharing in teams led by empowering leader affects desired team work outcomes by psychological empowerment. Knowledge sharing was examined as a mediator in the relationships between psychological empowerment and work outcomes in a survey of 244 hospital employees from 67 medical teams. Work outcomes were based on leader ratings of both teammates' in-role and extra-role behavior. This study provided the theoretical and methodological contributions to identify empowering leadership positively related to psychological empowerment; psychological empowerment positively related to knowledge sharing, which in turn increases the likelihood of team performance, but not of extra-role behavior. The practical contributions were also discussed as important references for health care service organization.

Keywords- *empowering leadership; psychological empowerment; knowledge sharing; team performance*

I. INTRODUCTION

In response to heightened competition and rapid technological advancements in the increasingly turbulent environments, managers need to consider the fit between employer's leadership style and employee in order to improve employees' behaviors and performance in the workplace. Many previous researches have shown that, diverse leadership styles have been revealed to significantly influence employees' performance [1]; [2]; [3]. By the raising of degree of the employees' autonomy, how leaders take empowerment to influence knowledge workers has been emerged a key within organizations in knowledge era. Empowering leadership is regarded as a style of leader behavior involving raising subordinates' autonomy and responsibility, sharing power with them, and encouraging them to express opinions and ideas, promoting collaborative decision making, and supporting information sharing and teamwork [4]; [5]; [6]; [7]; [8]. The issue of empowering leadership is as one of the most critical factors to analyze leader effectiveness and to affect job performance [9]; [3]; [10]. The empowered employees are more willing to benefit their leaders by exhibiting better job performance, engaging in extra-role behaviors, and showing more positive attitudes toward their jobs and organizations.

Unpredictable technology change and fierce global competition have made organizations flatter and more team

based and jobs more complex and demanding. Thus, employees need greater empowerment and support from their leaders, teams and organizations. Some previous empirical studies also supported the relationships of employee empowerment to important work-related outcomes [11]; [12], and the relationship of empowering leadership and employee work-related outcome [4]; [3]. Empowering leadership might influence team effectiveness via psychological empowerment as pursuing task objectives congruent with the team leader to generate the solutions required for sustained business success. It is expected that psychological empowerment is the guideline for creating the "win-win" situation for having favorable relationships with the leaders [13]. Psychological empowerment is not only necessarily, but can be, mutual. Indeed, the development of empowerment is necessary for stable, ongoing cooperative relationships and to enable people to work together more effectively.

Organizations recognize that knowledge is an essential for achieving sustainability and competitiveness [14]. However, organizations cannot learn by themselves; but their employees can behave and function as active carriers of change to acquire knowledge. Knowledge sharing cannot be forced, but can only be encouraged and facilitated [15]. Knowledge sharing is a construct that encompasses intercorrelated task and social dimensions that collectively capture the degree to which a team engages in mutual and collective interaction to improve decision quality, and promote corporate ambidexterity and entrepreneurship, which in turn improves team performance. Knowledge sharing is considered to be a well-established predictor of team outcomes [3], and a team process to which team members sharing task-relevant ideas, information, and suggestions with each other [16]. To fully understand knowledge sharing in linking empowering leadership and team work outcomes; I therefore need to consider that knowledge sharing acts as a connector between psychological empowerment and work outcomes, respectively, team performance and citizen performance.

Overall, this study represents an initial step toward a systematic investigation of psychological empowerment and knowledge sharing among work teams, medical teams in particular. Drawing on the framework of mediating mechanism, this study aims to make three major contributions to empowering leadership, psychological empowerment, knowledge sharing, and performance literatures. First, the

present study investigates empowering leadership as an antecedent of psychological empowerment, and thus extends the research into the links between team characteristics and team knowledge sharing. Second, the present study explores the mediating effect of knowledge sharing on the relationship between psychological empowerment and team work outcomes. This examination enriches the understanding of the influence of how knowledge sharing emerges and functions on team effectiveness in medical teams. Finally, this study uses a two sources research design to test the hypothesized model, where with different sources (e.g., team members rated empowering leadership of team leader, team members self-rated their perceived psychological empowerment and knowledge sharing, while team leaders rated their members' team performance and citizenship performance) in order to reduce the possibility of same source bias was measured.

