American Journal of
Leadership and Governance
(AJLG)

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AJP

American Journal of Leadership and Governance
ISSN 2519-0857 (online)
Vol.5, Issue 1 No.3, pp 23 - 39, 2020

www.ajpojournals.org

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Abstract

Purpose: The main purpose of this research was to investigate the impact of empowering leadership behavior on subordinates' creativity in teams, and the mediation role of team information sharing following self-determination theory (SDT) in the banking sector of Ghana.

Methodology: The researchers used the quantitative approach to investigate the causal relationships among the variables. Primary survey instrument in the form of questionnaires were distributed across 14 branches of a popular commercial bank in Ghana to obtain data. The authors gained the participation of the 14 branches based on random sampling technique from a list of banks at the head office in the capital city. The sample included 264 leader-subordinate pair surveys across 48 teams. Hierarchical Regression Analysis was used for data analyses and hypotheses testing.

Findings: The study established a positive relationship between empowering leadership and team creativity, while team information sharing revealed a significant mediation between empowering leadership and team creativity.

Unique Contribution: The study offer a unique contribution to the leadership and creativity research at the team level that incorporates a theory in an investigation of the mediation mechanism of teams' symmetric information sharing and dissemination in the Ghana Banking sector.

Keywords: *empowering leadership, self-determination theory, team creativity, team information sharing*

Introduction

Team creativity, referred to as the creation of original and potentially useful ideas about products, services, processes, and procedures by a group of employees in an organization (Hon & Chan, 2013; Hoever, van Knippenberg, van Ginkel, & Barkema, 2012;Wang, Cheng, Chen, & Leung, 2019; Wang, Kim, & Lee, 2016).) has been predicted as a necessary condition for innovation (Paulus & Kenworthy, 2018).Team creativity researchers have also emphasized that individuals working in teams may exhibit diverse knowledge, skills and expertise that will engender more creative solutions to organizational challenges (Dackert, 2016; Shin, 2014).The recent high global technology and competitive markets have further encouraged managers and leaders of organizations to exploit their teams' creative potentials to achieve higher business growth, profitability and sustainability (Bari, Abrar, Shaheen, Bashir & Fanchen, 2019; Erdogan, Bauer, & Taylor, 2015; Hon, 2012; Zhou, & Hoever, 2014).

Empowering leadership, denoted as the degree to which leaders express confidence in their employees' capabilities, recognize the significance of their work, involve them in decision making and removing bureaucratic constraints from their activities, has been examined by several researchers (e.g. Ahearne, Mathieu, & Rapp, 2005; Appienti & Chen, 2019; Arnold, Arad, Rhoades, & Drasgow, 2000; Cheong,Yammarino, Dionne, Spain, &Tsai, 2019; Hao, He, & Long, 2017; Jung, Kang, & Choi, S. 2020; Li, He, Yam, & Long, 2015; Zhang, Ke, Wang, & Liu, 2018; Zhang & Zhou, 2014), and has also been extensively linked with employees creative abilities at the team level (Batool & Adeel, 2016; Hon & Chan, 2013; Perry-Smith, & Shalley, 2014).

To a large extent, however, this study did not find any empowering leadership and creativity study at the team level that incorporates a theory in an investigation of the mediation mechanism of teams' symmetric information sharing and dissemination. Therefore, in this study, the researchers follow self-determination theory (SDT),(Deci & Ryan, 2012), and argue that information sharing among teams which refers to the process of collective utilization and dissemination of available informational resources is a necessary condition that can influence employees responses to empowering leadership behaviors.

SDT explain the degree to which people are able to satisfy their basic psychological needs as they pursue and attain their valued goals. The theory demonstrates an understanding of how human motivation requires a reflection of three distinctive psychological desires for competence, autonomy, and relatedness (Deci & Ryan, 2012). The choice of SDT theory is guided by its potential link with empowering leadership dimensions of coaching, informing, leading by example, informing/interacting and participative decision making (Arnold et al., 2000; Jung, Kang & Choi, 2020), which enable employees to develop a sense of psychological fulfillment and growth through competence, connection or relatedness, and autonomy (Ryan & Deci, 2020). Following SDT, the researchers argue that, the empowering leadership behavioral dimensions will satisfy teams' basic psychological needs and promote competency levels of employees which in turn will trigger their team creative performance.

