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Role of Empowering Leadership in Absorptive Capacity through Outcome Interdependence: A Cultural Perspective

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Abstract

This study explores the influence process involved in the relationship between empowering leadership and absorptive capacity. On 217 samples from manufacturing and service organizations, the study has found that outcome interdependence mediated the relationship between empowering leadership and knowledge identification, knowledge assimilation, knowledge dissemination, and knowledge application. The findings show that members' empowerment is essential for inducing them to engage in knowledge processes.

Introduction

Culture is a dynamic system. No part of the culture remains fixed and change is inevitable. Unfortunately, cultural and cross-cultural psychologists implicitly define culture in 'frozen' categories such as individualism-collectivism (Hofstede, 2001). One such category is hierarchy in India. Keeping in mind the 'rigidity' of hierarchy in Indian organizations, scholars have proposed personalized, affectionate, nurturant, and paternalistic approach of leaders toward subordinates (Sinha, 2008). Further, subordinates are expected to ingratiate leaders and behave in obedient manner that helps them to be in the 'in-group' of leaders. Of course, such ways of behavior on the part of leaders and followers are still very much prevalent.

However, we need to revisit the way we describe and explain a culture in light of current social changes and historical factors. Firstly, changing social dynamics alongside expanding economy have lessened the culturally rooted hierarchical grip. Secondly, Indian culture is difficult to be categorized. This is because of the philosophical/religious (*dharmic*) principle that on the basis of idiosyncratic qualities, individual is free to follow one path or the other or create path that suits his/her temperament. That is why, cultural studies frame India as both individualistic and collectivistic culture (Sinha, 2008). Further, Indians are as much concerned about satisfying wishes of their superiors as they are concerned about expressing idiosyncrasy (Kakar & Kakar, 2007). Both the reasons have redefined the expression of hierarchy. This paper deviates from earlier work by underscoring the importance of new practices entering into the Indian organizations.

One important practice is empowerment of followers. Although we do not deny the absence of hierarchy, we propose that empowerment can co-exist within the hierarchical structure and yield desirable results for the organization. This is the first important contribution of present study.

In today's business environment, knowledge is given greater importance than traditional resources such as land and labor (Drucker, 1999). Knowledge leads to innovation and enhances competencies (Rai, 2014). However, hierarchy is regarded as hurdle in the effective utilization of knowledge resource. The hierarchical structure (such as in India) may obstruct information flow because information is centralized and followers have to look up at superiors whenever in need of crucial information. We suggest that knowledge *can be* utilized effectively within hierarchy by devolution of power to subordinates. Thus, the second contribution of this paper is to examine *how* empowering leadership influences absorptive capacity. Earlier works have not paid attention to the mechanism/process through which empowering leadership affects learning processes (von Krogh, Nonaka, & Rechsteiner, 2012). *Empowering leadership* is defined as sharing of power between supervisors and subordinates. *Absorptive capacity* refers to individual learning behavior directed towards identifying new knowledge, assimilation of new knowledge, dissemination and application of that knowledge (Cohen & Levinthal, 1989, 1990; Grant, 1996; Pedrosa & Jasmand, 2011; Zahra & George, 2002). We propose that empowering leadership impacts absorptive capacity through the mediating role of social motivation measured by cooperative outcome interdependence. *Cooperative outcome interdependence* is defined as the individual achievement of outcomes depends on the outcomes attainment of other members.

Moreover, absorptive capacity and empowering leadership have been studied predominantly at organizational level and team level with little emphasis on individual level (Pedrosa & Jasmand, 2011; Spreitzer, 2008). Hence, this study has investigated the relationship between empowering leadership and absorptive capacity at individual level, thus underlining the third contribution of current study. In sum, by combining empowering leadership, outcome interdependence, and absorptive capacity, we tested the prediction that empowering leadership positively influences absorptive capacity through outcome interdependence (see figure 1).