II. LITERATURE REVIEW AND HYPOTHESE BUILDING

A. Empowering leadership and psychological empowerment

Regarding how to achieve desired outcomes, empowering leaders delegate authority to employees, involve employees in decision making, share power with employees, encourage self-management of work, and convey confidence in employees' ability to handle challenging work [17]. Empowering leadership is addressed to contain five dimensions: coaching, informing, leading by example, showing concern/interacting, and participative decision-making [4], and as the process by which leaders share power with employees by providing additional responsibility, decision-making authority over work and resources, and the support needed to handle the additional responsibility effectively [17]. Leaders have paid more attention to the effect of employees' psychological status on employees' work in the complex environment. Hence, leaders could assist in translating individual experiences into shared experiences or facilitating communities of practice at work [18]. Empowering leadership behavior could play a motivated factor to positively influence employees' psychological empowerment.

Psychological empowerment measures the extent to which employees perceive they are allowed to use their own initiative and judgment in performing their jobs, and is defined as an overall construct manifested in four cognitions: meaning, competence, self-determination, and impact [19]. The most direct impact of empowering leadership on teammates' interaction manifests through a feeling of psychological empowerment in a team [5]; [6]; [16]. Empowered employees feel more competent and able to influence their team's outcomes, so that empowerment is consistently shown to lead to higher levels of employee commitment, innovation, citizenship behaviors, and performance [12]; [20]; [10]; [21]. Empowering leaders tend to enhance the meaningfulness of work by helping employees understand the importance of their roles in contributing to the overall effectiveness of the organization, setting inspirational and/or meaningful goals for them. These leaders express confidence in an employee's competence and prospects for high performance and provide employees with autonomy and prospects for self-determination by encouraging the individual to decide how to carry out his or her job [7]; [22]. When employees received negotiating latitude

and support for self-worth from their superiors, their perceptions of control increased. In addition, greater job responsibilities translate into an increased perception of self-determination [23]. For a team, empowered members will tend to be motivated by collective ownership of their choices and work, to support and back each other up, and to work toward adaptation and performance improvement during team compilation [24]; [9]; [25]; [6]. Empowerment fosters team member's participation in decision making. This process or psychological state potentially gives a teammate a feeling of greater control over the immediate work situation and an enhanced sense that his or her own behaviors can make a difference in work results, thus promoting the sense of impact. Therefore, the following hypothesis is proposed:

Hypothesis 1: Empowering leadership is related to psychological empowerment.

B. Psychological empowerment and knowledge sharing

Knowledge sharing is the "provision of task information and know-how to help others and to collaborate with others to solve problems, develop new ideas, or implement policies or procedures" [26]. Because knowledge resides within individuals, knowledge cannot be shared effectively if individuals are not motivated to do so. Empirical evidence supports the argument that when facilitating, mentoring and innovating leadership roles have been found to be most useful for implementing employee knowledge sharing and exchanging [3]; [27]. In terms of knowledge sharing, a key task of the leader is to accumulate and protect valuable knowledge or capability [28]; [29]. However, knowledge exchange among team members is dependent upon willing to interact and share ideas with colleagues. Employee's knowledge often been influenced by themselves psychological cognition and attitude for leaders [30]. Empowered individuals equipped with more information and resources feel more confident and efficacious about their task activities so that they are willing to introduce change [19]. Thus, leaders and organizations must be cautious to pay attention on deliberately formulating psychological empowerment that establishes trust between the parties in order to promote employee willing to share knowledge and motive workers towards the type of knowledge sharing contributions that are essential to their mutual success [31]. When psychological empowerment for employee perceived is fulfilled, such perception will promote employees' exchange and sharing knowledge behavior. Therefore, the following hypothesis is proposed:

Hypothesis 2: Psychological empowerment is positively related to knowledge sharing in teams.