Moreover, team members operating within an empowered leadership structure are encouraged to make decisions on their own which conforms to the SDT dimension of autonomy, and this requires adequate information to ensure that their decisions are rational and justifiable to the benefit of the organization. In fact, empowering leadership dimensions of participative decision making, and informing encourage the sharing of ideas and dissemination of information among team members in the organization (Arnold et al., 2000). Moreover, information sharing is perceived as an important resource for disseminating knowledge applications, innovation and creativity among teams (Wang & Noe, 2010). Overall, the current study introduce a framework that investigates the mediation mechanism of information sharing in the relationship between empowering leadership and team creativity, using empirical data from the banking sector of Ghana.

Theoretical Background and Hypotheses Development

The Relationship Between Empowering Leadership and Team Creativity

Previous studies have emphasized the relevance of leadership to creativity and team outcomes (Adeel, Batool, & Ali, 2018; Hon & Chan, 2013; Audenaert, & Decramer, 2016; Zhang, Chen, & Kwan, 2010). Self-determination theory (SDT) emphasize that creative teams work best when they have considerable autonomy and decision making ability (Deci & Ryan, 2012; Ryan & Deci, 2020). Arnold et al. (2000) identified five dimensions of empowering leadership as: *leading by example* which demonstrates a leaders enthusiasm to his or her own work and that of his/her team members to accomplish improved performance; *coaching* which refers to leaders' instruction of team members and supporting them to become more proficient and self-confident; *participative decision making* which motivates the sharing of ideas and opinions among team members; *informing* which encourages the sharing of information and knowledge among team members and *showing concern* which demonstrates the support for impartial treatment of subordinates by their leader (Hon & Chan, 2013; Zhang et al., 2010).

There are obvious reasons to expect an association between empowering leadership and team creativity. Empowering leaders grant freedom, flexibity and autonomy which possess the propensity for improved competency (Appienti & Chen, 2019). The leaders also establish strong commitment to their work and transfer their quality values and virtues to their subordinates (Batool & Adeel, 2016). When empowering leaders lead by example they inspire their employees to identify their work goals, which in turn will trigger higher levels of creativity. The coaching and informing characteristics of the empowering leader will improve the confidence and proficiency levels of subordinates' in performing task (Amundsen & Martisen, 2015; Biemann, Kearney, & Marggraf, 2015; Cheong, Spain, Yammarino, & Yun, 2016).The coaching and information behavior of the empowering leader will also support high quality relationships, improve trust among team members and stimulate the necessary ideas to the teams' creativity.

In the end, positive relationships between leaders and subordinates are developed that support the working needs of both parties (Zhang & Bartol, 2010). Accordingly, it can be hypothesized that:

Hypothesis 1: *Empowering leadership is positively related to team creativity.*

Mediating Role of Team Information Sharing

Organizational leaders can enhance efficiency in performance by empowering their employees and inspiring them to share information regarding knowledge and skills (Lee, Lee, & Park, 2014).A significant role of the empowering leader is to make information sharing possible among team members by improving their self-efficacy and control over their working environment (Hahm, 2017). Team members can be empowered by their empowering leader to make independent job-related decisions, but there is the need for them to have sufficient information to make rational decisions (Hon & Chan, 2013). Accordingly, empowering leadership behavior is recognized as the substance that stimulates and trigger the occurrence of information sharing (Lee et al., 2014). An empowering leader who possess the precise qualities is perceived as a supportive leader who provides direction to followers, treats them impartially, and recognize the worth of their efforts. When subordinates perceive a fair recognition of their input by their empowering leader, they are likely to be inspired to share their information and knowledge with others (Hu, Erdogan, Jiang, Bauer, & Liu, 2018).