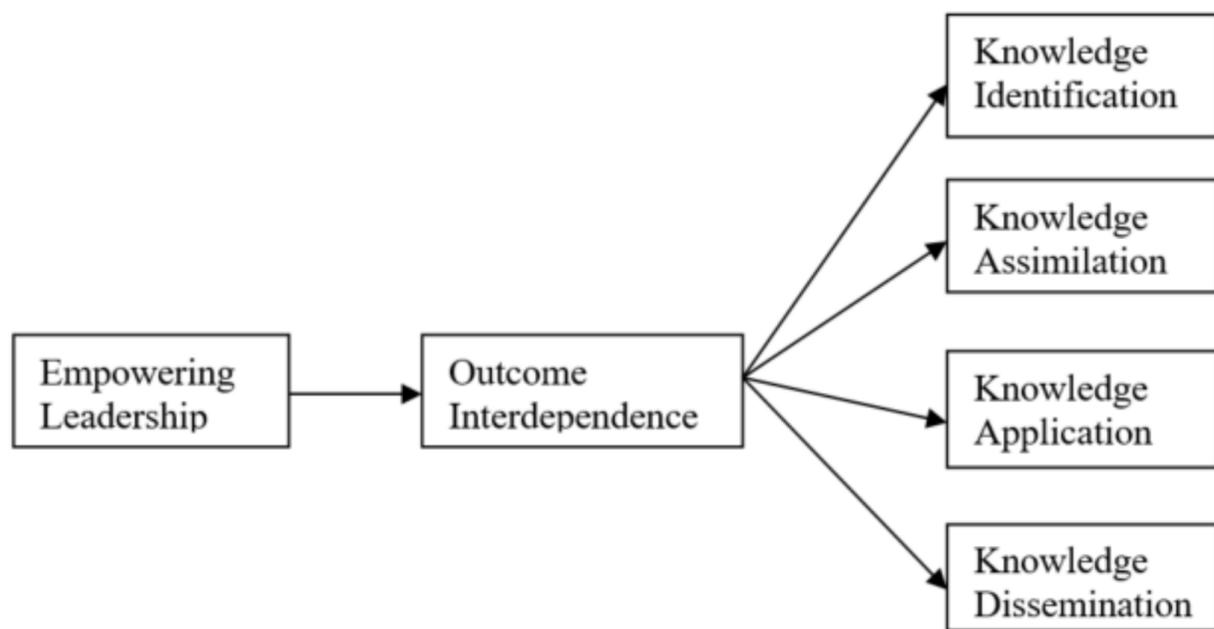


Figure 1

Relationship between empowering leadership and knowledge behavior

Empowering Leadership and Absorptive Capacity

The present study examines absorptive capacity at individual level, largely ignored by earlier works (Chuang, Jackson, & Jiang, 2013; Cramisó & Forés, 2010; Flatten, Engelen, Zahra, & Brettel, 2011; Jansen, Van Den Bosch, & Volberda, 2005; Szulanski, 1996). Until now, absorptive capacity has not been understood empirically from empowering leadership approach. Though other leadership approaches such as transformational leadership and transactional leadership have been taken into account, they have not adequately addressed *how* absorptive capacity occurs (Bryant, 2003; Noruzy, Dalfard, Azhdari, Nazari-Shirkouh, & Rezazadeh, 2012; Politis, 2002). Studies on absorptive capacity suggest that relational mechanisms such as participation (Argote, Ingram, Levine, & Moreland, 2000), collaboration (Bock, Zmud, Kim, & Lee, 2005; Jansen *et al.*, 2005), social network (Tsai & Ghoshal, 1998), and shared cognition (Nonaka, 1991) act as precursor for absorptive capacity. Members within organization engage in interactive dialogue to construct, share, and apply new knowledge.

Empowerment as a notion is contributed by various cognitive and motivational concepts, namely, Hackman and Oldham's job redesign model, Deci's self-determination theory, Rotter's internal and external locus of control, Bandura's social learning theory, Seligman's learned helplessness, and Lawler's expectancy theory (Conger & Kanungo, 1988; Menon, 2001; Spreitzer, 2008; Thomas & Velthouse, 1990). Scholars have primarily taken two positions while conceptualizing empowerment: socio-structural/relational perspective and psychological/motivational perspective (Conger & Kanungo, 1988; Spreitzer, 2008). While the former focuses on enabling empowerment through organizational mechanisms that enhance power and participation, the latter sees empowerment as individuals' subjective experience of control over work characteristics. Specifically, in this paper, empowering leadership falls under socio-structural or relational perspective to empowerment.

Empowerment has been found to be positively associated with job satisfaction

(Butts, Vandenberg, DeJoy, Schaffer, & Wilson, 2009), job performance (Raub & Robert, 2010), emotional connectivity with team and organization (Raub & Robert, 2010), innovation (Spreitzer, 1995), team coordination and collaboration (Manz & Sims, 1987), extra-role behaviors (Raub & Robert, 2010), knowledge sharing (Srivastava, Bartol, & Locke, 2006; Xue, Bradley, & Liang, 2010), joint decision-making (Arnold, Arad, Rhoades, & Drasgow, 2000), and team and organizational effectiveness (Carmeli, Schaubroeck, & Tishler, 2011).

This empowerment of followers is increasingly advocated to facilitate absorptive capacity (Drucker, 1999; Pearce, 2004). Nevertheless, this is yet to be empirically substantiated. This study considers four aspects of empowering leadership: empowering followers, participative decision making, opportunistic thinking, and cooperative action. *Empowering followers* indicates leader's motive to develop followers by providing them autonomy and responsibility in executing work. It makes followers independent in the use of one's knowledge such as generation and execution of ideas to solve problems. Followers are given freedom to choose appropriate action towards a problem task. The independent action, thus, stimulates thinking and action potential of followers. *Participative decision-making* refers to employees' active involvement in the decision-making process. This helps inculcating perceived control of employees over job and organization. The perceived control reduces the hierarchical boundary between supervisor and subordinate. It contributes to greater ideas sharing between supervisor and subordinate. *Opportunistic thinking* stresses upon the followers' exploration into newer domains, learning new things, and experimentation with ideas. In that sense, followers are motivated to see problems as learning opportunities (Manz & Sims, 1987). This encourages followers to share their knowledge with others while learning new tasks and participate in solving complex problems. *Cooperative action* entails collaboration among members. Earlier findings have pointed that cooperation and coordinated efforts are necessary for effective utilization of knowledge resource (Nonaka, 1991; Sherif & Sherif, 1969; De Dreu, Nijstad, & van Knippenberg, 2008). Cooperation combines the knowledge base of employees and makes it useful for the organization. As a result, it is expected that coordinated action motivates employees to uninhibitedly exchange and share their knowledge, and implement new knowledge for organizational benefits. Therefore, we propose that:

Hypothesis 1: Empowering leadership is positively related to knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination.