C. Knowledge sharing and work outcomes

When teams can successfully create an environment in which members share knowledge and when the knowledge shared is actually used by the recipients of information, teams appear to be more productive. Two sorts of performance are normally engaged and accomplished by employees. Citizenship performance has been defined as distinct from the tasks formally required of employees, including instead those behaviors that contribute to those tasks, such as cooperation and making unusual effort [32]. In-role performance is defined as those officially required outcomes and behaviors that

directly serve the goals of the organization [33]. In addition, employees display citizenship performance defined as extra-role and discretionary behaviors on the part of an employee that are believed to directly promote the effective functioning of an organization, without necessarily directly influencing a person's target productivity [34].

When empowered employees work in organic structure, the effect of their psychological empowerment is reinforced by the team structure, leading to higher employee performance. Reference [35] found that knowledge sharing among hospitality teams at international tourist hotels was related to innovations and improvements in service innovation performance. In short, team member could acquire diverse and update knowledge to provide considerate service with efficiency for customers by sharing knowledge with colleagues. When team member disclosed information indicating their special knowledge, repeated interactions would facilitate learning about other's areas of expertise [36]. Knowledge sharing behaviors will motivate and influence members' knowledge-related actions to promote team performance, and to engage in extra-role performance. Thus, the following hypotheses are proposed:

Hypothesis 3: Knowledge sharing is related to task performance.

Hypothesis 4: Knowledge sharing is related to organizational citizenship behavior.

D. Mediating Role of knowledge sharing

Past research has acknowledged the crucial role of superior-subordinate relationships in facilitating psychological empowerment [37]; [38]; [19]; [10]. Increased collective sense of psychological empowerment under empowering leadership enhances a unit's employees' task effort and persistence. Team-based approaches are used to build and maintain high performance and foster innovation in a rapidly changing and competitive environment [39]. Research on knowledge sharing has focused on enablers, motivators, and barriers of knowledge sharing [40]; [41]; [42] on one hand, and the relationship between knowledge sharing and performance at the organizational, team and individual level on the other. Given that psychological empowerment is basically a motivational construct, it is logically expected that individuals' behaviors will be primarily determined by the strength of its state. Specifically, teammates' work outcomes will be dependent of the extent of psychological empowerment experienced.

Knowledge sharing does not happen automatically in a team. Team members are likely to receive fair recognition by empowerment for their contribution of ideas and information, thereby motivating them to share their unique knowledge with one another. When an empowering leader models and engages in participative decision and coaching behaviors which team members perceive and are extended themselves to take responsibility, there are more opportunities for members to share their ideas [3].

Some previous empirical studies supported the relationships of employee empowerment to important work-related outcomes [11]; [43], and they have expanded various factors

that may enhance employee knowledge sharing behaviors [44]; [26]. The use of team knowledge is focused on team members' efforts to share information and keep each other current on key issues [45]. Knowledge workers process information rather than physical goods [46]. Because individual members understand the value of knowledge to the whole task and believe teammates will accept it, they tend to be motivated to share knowledge [47] and to transform member knowledge into novel solutions to address complex problems or make better decisions [48]. Leaders via psychological empowerment perceived can significantly motivate and influence employees' knowledge-related actions [3]; [27]. According to the importance of psychological empowerment on teammates' knowledge exchange behaviors to promote work-related outcomes, knowledge sharing plays an important role in the "black box" for the process of psychological empowerment-work outcomes (team performance and OCB). By the raising of degree of team member's autonomy, how leaders take empowerment to influence knowledge workers to enhance job performance has been emerged a key within organizations in knowledge era. Therefore, the following hypotheses are proposed:

Hypothesis 5: Psychological empowerment was positively related to knowledge sharing, which in turn increase the likelihood of task performance.

Hypothesis 6: Psychological empowerment was positively related to knowledge sharing, which in turn increase the likelihood of organizational citizenship behavior.

III. METHODS

A. Sample and Procedures

A total of 280 followers and 93 immediate team leaders from a healthcare system located a major county in Taiwan. The teaching hospital conducted has been established for 33 years. All participants were professional-level employees who were members of teams or the corresponding internal team leaders. Team members' tasks involved various functions including outpatient clinic, admission, emergency, pharmacy, nursing, pharmacy, surgical assists, laboratory, care unit, and executive. These medical teams were responsible for leading all the activities in providing customer-oriented medical care, installing professional, dedicating high quality medical network, and making efforts in researching and teaching. They were told about the objectives and procedures of the survey, and anonymity and confidentiality were assured.