The empowering leadership dimensions developed by Arnold et al. (2000), can contribute to the sharing of information among team members. The empowering leader can lead by example and share his or her information for team members to emulate. Also, the empowering leader can exhibit his or her coaching behavior by inspiring and engaging subordinates in combined problem-solving task that will provide them the opportunity to interact with one another in terms of skills, knowledge and capabilities (Hahm, 2017). Again, team members can have the opportunity to voice out their concerns and suggestions as their empowering leader demonstrates participative decision making. Further employees might harbor some apprehensions in sharing knowledge with their peers because their position in the organization is associated with their exclusive knowledge. The empowering leader holds the skill of identifying and lessening such apprehensions and will eventually alleviate such barriers to information sharing. Overall, information sharing inspires team members to cooperate with one another and identify solutions to thought-provoking tasks (Men, Fong, Luo, Zhong, & Huo, 2017).The preceding discussions supports the arguments that empowering leadership will encourage team members information sharing behavior.

Information sharing among team members can also be used to determine their creativity (Hu & Randel, 2014). Thus, personal level information becomes a necessary resource at a group or team level (Hahm, 2017).In order to share information, team members should have a disposition to share their own information with their colleagues in the team (Hu et al., 2018). Information which is usually shared by members includes job-related content, new technologies, individual experiences, skills and organizational policy. Differences in knowledge, skills and intellectual abilities of team members are major determinants of their creativity (Perry-Smith & Shalley, 2014; Shin, Kim, Lee, & Bian, 2012).

Therefore, sharing of information among team members can activate new blends of opinions and insights that are necessary for their advancement in creativity (Men et al., 2017; Shin et al., 2012). Overall, information sharing can be regarded as one of the vital resources which team members can use to contribute to knowledge applications and creativity (Wang & Noe, 2010). It has been established in the literature that, empowering leader behaviors will encourage employees to disseminate information among themselves (Zhang et al., 2010), and researchers also recognize the fact that information sharing is crucial for team creativity (Tung &Chang, 2011), an indication that information sharing can mediate the relationship between empowering leadership and team creativity.

Hypothesis 2: *Team information sharing mediates the relationship between empowering leadership and team creativity.*

Figure 1 represents the model of the hypothesized relationships.

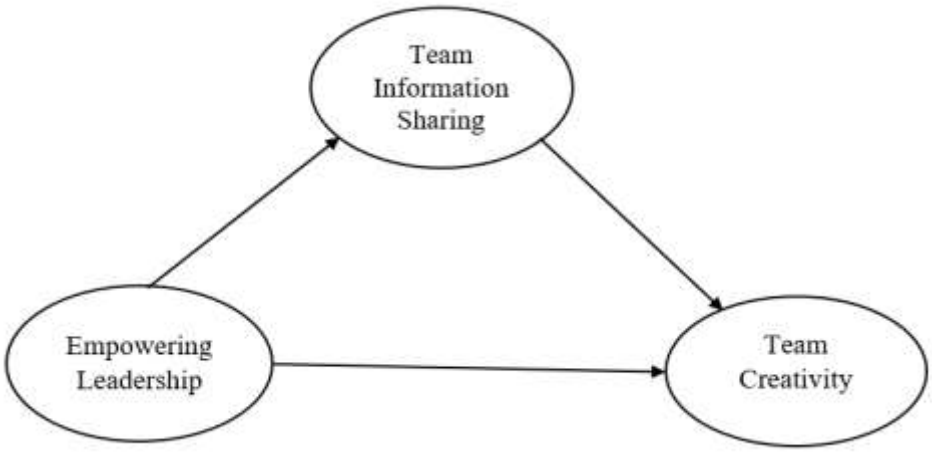

Figure 1. The Hypothesized Model

Method

Participants and Procedures

The researchers used questionnaires to collect data from 48 teams in 14 branches of a popular commercial bank in Ghana. The choice of the banking sector was guided by the essential need for creative employees in this sector to respond to customer enquiries, resolve challenges, and generate ideas pertaining to work procedures. The authors gained the participation of the 14 branches based on a list obtained from the head office of the bank in the capital city. The branches were then randomly selected from the list. The participants were briefed about the purpose and

procedures of the survey after which they were assured of the confidentiality of their responses. The participating team members and their leaders completed the questionnaires during working hours. Team members reported their information sharing, and their leaders empowering leadership behavior. Team leaders assessed their team members' creativity.