Still, aforementioned arguments may not pass convincing reason regarding direct association between empowering leadership and absorptive capacity. There is possibility that empowering leadership may have indirect influence on absorptive capacity, not direct. It has been empirically observed that empowerment generates favorable impact under certain conditions such as task uncertainty (Cordery, Morrison, Wright, & Wall,

2010), task interdependence (Langfred, 2000), social support (Van Mierlo, Rutte, Vermunt, Kompier, & Doorewaard, 2006), prior task exposure (Chua & Iyengar, 2008), task instructions (Chua & Iyengar, 2008), cultural variation (Dennis, Cole, Zahn-Waxler, & Mizuta, 2002), and socio-economic disparity (Chua & Iyenger, 2006). Moreover, in conformity with various scholars (Aryee, Walumbawa, Zhou, & Hartnell, 2012; Yukl, 1999) regarding the importance of mediators in leadership studies, we include outcome interdependence as mediator between empowering leadership and absorptive capacity.

Knowledge organizations aspire for creativity and innovation. It is held that innovation requires certain amount of decentralization of power because decentralization facilitates cooperation and flexible interactions among members (Bligh, Pearce, & Kohles, 2006; Nonaka, 1991; Pearce & Ensley, 2004; Pearce & Sims, 2002). In other words, empowerment motivates followers to undertake joint activities and coordinate with others in work performance. This is best understood by the reasoning that disempowered employees take guidance and instructions for the planning and execution of tasks from superiors resulting in doubts over employees' self-efficacy, which in turn, may promote negative interpersonal relations and employees' alienation from the organization and work. At interpersonal level, employees model superiors' centralized and monitoring behavior in terms of constraining information sharing and lessening collaborative interactions with others (Bandura, 1969). In contrast to this, empowerment leads followers to search for new ideas by interacting with other members of the organization, enhances learning motivation of followers, and promotes novel solutions. Recent works have conceptualized empowering leadership as involving cooperative action (Spreitzer, 2008; Vecchio, Justin, & Pearce, 2010) and underscored the construction of relational networks among empowered people (Walsh, Bartunek, & Lacey, 1998). Empowered employees are more likely to take initiative in the interest of organization (Butts *et al.*, 2009; Manz & Sims, 1987; Menon, 2001; Spreitzer, 2008). Members who are suggested self-directedness look for resources and knowledge from other members in the organization. As members help and assist each other, and greater interpersonal linkages are established, they become cooperatively associated with each other. Thus, under empowering leadership, there is greater possibility to attain goals collectively. Hence we propose that:

Hypothesis 2: Empowering leadership positively relates to cooperative outcome interdependence.

As noted in studies on groups and information processing (De Dreu *et al.*, 2008), members working in groups are facilitated by both competitive and cooperative motives. Competition generates greater information withholding, sharing of inaccurate information, and less willingness to change initial preferences (Toma & Butera, 2009). Under competition, members distrust each other and consider information sharing as impediment in getting promotions and benefits (Hinds & Pfeffer, 2003). However, cooperation might be a better facilitator of absorptive capacity (De Dreu, 2007). Rai and Prakash

(2012) viewed that interdependence, cooperation, and social relationships support knowledge creation. Meanings are created within the network of relationships (Gergen, 2009; Rai & Prakash, 2012). Cooperative outcome interdependence leads to better task performance (De Dreu, 2007; Procter & Currie, 2004), discretionary behavior (Chen, Tang, & Wang, 2009), team effectiveness (Hertel, Konradt, & Orlikowski, 2004; Wage- man, 1995), cohesiveness (Chen *et al.*, 2009), social identity (Menon & Blount, 2003), trust (De Dreu, Beersma, Stroebe, & Euwema, 2006; Toma & Butera, 2009), acting above self-interest (Canegallo, Ortona, Ottone, Ponzano, & Scacciati, 2008), construc- tive conflict resolution (De Dreu *et al.*, 2006), and ideas sharing and constructive dia- logue among members (Bossche, Gijssels, Segers, Kirschner, 2006).

Cooperation facilitates shared understanding in terms of what information and ex- pertise different members have (Van Ginkel & Van Knippenberg, 2008). As a result, members know whom to approach for the desired information. This helps individual member to have easy access to the distinct and unique experiences and knowledge of other members. Under cooperation, members do not withhold information and share both unique and common information (Van Ginkel & Van Knippenberg, 2009). The new information acquired is easily assimilated when individuals learn in cooperative set- ting. While learning new tasks and understanding new information, members face diffi- culty in processing and assimilating new knowledge. As a result, members solicit advice from experts and peers in possession of that new knowledge. This coordination between less experienced ones and experts facilitates better integration of new knowledge with previous knowledge. The new knowledge garnered and assimilated is effectively and ef- ficiently applied when members support each other and when the benefits are collective- ly associated. Doubtless cooperation leads to cohesiveness and better coordination, thus helping individual to execute new knowledge in harmonious and conflict free context. Hence:

Hypothesis 3: Cooperative outcome interdependence is positively related to knowl- edge identification, knowledge assimilation, knowledge dissemination, and knowledge acquisition.