In this study, constructs with different sources (e.g., team members rated their perceived empowering leadership, psychological empowerment, and knowledge sharing, while team leaders rated their members' task performance and organizational citizenship behavior) in order to reduce the possibility of same source bias was measured. Surveys were sent to medical team leaders who were requested to distribute the surveys to supervisors leading different functions. The approach to survey distributions to the team leaders was consistent with previous research on teams [43]. The questionnaires were completed during work hours. Members of the research team were presented to ensure all

questionnaires being filled correctly and independently. Each respondent placed his/her completed survey in a sealed envelope and dropped it into a box in the respective HR Department. Surveys were sent to 93 medical teams. The respondents must meet a criterion that they work in a team with at least 3 members, for which performance data and available procedures were included. Out of 280 questionnaires distributed, a total of 224 completed surveys were received, representing 67 teams with a response rate of 72.04 percent. All 67 leaders and 224 of their followers responded after several rounds of follow-up reminders, yielding very high response rates. In addition to the reminders, the high response rates also occurred because of company sponsorship and the use of work time to complete the survey.

Of the 67 teams, the average team size was 3.34 and average team age was over 10 years. Among the 67 internal team leaders, 61.2% were women, the average age was 41.7 years, and most of them held bachelor or above degrees (50.7% held bachelor degrees and 22.4% held postgraduate degrees). Among the 224 team members, 79.5% were women, the average age was 31.1 years, and most of them held bachelor or above degrees (12.1% high school degrees, 29.5% associate degrees, 50.4% bachelor degrees, and 7.1% postgraduate degrees).

B. Measures

1) Empowering leadership

For empowering leadership, reference's [17] measure was adopted. The best-fitting model of 7-item measure with multi-item subscales. A sample item is, "In providing autonomy from bureaucratic constraints, my leader allows me to make important decisions quickly to satisfy patient/customer needs". The average score of responses from team members other than the general leaders was used to compute this measure. Respondents rated these items on a scale ranging from 1, "extremely ineffective," to 7, "extremely effective." The coefficient alpha was 0.878. A CFA to assess the psychometric characteristics of the measure was conducted. Aggregating empowering leadership ratings fell in an acceptable range ($\chi^2[14] = 14.436$, $p < .05$; $RMR = .043$, $GFI = .982$, $CFI = .999$, $RMSEA = .012$), supporting the notion that the factors are distinctive, but also collectively reflective of the overall construct.

2) Psychological empowerment

Psychological empowerment was measured with reference [19]. The best-fitting model of 7-item measure with multi-item subscales. A sample item is, "I have considerable opportunity for independence and freedom in how I do my job." Team members made responses on a rating scale ranging from 1, "extremely disagree," to 7, "extremely agree." The coefficient alpha was 0.936. This study conducted CFA to assess the psychometric characteristics of the measure. Aggregating psychological empowerment ratings yielded acceptable values ($\chi^2[5] = 7.415$, $p < .05$; $RMR = .041$, $GFI = .987$, $CFI = .994$, $RMSEA = .047$), suggesting that the factors reflected the overall construct. Accordingly, the score on all 7 items to compute this variable was averaged.

3) Knowledge sharing

To capture individual perceptions on the extent of knowledge sharing, this measure was adapted from reference [49]. This 7-item scale was measured ($\alpha = .872$). A sample item in this category is, "Leader in my team shares his/her special knowledge and expertise with one another". A CFA of the seven items indicated an acceptable level of fit for a one-factor model ($\chi^2[14] = 25.479$, $p < .05$; $RMR = .021$, $GFI = .967$, $CFI = .983$, $RMSEA = .061$), supporting the notion that the factors are distinctive, but also collectively reflective of the overall construct. Accordingly, this study averaged the score on all 7 items to compute this variable.