Data Analyses

Survey Responses and Demographics

Of the 392 member–team leader pair surveys distributed, 288 were returned by 56 teams, representing a response rate of 73.5%. Eight teams returned the response of only two or less team members. Such responses created missing values and were therefore removed from data analysis. In all 264 member–team leader pair surveys across 48 teams were used for data analysis. Sixty-four percent of the employees had higher than high school diploma. A total of 25% of the employees were female. Their average age was 34.9 years (SD = 8.9), with an average team tenure of 4.9 years (SD = 3.2). The team leaders were well educated with 70% holding a bachelor or higher degrees. A total of 28% were female. Their average age was 43.4 years (SD = 9.7) with an average team tenure of 6.5 years (SD = 4.9).

Measurements

A 6-point Likert-scale type was used for all study measures, with 1 representing *strongly disagree, 2 disagree, 3 somewhat disagree, 4 somewhat agree, 5 agree, and 6 strongly agree.*Team members were asked to answer questions covering team information sharing, and empowering leadership, while team leaders were asked to rate their subordinates' creativity in the team.

Empowering leadership was measured by a 15-item scale developed by Arnold et al. (2000). The most suitable model contained five factors: leading by example, participative decision making, coaching, informing, and showing concern /interacting with the team. Three (3) items each of the above factors as listed by Arnold et al. (2000) were adopted. Sample items for each of the five dimensions of empowering leadership are presented. A sample item for leading by example is "my supervisor sets good example by way of his or behavior", a sample item for participative decision-making is "my supervisor gives all team members a chance to express their opinions", a sample item for coaching is "my supervisor teaches team members how to solve problems on their own", a sample item for informing is, "my supervisor explains rules and expectation of the job to team members", and that of showing concern is "my supervisor shows interest in team members success." A confirmatory factor analysis (CFA) revealed that the fit indices for a single second-order factor were satisfactory (χ^2 = 312.02, *df* = 92, $p < .01$; Normed fit index [NFI] = .93; comparative fit index [CFI] = .98), Tucker Lewis Index [TLI] =.91; root mean square error of approximation [RMSEA] = .07, indicating that empowering leadership as a single overall construct

composed of five distinct sub-dimensions. The mean of 15 items was used to generate a combined empowering leadership scale and revealed a coefficient alpha reliability of .94.
Team information sharing was measured by a six-item scale adapted from Arnold et al. (2000). Sample item from this measure was "My team members engage in open and honest communication with each other". The alpha coefficient was .89.

Team Creativity was measured with a 4-item scale and adapted from Shin and Zhou (2007), and was based on supervisor's valuation. Sample items included "my team produce useful ideas" and "my team produce significant ideas". The coefficient alpha for this scale was .91.

Control variables consisting of participants' age, gender, education level, and tenure and team size were used because of their implied association with team processes and outcomes (e.g., Hon & Chan, 2013; Shalley, Zhou, & Oldham, 2004; Shin & Zhou, 2007). Age was self-reported in years. Gender was coded as a dichotomous variable of 0 for female and 1 for male. Education represented the highest academic qualification of a particpant: 1 = high school diploma; 2 = bachelor's degree; 3 = master's degree; 4 = doctorate. Tenure was recorded as the number of years with the company while team size represented the number of participants in each team.

Data Aggregation

Two variables including empowering leadership, and information sharing, were measured at the individual level and then aggregated for team level analysis thereafter in order to determine the within group inter-rater agreement (r_{wg}) and the inter-member reliability ICC(1) and ICC(2) for the three variables (Bliese, 2000).The results were recorded as: empowering leadership, median r_{wg}=.83, ICC(1) =.18, ICC(2) =.66; team information sharing, median r_{wg}=.81, ICC(1)=.21, ICC(2) =.63. The results revealed that all teams had *r*wg values greater than the suggested minimum value of .70 (James, Demaree, & Wolf, 1993). Also, ICC (1) values were all greater than the suggested minimum value .05, indicating a higher between-team variance than within-team variance. Lastly, the ICC (2) values were higher than the suggested minimum value of .60. These results established the suitability of averaging the scores of team members to obtain team-level scores.