Integrating hypothesis 1 to hypothesis 3, we propose mediation analysis:

Hypothesis 4: Cooperative outcome interdependence mediates relationship between empowering leadership and knowledge identification, knowledge assimilation, knowl- edge dissemination, and knowledge acquisition.

Method

Participants and Procedure

We administered survey on 217 employees assessing empowering leadership, out- come interdependence, and absorptive capacity (knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination). Organizations par-

anticipated in the study were from manufacturing and services sector. Employees and organizations were told that their responses would be kept confidential. Employees were given survey form through email and by hand. It was told to them to answer in whatever format they found it convenient.

75% of the respondents filled the demographic details. 53% belonged to manufacturing sector and 22% worked in service sector. The age of participants comprised of 7.8% in 20-24 age group, 23.5% in 25-29 age group, 18.9% in 30-34 age group, 10.6% in 35-39 age group, 8.8% in 40-44 age group, 3.2% in 45-49 age group, and 1.8% in 50-54 age group. 61.8% employees were male and female participants constituted 13.4%. Managerial level employees formed 41.5% while non-managerial 30%. In education, 30.4% were undergraduates while 43.8% were post-graduate. 37.3% employees had 1-3 years of experience in their firms, 19.4% had 4-6 years of experience, 5.1% had 7-10 years of experience, and 11.1% had more than 10 years of experience.

Measures

This study is part of the doctoral study conducted on the same dataset (Rai, 2014). The respondents indicated their responses on a 7- point Likert- type scale (1= strongly disagree and 7 = strongly agree).

Empowering leadership

Empowering leadership was composed of 14 items scale from four dimensions, namely, empowering followers, opportunistic thinking, cooperative action, and participative decision-making. We assessed empowering followers from three out of four items scale from Liden, Wayne, Zhao, and Henderson (2008) Servant Leadership Scale; three items scale of opportunistic thinking and cooperative action from Vecchio *et al.* (2010) Empowering Leadership Scale; and five out of six items scale of participative decision-making from Arnold *et al.* (2000) Empowering Leadership Scale.

Absorptive Capacity

We used four three items scale of absorptive capacity developed by Pedrosa and Jasmund (2011) to measure knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination.

Outcome interdependence

We used six items scale of outcome interdependence developed by Van der Vegt, Emans, and Van de Vliert (1998).

Data Analysis

SPSS 20.0 was used after installing PROCESS macro developed by Hayes (2013). PROCESS uses several model templates to analyze mediation, moderation, and conditional analysis. To test out mediation hypothesis, we used model 4 of the PROCESS. The results obtained are bias-corrected bootstrapped 95 % confidence interval (using 10000 bootstrap samples). Further, HC3 estimator has been recommended to be used routinely (Hayes & Cai, 2007) to correct for heteroscedasticity sometimes of unknown

form (Cai & Hayes, 2008; Hayes & Cai, 2007; Long & Ervin, 2000), when sample size is less than 250 and data is cross sectional (Long & Ervin, 2000).

Results

Table 1 shows significant positive correlation among empowering leadership, outcome interdependence and all four dimensions of absorptive capacity.

Table 1
Descriptive Statistics and Variables Intercorrelations

Variable	M	SD	1	2	3	4	5	6
Empowering Leadership	71.28	13.04	(.88)					
Outcome Interdependence	29.67	6.70	.409	(.84)				
Knowledge Identification	18.81	2.30	.202	.221	(.64)			
Knowledge Assimilation	16.74	3.00	.234	.272	.345	(.70)		
Knowledge Application	18.02	2.43	.288	.264	.430	.505	(.67)	
Knowledge Dissemination	17.19	2.68	.335	.458	.328	.380	.457	(.74)

Note: $N=217$. Diagonal values indicate Cronbach alpha. All correlations are $> .2$ and significant $p < .005$.

Table 2 shows the direct and total effects analysis. Confirming Hypothesis 1, empowering leadership had significant positive association with knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination, even after controlling outcome interdependence. Hypothesis 2 was also supported indicating significant positive relationship between empowering leadership and outcome interdependence. Further, significant positive relationship was found between outcome interdependence and knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination, thus supporting hypothesis 3, after controlling empowering leadership. As shown in Table 3, the indirect effect of empowering leadership on knowledge identification, knowledge assimilation, knowledge application, and knowledge dissemination through outcome interdependence was found significant and positively related, thus confirming hypothesis 4. The test of mediation included unstandardized indirect effect, partially standardized indirect effect, and completely standardized indirect effect. The bias-corrected bootstrapped confidence interval at 95 % shows indirect effect as statistically different from zero, that is, the confidence interval values do not contain zero (Hayes, 2013). The Preacher and Kelley's Kappa-squared (κ^2) refers to the "ratio of the indirect effect relative to its maximum possible value" (Hayes, 2013, p.

191). Thus, indirect effect on knowledge identification had $b = .01$ and $\kappa^2 = .06$ indicating that .01 is 6 % of its maximum possible value. In a similar way, for knowledge assimilation, knowledge application, and knowledge dissemination, indirect effect is 8 %, 7 %, and 15 % of its maximum possible value respectively. Normal theory test or Sobel test also supported the mediation effects.