4) Team performance

A four-item scale measuring performance was adapted from reference [50]. Examples of items are, "This team meets or exceeds its objectives" and "This team's work is of high quality". Team leaders made responses on a rating scale ranging from 1, "extremely disagree," to 7, "extremely agree." The reliability coefficient for this scale was .608. This study conducted CFA to assess the psychometric characteristics of the measure. Aggregating task performance ratings yielded acceptable values ($\chi^2[2] = 5.020$, $p < .05$; $RMR = .041$, $GFI = .989$, $CFI = .970$, $RMSEA = .082$), suggesting that the factors reflected the overall construct. Accordingly, the score on all 4 items to compute this variable was averaged.

5) Organizational citizenship behavior

A 9-item scale developed by reference [32] was used to measure organizational citizenship behavior of team members and was completed by team leaders. Response options ranged from 1, "strongly disagree," to 7, "strongly agree." Sample items of OCB scale are, "Makes constructive suggestions for health care service improvement". The alpha reliability was 0.928. A CFA assessing the psychometric characteristics of the measure was conducted. Aggregating OCB ratings yielded acceptable values ($\chi^2[9] = 19.844$, $p < .05$; $RMR = .036$, $GFI = .970$, $CFI = .988$, $RMSEA = .074$), suggesting that the factors reflected the overall construct. Accordingly, we averaged the score on all items to compute this variable.

6) Level of analysis and aggregation of data

To examine the appropriateness of data aggregation, I calculate the inter-rater agreement (rwg), intra-class correlation coefficient (ICC[1]) and reliability of group mean (ICC[2]) for variables [51]. I obtained .753 for empowering leadership; .768 for psychological empowerment; .86 for knowledge sharing; .74 for task performance; and .78 for OCB, suggesting a high level of inter-rater agreement on the responses of these variables indicated high inter-member agreement. In addition, I further obtained the ICC(1) value of .26 for empowering leadership; .33 for psychological empowerment; .34 for knowledge sharing; .30 for task performance; and .40 for OCB. The one-way analysis of variance test also indicated the significant between group variance for all five variables (F-ratios). Finally, the value of ICC(2) was: empowering leadership, .64; psychological empowerment, .66; knowledge sharing, .85; task performance, .68; and OCB, .77, respectively, suggesting that acceptable levels of group mean score reliability. According to

aforementioned empirical findings, it should be appropriate to conceptualize all five variables at the team-level and aggregate followers' responses into team-level.

7) Covariates

The covariates included the demographic composition of a team with regard to team tenure and member's education, both of which have been found to influence team mechanisms and performance [52]. Additional covariate of revenue has also been considered relating to performance. Consequently, the effects of three variables on this model were statistically controlled. First, given the importance of demographic diversity variables in team research [53], a measure of educational background heterogeneity was controlled in each team. The intended use of the dummy variable is to control the potential effects of team diversity. Second, the average tenure of members on the management team was controlled because it may affect the level of familiarity and interaction among team members. Finally, average revenue of each team member was also included.

IV. RESULTS

A. Descriptive Statistics

Means, standard deviations, and zero-order Pearson correlations for all key variables were reported in Table 1. Clearly, empowering leadership was positively correlated with psychological empowerment ($r = .689, p < .01$). Moreover, psychological empowerment was positively correlated with knowledge sharing ($r = .364, p \leq .01$), task performance ($r = .213, p < .01$), and OCB ($r = .196, p < .01$), respectively. Knowledge sharing was positively correlated with task

performance ($r = .209, p < .01$), but not correlated with OCB ($r = .109, p > .01$). Task performance was positively correlated with OCB ($r = .604, p < .01$).

Table 1 Means, Standard Deviations, and Correlations among Study Measures

Variables	Mean	s.d.	1	2	3	4	5	6	7
1.Educational diversity	351	—	1						
2. Tenure	402	—	.307**	1					
3. Average revenue	370	—	.164**	.248**	1				
4.Empowering leadership	505	1.103	.081	.024	.16*	1			
5.Psychological empowerment	486	1.086	.002	.070	.23**	.689*	1		
6.Knowledge sharing	501	.529	.096	.061	.034	.406**	.364**	1	
7.Task performance	549	.740	.043	.075	.108	.210**	.213**	.309**	1
8.OCB	427	.934	.068	.018	.089	.191**	.196**	.109	.604**

* $p < 0.05$;

** $p < 0.01$;

*** $p < 0.001$

B. Tests of Hypotheses

As shown in M2 of Table 2, psychological empowerment was significantly positively predicted by empowering leadership ($b = 0.67, p < .001$), providing support for Hypothesis 1. As can be seen, psychological empowerment had a relationship with task performance ($b = 0.18, p < .01$) and OCB ($b = 0.18, p < .05$). Therefore, according to the norms set by reference [54], it is possible to establish the mediating roles of knowledge sharing in the relationship between psychological empowerment and team performance. Testing the indirect effect of psychological empowerment on performance requires a significant relationship between psychological empowerment and knowledge sharing, and a significant relationship between knowledge sharing and, respectively, task performance and OCB.