Descriptive Statistics

The means and the standard deviations of the variables are shown in Table 1

Table 1. Means and Standard Deviations

Variables	Mean	SD
1.Subordinates Age	34.94	8.92
2.Subordinates Gender	0.64	0.48
3.Subordinates Education Level	3.41	0.72
4. Subordinates Tenure	4.87	3.22
5.Leaders Age	43.44	9.69
6.Leaders Gender	0.66	0.54
7.Leaders Education Level	3.74	0.84
8.Leaders Tenure	6.51	4.92
9. Team Size	5.77	3.61
10.Empowering Leadership	4.34	0.51
11.Team Information Sharing	4.46	0.54
12. Team Creativity	3.98	0.55

Table 2 shows the Pearson's intercorrelations of all the variables. Consistent with the predictions, empowering leadership is positively related with team creativity (r = .38, p <. 01) Also, consistent with the mediation, empowering leadership is positively related with team information sharing (r = .20, p <. 05), while team information sharing is also positively related to team creativity (r =.22, p <.05).These results provided some initial support for the study propositions.

Table 2. Pearson Correlations of the Study Variables.

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1.Subordinates Age	-											
2.Subordinates Gender	-.07	-										
3.Subordinates Education Level	.13*	.17*	-									
4. Subordinates Tenure	.15*	-.11*	.01	-								
5.Leaders Age	-.13*	.05	-.06	-.14*	-							
6.Leaders Gender	-.21*	.17*	-.02	.15*	.20*	-						
7.Leaders Education Level	-.11*	.07	.17*	-.12*	.05	-.09	-					
8.Leaders Tenure	.09	.19*	-.09	.09	-.17*	.05	.04	-				
9. Team Size	.02	-.06	.14*	-.02	.11*	.07	-.18*	-.06	-			
10.Empowering Leadership	-.19*	-.18*	.02	.15*	.09	-.11*	.08	.01	-.05	**(.94)**		
11.Team Information Sharing	.04	.07	.07	-.01	.01	.16*	.15*	.06	.08	.20*	**(.89)**	
12. Team Creativity	-.09	-.11*	.11*	-.18*	.13*	.09	.03	.03	.10*	.38**	.22*	**(.91)**

Notes. (*N*=48 teams). Internal reliabilities (Cronbach alpha coefficients are indicated along the parenthesis in brackets) **. Correlation is significant at the 0.01 level (2-tailed).*. Correlation is significant at the 0.05 level (2-tailed)

Confirmatory Factor Analyses

The researchers conducted a series of confirmatory factor analyses (CFA) using AMOS 23 maximum likelihood to examine whether empowering leadership, information sharing, and team creativity, revealed distinct constructs. Results showed that the three-factor model fit the data well (χ^2 = 460.76, *df* = 132, *p* < .01; [NFI] = .95; [CFI] = .93); [TLI] =.91, root mean square error of approximation [RMSEA] = .05). These values gained support for considering these variables as separate constructs. We compared this model to two other alternative models. A two-factor model where empowering leadership and team creativity were combined was also considered (χ^2 = 1012.76, *df* = 446, *p* < .01, [NFI] = .63; [CFI] = .60, [TLI] =.64, [RMSEA] = .09).

This yielded a poorer fit to the data. Finally, a one-factor model where all items were constrained to load on a single factor yielded a poorest fit to the data ($\chi 2 = 1439.76$, $df = 694$, $p < .01$, [NFI] = .48; [CFI] = .42, [TLI] =.44, [RMSEA] = .24). The hypothesized three-factor model thus fit the data better than the other two alternative models, supporting the distinctiveness of these constructs.