Table 2

Direct and Total Effects: Empowering Leadership, Outcome interdependence, and Knowledge Identification and Knowledge Assimilation

Variables and hypothesis testing		Direct and total effects			
		Coeff.	CI	t	p
Empowering leadership	Outcome interdependence	.210 (.035) $R^2 = .16, MSE = 37.60, F(1, 215) = 34.93, p < .001$	[.140, .280]	5.91	p < .001
Empowering leadership	Knowledge identification	.035 (.015) $R^2 = .041, MSE = 5.11, F(1, 215) = 5.11, p = .024$	[.004, .066]	2.26	.024
Outcome interdependence, controlling for empowering leadership		.057 (.026)	[.005, .109]	2.16	.031
Empowering leadership, controlling for outcome interdependence		.023 (.015) $R^2 = .063, MSE = 5.01, F(2, 214) = 4.15, p = .016$	[-.005, .053]	1.57	.115
Empowering leadership	Knowledge assimilation	.054 (.017) $R^2 = .054, MSE = 8.57, F(1, 215) = 10.13, p = .001$	[.020, .087]	3.18	.001
Outcome interdependence, controlling for empowering leadership		.094 (.032)	[.031, .158]	2.94	.003
Empowering leadership, controlling for outcome interdependence		.034 (.016) $R^2 = .092, MSE = 8.27, F(2, 214) = 8.76, p < .001$	[.0007, .067]	2.01	.045
Empowering leadership	Knowledge application	.053 (.012) $R^2 = .082, MSE = 5.48, F(1, 215) = 18.66, p < .001$	[.029, .078]	4.32	p < .001
Outcome interdependence, controlling for empowering leadership		.064 (.026)	[.011, .116]	2.42	.016
Empowering leadership, controlling for outcome interdependence		.040 (.012) $R^2 = .108, MSE = 5.35, F(2, 214) = 11.74, p < .001$	[.015, .065]	3.14	.001
Empowering leadership	Knowledge dissemination	.068 (.016) $R^2 = .112, MSE = 6.40, F(1, 215) = 17.56, p < .001$	[.036, .101]	4.19	p < .001
Outcome interdependence, controlling for empowering leadership		.154 (.026)	[.101, .206]	5.76	p < .001
Empowering leadership, controlling for outcome interdependence		.036 (.014) $R^2 = .235, MSE = 5.54, F(2, 214) = 26.11, p < .001$	[.008, .064]	2.54	.011

Note: N = 217. Coeff. = Regression coefficient; CI = Confidence interval. Results based on [95 % confidence interval] and HC3 estimator. (Standard Error in parentheses after regression value).

Table 3
Tests of mediation: Empowering Leadership influencing Knowledge Identification, Knowledge Assimilation, Knowledge Application, and Knowledge Dissemination through Outcome Interdependence

Mediation	Indirect effect		Partially standardized indirect effect		Completely standardized indirect effect		Preacher and Kelley Kappa-squared	
	Effect	CI	Effect	CI	Effect	CI	Effect	CI
Empowering leadership → Outcome interdependence → Knowledge identification	.012 (.005)	[.002, .025]	.005 (.002)	[.001, .010]	.067 (.030)	[.012, .134]	.063 (.027)	[.012, .123]
Empowering leadership → Outcome interdependence → Knowledge assimilation	.019 (.007)	[.007, .035]	.006 (.002)	[.002, .011]	.086 (.029)	[.033, .151]	.081 (.027)	[.031, .139]
Empowering leadership → Outcome interdependence → Knowledge application	.013 (.005)	[.003, .025]	.005 (.002)	[.001, .010]	.072 (.029)	[.016, .134]	.068 (.027)	[.016, .126]
Empowering leadership → Outcome interdependence → Knowledge dissemination	.032 (.007)	[.020, .047]	.012 (.002)	[.007, .017]	.157 (.031)	[.100, .225]	.153 (.030)	[.098, .217]

	Sobel test		
	Effect	Z	P
Empowering leadership → Outcome interdependence → Knowledge identification	.012(.006)	2.00	.045
Empowering leadership → Outcome interdependence → Knowledge assimilation	.019(.007)	2.60	.009
Empowering leadership → Outcome interdependence → Knowledge application	.013(.006)	2.21	.026

Note: $N = 217$. CI = Confidence interval. Results based on bias-corrected bootstrap sample size = 10000, [95 % confidence interval] and HC3 estimator. (Standard Error in parentheses) after regression value.

Discussion

This study has significantly contributed to absorptive capacity and empowering leadership literature. Previous works on absorptive capacity have focused on team and organizational level analysis while individual level has been relegated (Camisón & Forés, 2010). Although some dimensions such as knowledge sharing and knowledge transfer have been examined at the individual level, they still provide no substantive answer to leadership as precursor and suggest no understanding about other dimensions of absorptive capacity. Moreover, studies that have focused on leadership such as transformational and transactional have not addressed the process through which leadership influences absorptive capacity, thus leaving the field unexplored (Von Krogh *et al.*, 2012). This study has found the role of empowering leadership in individual level absorptive capacity through outcome interdependence. This is new and robust finding apropos to how empowering leadership affects absorptive capacity.