Table 2 Hierarchical Regression Analysis

Variable	Psychological Empowerment		Work outcomes								Knowledge sharing	
			task performance				OCB					
	M1	M2	M3	M4	M5	M6	M7	M8I	M9	M10	M11	M12
Control variable												
Educational diversity	-.05	.02	.02	.02	.04	.04	.02	.03	.03	.04	-.12	.10
Tenure	.15	.16	.10	.07	.09	.08	.08	.05	.07	.05	.03	-.03
Average revenue	.17	.10	.02	-.01	.03	.01	.07	.04	.07	.04	-.03	-.09
Main variable												
Empowering leadership		.67***										
Psychological Empowerment				.18**		.13		.18*		.16*		.35***
Intermediate												
Knowledge sharing					.19**	.147*			.11	.05		
F	3.25**	162.36***	1.503	6.603**	7.64**	6.313**	.833	6.074*	2.29	3.289*	1.966	27.83***
R ²	.82	.455	.04	.068	.072	.086	.023	.048	.034	.052	.051	.159
ΔR ²	—	.373	—	.028	.032	.014	—	.025	.011	.018	—	.108

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

Multiple regression analyses for models were conducted involving performance as the outcome variable to test the

hypotheses and the indirect effect of psychological empowerment on team performance was verified.

Consistent with Hypothesis 2, as shown in M12 in Table 2, psychological empowerment had a significant positive effect on knowledge sharing ($b = .35, p < .001$). As shown by M5 in Table 2, task performance was significantly and positively predicted by knowledge sharing ($b = .19, p < .001$). This confirmed H3. In addition, as reported in M9, knowledge sharing had no significant relationship with OCB ($b = 0.11, p > .05$). Therefore, Hypotheses 4 is not supported.

In addition, as reported in M6, when knowledge sharing was added as a mediator, the relationship between psychological empowerment and task performance became non-significant. In other words, psychological empowerment had a positive relationship with knowledge sharing. In turn, knowledge sharing had positive relationships with task performance. In the same model, the direct relationship between psychological empowerment and task performance was changed to be non-significant while the partial indirect effect of psychological empowerment on task performance was significantly positive. Therefore, it supported H 5 that knowledge sharing mediated the effect of psychological empowerment on task performance.

Hypothesis 6 predicts that knowledge sharing mediates the relationship between psychological empowerment and OCB. M8 and M9 in Table 2 show the effects of psychological empowerment and knowledge sharing, respectively, on OCB. Models 8 to 10 show results of a set of parallel tests with OCB as dependent variable. Taken together, M8-12 depicts procedures for testing mediation. Comparing model 8 to model 10, the effect of psychological empowerment on task performance did not drop from 0.18 ($p < .05$) to 0.16 ($p < .05$), and there is no significant relationship between knowledge sharing on OCB, both indicating no support for H6.

V. DISCUSSION

This study examined that empowering leadership has a positive effect on psychological empowerment. Psychological empowerment was positively related to knowledge sharing, which, in turn, was positively related to task performance, and was not related to OCB. The mediating effect of knowledge sharing on the relationship between psychological empowerment and task performance was supported. The implications of these findings and the limitations of this research are discussed below.

A. Theoretical Implications

The findings extend previous research in four important ways. Firstly, the influence of empowering leadership on a follower's perceptions of psychological empowerment was found. This process potentially gives an employee a feeling of greater control over the work situation to stimulate his or her own behaviors making a difference in work results, thus promoting the sense of impact. For solving team members' problems and making decisions, an important benefit of psychological empowerment is that they have increased opportunities and a need to enhance the work results was suggested.

Secondly, the present study contributes to the knowledge management literatures by examining and confirming knowledge sharing as a mediating mechanism through which psychological empowerment ultimately influences employee task performance. The direct relationship between psychological empowerment and knowledge sharing is also an important finding, and consistent with those of previous research [3]; [31]. For the team members sharing their unique expertise, the purpose of designing such medical care teams would be served that knowledge sharing is a critical team process, in particular, when the confidence of team member's competence was expressed to prospect for high performance. Another linkage of knowledge sharing on task performance is also found. The evidence of positive effects indicates the robustness of findings of empirical research on knowledge sharing in teams. The evidence for a positive relationship between knowledge sharing and task performance exists [36]; [3], the knowledge sharing-performance relationship in management teams is an important finding. The results support reference's [3] finding of the relationship between knowledge sharing and performance in teams performing tasks. Knowledge exchange in teams led to the formation of transactive memory, which was instrumental in higher performance and would promote task performance.

Finally, medical care teams provided a worthwhile sample here for implications of organizational performance. Medical care team by expanding knowledge of the team factors influencing organizational performance was contributed to the research. The present study indicates that knowledge sharing is strategically important team factors measuring organizational performance.

B. Practical Managerial Implications

The study illustrates three direct importance of empowering leadership, psychological empowerment as well as the direct importance of knowledge sharing of teams for organizational performance - an outcome of great interest for managers. This study has important implications for team leaders and managers. First, the findings suggest that empowering leadership via psychological empowerment patterns developed within the teams to bolster effectiveness. Managers can promote empowering leadership by setting expectations and encouraging members when teams initially form to view themselves and to engage in shared, mutual empowerment. Second, although technology has long been recognized as an important facilitator of knowledge sharing [55], practitioners have also identified the importance of behavioral issues. An empowering leader via psychological empowerment was also indicated in this study an important facilitator of knowledge sharing. Teams can also provide training that fosters a shared perspective and disseminates "best practices." Third, the findings point to specific internal team environments with shared purpose to support the development of knowledge share in teams. Each team should have a clear and shared sense of direction and purpose, promote and establish norms of participation and input into the team's activities and strategies, and seek to foster a positive

environment where team members encourage one another and actively recognize each others' contributions. Finally, leader selection and development was emphasized useful in most organizations so that empowering behaviors are exhibited by team leaders. Empowering behaviors may not be suited to crisis situations or situations with incompetent and disinterested employees [21]. Team leaders should also pay particular attention to teams that may have weaker psychological empowerment in order to provide additional motivation, guidance, and support to assist supportive internal environments.

C. Limitations and future research directions

The findings of this study indicate several important directions for future research. First, this study has focused on empowering leadership at the team level. Given the dyadic nature of empowering leadership, future research might address the possibilities for multilevel models involving empowerment issues and seek to develop a more comprehensive understanding of the connection between empowering leadership and work outcomes.

Second, conducting this study in a single organization did provide the advantage of controlling for potential organization-level confounding variables. Future research in multiple organizational settings may increase the generalizability of the findings to other types of employees and organizations.

Third, future research should examine the application of empowerment and performance theories to other culture contexts. The findings tested in the Confucian Asian societies may be more conservative compared with model derived from Western theories. According to role expectations and obligations in high power distance cultures such as Chinese culture, individuals may response to organizational favors. Future work in other cultures can help verify the generalizability of the findings.

Fourth, the impacts of social and organizational factors on extra-role behavior were explored in this study, but the findings of this study could be incomplete because of the possibility of other mediating variables in the relationships between the suggested constructs. Future research is needed to consider the inclusion of other contextual factors to clarify the target of work outcomes.

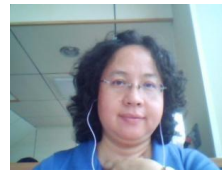
Finally, the study synthesizes leadership theories, empowerment theories, and performance theories to further build and test theory regarding the potential influence of empowering leadership on performance. It also highlight the critical role that knowledge sharing plays in the mediating mechanism. In consequence, the theoretical model which received empirical support sets the stage for further research in understanding how empowering leadership can increase team work outcomes.

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