Socio-structural empowerment has been relatively less explored empirically in comparison to subjective or psychological empowerment (Spreitzer, 2008). Further, works on empowerment have contested whether it signifies trimming of hierarchy (Pearce, Conger, & Locke, 2008). The present study has given credence to our rationale that em-

powerment can co-exist within the hierarchical structure of Indian organizations. The first conclusion is the positive association between empowering leadership and dimensions of absorptive capacity (even after controlling outcome interdependence). This finding suggests the importance of autonomy, independence, and coordination to facilitate discretionary behaviors such as absorptive capacity. This is in consonance with few works suggesting that empowering leadership enhances knowledge sharing (Srivastava *et al.*, 2006). However, the work of Srivastava *et al.* (2006) considered only knowledge sharing while other aspects of learning were left untouched. The present work has widened earlier works by considering other aspects of learning behavior.

The second conclusion is that the empowering leadership is positively related to cooperative outcome interdependence. Empowering leadership reduces the psychological and structural barriers between members. The emphasis on decentralization and followers' development enhances cooperation among members and align them together towards achieving common goals. The autonomy and self-directedness given to followers and hassle free interaction between leaders and followers inspires members to perform their roles and responsibilities with dedication and commitment, resulting in greater interaction and collaboration among members.

The third conclusion derived is the positive influence of outcome interdependence on absorptive capacity. Cooperation facilitates sharing of shared/common and unshared/unique information. Under cooperation, members learn from each other by exchanging information and helping each other in executing new knowledge. This is quite consistent with earlier works that cooperation plays pivotal role in knowledge sharing and knowledge transfer (Hinds & Pfeffer, 2003). Our study further extends this work to suggest that cooperation also influences individuals' search for information from appropriate source (knowledge identification) and their effort of integrating new knowledge with previous knowledge (knowledge assimilation).

Strengths, Limitations and Future Directions

The first important contribution of this study is the possibility of empowering leadership in Indian organizations whose formal and information structure is hierarchical. Indian organizations should create platforms that provide greater role to employees. This would enrich the reciprocal influence between leader and followers. The psychological barrier present in the minds of employees can also be removed if the leader encourages employees' participation. Further, there is quite negligible understanding of how leadership in general and empowering leadership in particular affects absorptive capacity. Our findings have addressed this lacuna by examining empowering leadership and how it affects absorptive capacity through cooperation. The second strength is generalizability of the results. The study has included diverse and large sample from various organizations, considered participants from various departments, and people from all levels of organizations. This has provided greater confidence into the results. The third positive feature

is the study's focus on individual level absorptive capacity. This study has tried to bridge the gap between individual and unit study so that a holistic understanding of the concept emerges.

The first limitation of this study is it is not cross-cultural. However, we tried to convey in this paper that hierarchy in Indian culture is not static. Rather, in light of changing economic and social equations in India, hierarchy manifests with multiple possibilities. This study may provide impetus to future research in cross-cultural psychology among other Asian countries undergoing similar transformation in social context. Second limitation is the cross sectional nature of the study, which precludes causality among variables. Hence, longitudinal study is preferred to infer causal relationships. However, we tried to minimize this by focusing on hypothesis formulation based on theory and previous empirical works. Another limitation is occurrence of common source bias. Spector (2006) argued that this bias is not significant enough to affect the results validity. Moreover, the presence of mediating mechanism makes the study intricate and significance or non-significance of the findings may not be solely due to common source bias. Further, the use of bootstrap confidence interval and HC3 estimator has provided credibility to the findings.

Unlike socio-structural empowerment, the dynamics and processes of psychological empowerment are different. It would be interesting to explore whether psychological empowerment follows different mechanisms. Moreover, the combined effect of empowering leadership and psychological empowerment shall also provide useful insights. Additionally, other mediating mechanisms should also be explored in empowering leadership and absorptive capacity. For instance, although we have taken outcome interdependence, other studies should consider task interdependence and resource interdependence as avenues for further exploration.

Author note

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References

- Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L. (2000). Knowledge transfer in organizations: Learning from the experiences of others. *Organizational Behavior and Human Decision Process*, 82, 1–8.
- Arnold, J.A., Arad, S., Rhoades, J.A., & Drasgow, F. (2000). The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors. *Journal of Organizational Behavior*, 21, 249-269.
- Aryee, S., Walumbawa, F.O., Zhou, Q., & Hartnell, C.A. (2012). Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Human Performance*, 25, 1-25.
- Bandura, A. (1969). Social-learning theory of identificatory processes. In D.A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213-262). Chicago: Rand McNally.
- Bligh, M. C., Pearce, C. L., & Kohles, J. C. (2006). The importance of self- and shared leadership in team based knowledge work: A meso-level model of leadership dynamics. *Journal of Managerial Psychology*, 21, 296–318.
- Bock, G., Zmud, R.W., Kim, Y., & Lee, J. (2005). Behavioral intention formation in knowledge sharing:

- Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29, 87-111.
- Bossche, P.V.D., Gijssels, W.H., Segers, M., & Kirschner, P.A. (2006). Social and cognitive factors driving teamwork in collaborative learning environments. *Small Group Research*, 37, 490-521.
- Bryant, S.E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership and Organizational Studies*, 9, 32-44.
- Butts, M.M., Vandenberg, R.J., DeJoy, D.M., Schaffer, B.S., & Wilson, M.G. (2009). Individual reactions to high involvement work processes: Investigating the role of empowerment and perceived organizational support. *Journal of Occupational Health Psychology*, 14, 122-136.
- Cai, L., & Hayes, A.F. (2008). A new test of linear hypothesis in OLS regression under Heteroscedasticity of Unknown form. *Journal of Educational and Behavioral Statistics*, 33, 21-40.
- Canegallo, C., Ortona, G., Ottone, S., Ponzano, F., & Scacciati, F. (2008). Competition versus cooperation: Some experiential evidence. *The Journal of Socio-Economics*, 37, 18-30.
- Carmeli, A., Schaubroeck, J., & Tishler, A. (2011). How CEO empowering leadership shapes top management team processes: Implications for firm performance. *The Leadership Quarterly*, 22, 399-411.
- Chen, C.V., Tang, Y., & Wang, S. (2009). Interdependence and organizational citizenship behavior: Exploring effect of group cohesion in multilevel analysis. *The Journal of Psychology*, 143, 625-640.
- Chua, A.Y., & Iyengar, S.S. (2006). Empowerment through choice? A critical analysis of the effects of choice in organizations. *Research in Organizational Behavior*, 27, 41-79.
- Chua, A.Y., & Iyengar, S.S. (2008). Creativity as a matter of choice: Prior experience and task instruction as boundary condition for the positive effect of choice on creativity. *Journal of Creative Behavior*, 42, 164-180.
- Chuang, C., Jackson, S.E., Jiang, Y. (2013). Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management*, 20, 1-31.
- Cohen, W.M., & Levinthal, D.A. (1989). Innovation and learning: The two faces of R&D. *The Economic Journal*, 99, 569-596.
- Cohen, W.M., & Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-152.
- Conger, J.A., & Kanungo, R.N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13, 471-482.
- Cordery, J.L., Morrison, D., Wright, B.M., & Wall, T.D. (2010). The impact of autonomy and task uncertainty on team performance. *Journal of Organizational Behavior*, 31, 240-258.
- Cramisó, C., & Forés, B. (2010). Knowledge absorptive capacity: New insights for its conceptualization and measurement. *Journal of Business Research*, 63, 707-715.
- De Dreu, C. K. W. (2007). Cooperative outcome interdependence, task reflexivity, and team effectiveness: A motivated information processing perspective. *Journal of Applied Psychology*, 92, 628-638.
- De Dreu, C. K. W., Nijstad, B. A., & van Knippenberg, D. (2008). Motivated information processing in group judgment and decision making. *Personality and Social Psychology Review*, 12, 22-49.
- De Dreu, C.K.W., Beersma, B., Stroebe, K., & Euwema, M.C. (2006). Motivated information processing, strategic choice, and the quality of negotiated agreement. *Journal of Personality and Social Psychology*, 90, 927-943.
- Dennis, T.A., Cole, P.M., Zahn-Waxler, C., & Mizuta, I. (2002). Self in context: Autonomy and relatedness in Japanese and U.S. Mother-Preschooler Dyads. *Child Development*, 73, 1803-1817.
- Drucker, P. (1999). Knowledge-worker productivity: The biggest challenge. *California Management Review*, 41, 79-94.
- Flatten, T.C., Engelen, A., Zahra, S.A., & Brettel, M. (2011). A measure of absorptive capacity: Scale development and validation. *European Management Journal*, 29, 98-116.
- Gergen, K. J. (2009). *Relational being: Beyond self and community*. New York, NY: Oxford University Press.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17, 109-122.

- Hayes, (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Hayes, A.F., & Cai, L. (2007). Using heteroskedasticity-consistent standard error estimators in OLS regression: An introduction and software implementation. *Behavior Research Methods*, 39, 709-722.
- Hertel, G., Konradt, U., & Orlikowski, B. (2004). Managing distance by interdependence: Goal setting, task interdependence, and team-based rewards in virtual teams. *European Journal of Work and Organizational Psychology*, 13, 1-28.
- Hinds, P. & Pfeffer, J. (2003). Why organizations don't "know what they know": Cognitive and motivational factors affecting the transfer of expertise. In M. Ackerman, V. Pipek, and V. Wulf (Eds.), *Beyond Knowledge Management: Sharing Expertise* (pp. 3-26). Cambridge, MA: MIT Press.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. 2nd Ed. Thousand Oaks CA: Sage Publications.
- Jansen, J.J.P., Van Den Bosch, F.A.J., & Volberda, H.W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter?. *Academy of Management Journal*, 48, 999-1015.
- Kakar, S., & Kakar, K. (2007). *The Indians: Portrait of a people*. New Delhi: Penguin Viking.
- Langfred, C.W. (2000). Work-group design and autonomy: A field study of the interaction between task interdependence and group autonomy. *Small Group Research*, 31, 54-70.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly*, 19, 161-177.
- Long, J.S., & Ervin, L.H. (2000). Using heteroskedasticity consistent standard errors in the linear regression model. *American Statistician*, 54, 217-224.
- Manz, C.C., & Sims, Jr., H.P. (1987). Leading workers to lead themselves: The external leadership of self-managing work teams. *Administrative Science Quarterly*, 32, 106-128.
- Menon, S.T. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology: An International Review*. 50, 153-180.
- Menon, T., & Blount, S. (2003). The messenger bias: A relational model of knowledge valuation. *Research in Organizational Behavior*, 25, 137-186.
- Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, 69, 96-104.
- Noruzy, A., Dalfard, V.M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2012). Relations between transformational leadership, organizational leadership, knowledge management, organizational innovation, and organizational performance: An empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64, 1073-1085.
- Pearce, C. L., & Ensley, M. D. (2004). A reciprocal and longitudinal investigation of the innovation process: The central role of shared vision in product and process innovation teams (PPITs). *Journal of Organizational Behavior*, 25, 259-278.
- Pearce, C. L., & Sims, H. P., Jr. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics: Theory, Research, and Practice*, 6, 172-197.
- Pearce, C.L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Executive*, 18, 47-57.
- Pearce, C.L., Conger, J.A., & Locke, E.A. (2008). Shared leadership theory. *The Leadership Quarterly*, 19, 622-628.
- Pedrosa, A.D.M., & Jasmand, C. (2011, June). *Individual-level absorptive capacity*. Paper presented at the DRUID .
- Politis, J.D. (2002). Transformational and transactional leadership enabling (disabling) knowledge acquisition of self-managed teams: The consequences for performance. *Leadership & Organization Development Journal*, 23, 186-197.

- Proctor, S., & Currie, G. (2004). Target-based team working: Groups, work and interdependence in the UK civil service. *Human Relations, 57*, 1547-1572.
- Rai, R. (2014). Knowledge processes in organization: Role of leadership and culture (Unpublished doctoral dissertation). Department of Psychology, University of Delhi, India.
- Rai, R., & Prakash, A. (2012). A relational perspective to knowledge creation: Role of servant leadership. *Journal of Leadership Studies, 6*, 61-85.
- Raub, S., & Robert, C. (2010). Differential effects of empowering leadership on in-role and extra-role employee behaviors: Exploring the role of psychological empowerment and power values. *Human Relations, 63*, 1743-1770.
- Sherif, M., & Sherif, C. W. (1969). *Social psychology*. New York, NY: Harper & Row.
- Sinha, J.B.P. (2008). *Culture and organizational behavior*. New Delhi: Sage Publications.
- Spector, P.E. (2006). Method variance in organizational research: Truth or urban legend? *Organizational Research Methods, 9*, 221-232.
- Spreitzer, G. (2008). Taking Stock: A review of more than twenty years of research on empowerment at work. In C. Cooper and J. Barling (Eds.), *The Sage Handbook of Organizational Behavior*. New Delh: Sage Publications.
- Spreitzer, G.M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal, 38*, 1442-1465.
- Srivastava, A., Bartol, K.M., & Locke, E.A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal, 49*, 1239-1251.
- Szulanski, G. (1996). Exploring internal stickiness impediments to the transfer of best practice within the firm. *Strategic Management Journal, 17*, 27-43.
- Thomas, K.W., & Velthouse, B.A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review, 15* (4), 666-681.
- Toma, C., & Butera, F. (2009). Hidden profiles and concealed information: Strategic information sharing and use in group decision making. *Personality and Social Psychology Bulletin, 35*, 793-806.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal, 41*, 464-476.
- Van der Vegt, G., Emans, B. J.M., & Van de Vliert, E. (1998). Motivating effects of task and outcome interdependence in work teams. *Group & Organization Management, 23*, 124-143.
- van Ginkel, W.P., & van Knippenberg, D. (2008). Group information elaboration and group decision making: The role of shared task representations. *Organizational Behavior and Human Decision Processes, 105*, 82-97.
- van Ginkel, W.P., & van Knippenberg, D. (2009). Knowledge about the distribution of information and group decision making: When and why does it work? *Organizational Behavior and Human Decision Processes, 108*, 218-229.
- van Mierlo, H., Rutte, C.G., Vermunt, J.K., Kompier, M.A.J., & Dooreward, J.A.M.C. (2006). Individual autonomy in work teams: The role of team autonomy, self-efficacy, and social support. *European Journal of Work and Organizational Psychology, 15*, 281-299.
- Vecchio, R.P., Justin, J.E., & Pearce, C.L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *The Leadership Quarterly, 21*, 530-542.
- von Krogh, G., Nonaka, I., & Rechsteiner, L. (2012). Leadership in organizational knowledge creation: A review and framework. *Journal of Management Studies, 49* (1), 240-277.
- Wageman, R. (1995). Interdependence and group effectiveness. *Administrative Science Quarterly, 40*, 145-180.
- Walsh, K., Bartunek, J.M. & Lacey, C.A. (1998). A relational approach to empowerment. In D. Rousseau & G. Cooper (Eds.), *Trends in Organizational Behavior*, Vol. 5, New York: John Wiley & Sons, 103-126.
- Xue, Y., Bradley, J., & Liang, H. (2010). Team climate, empowering leadership, and knowledge sharing. *Journal of Knowledge Management, 15*, 299-312.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly, 10*, 285-305.

Zahra, S.A., and George, G. (2002). Absorptive Capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27, 185-203.