Results of Hypotheses Testing

Hierarchical Multiple Regression analysis was used to test hypotheses 1 and 2. Drawing on Baron and Kenny's (1986) procedures, the variables were entered into the analysis in three steps. Control variables including both subordinates' and leaders' demographics of age, gender, education level, and tenure as well as team size were entered in step 1. The independent variable-empowering leadership was entered in step 2, while the mediating variable-team information sharing was entered in step 3. As demonstrated in the table, (model 7), empowering leadership was positively related to team creativity ($\beta = .35$, $p < .01$), thus given support to hypothesis 1. Hypothesis 2 predicted information sharing to mediate the positive relationship between empowering leadership and team creativity. The results in Table 3 has already revealed that: (i) empowering leadership is positively related to team creativity (model 7, $\beta = .35$, $p < .01$) (ii) empowering leadership is positively related to team information sharing (Model 2; $\beta = .31$, $p < .01$) and (iii) team information sharing was positively related to team creativity (Model 8; $\beta = .25$, $p < .01$). The relationship between empowering leadership and team creativity was however not significant (model 8; $\beta = .09$. *ns*) at the presence of the mediator. This revealed full mediation and gained support for hypothesis 2 (Baron & Kenny, 1986).

American Journal of Leadership and Governance
ISSN 2519-0857 (online)
Vol.5, Issue 1 No.3, pp 23 - 39, 2020

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Table 3. Results of Hierarchical Regression Analysis

Steps/variables entered	Team Information Sharing					Team Creativity				
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
Step 1. Control Variables										
Subordinates' Age	-.01	-.01	-.02	-.01	.02	-.04	-.04	-.05	-.04	.05
Subordinates' Gender	.12	.11	.12	.12	.11	.05	.06	.05	.05	.06
Subordinates' Education Level	.08	.07	.07	.07	.08	.11	.12	.10	.11	.12
Subordinates' Tenure	-.02	-.06	-.07	-.07	.07	.04	.05	.06	.06	.05
Leaders' Age	-.02	-.03	-.04	-.04	-.03	-.08	-.08	-.09	-.08	-.08
Leaders' Gender	.13	.14	.14	.12	.14	.16	.15	.15	.15	.14
Leaders' Education Level	.10	.11	.12	.11	.11	.10	.10	.09	.09	.08
Leaders' Tenure	-.04	-.05	-.06	-.05	-.05	.12	-11	.11	.10	.10
Team size.	.08	.09	.10	.09	.10	.13	.13	.12	.12	.11
Step2. Independent Variable										
Empowering Leadership (EL)		.31**	.26**	.22**	.21**		.35**	.09	.32**	.19**
Step 3. Mediation Variable										
Team Information Sharing								.25**	.22**	.18*
R^2	.08	.12	.13	.16	18	.11	.14	.15	.17	17
Adjusted R^2	.06	.09	.10	.14	.15	.10	.12	.12	.13	.15
ΔR^2	-	.04	.01	.03	.02	-	.03	.01	.02	.00
F	1.29*	2.52**	2.77**		2.46**					3.57**
				2.38**		1.72**	2.81**	3.02**	3.44**	

Notes: N=264. Standardized coefficients are reported. *p < .05; **p < .01.

Discussion

This study investigated an empirical research model between empowering leadership and employees' team creativity, and the mediation role of team information sharing in the banking sector of Ghana. The results revealed a positive relationship between leaders' empowering leadership behavior and team creativity. Again, team information sharing was demonstrated as relevant mediation mechanism in the empowering leadership-team creativity relationship. The implications of the findings and the limitations of the research are discussed below.

Theoretical Implications

The findings of the study extends previous research in two main ways. First, empowering leadership is positively related to employees' team creative outcomes and this is consistent with earlier research such as (Hon & Chan, 2013; Zhang et al., 2010). However, earlier studies did not emphasize the relevance of team information sharing in the association between empowering leadership and team creativity. The study contributes to the leadership and creativity literature knowledge by using self-determination theory (SDT), to justify the positive relationship between empowering leadership and team creativity. Self-determination theory (SDT), emphasize that creative teams work best when they have substantial autonomy and decision-making ability (Deci & Ryan,2012), where the autonomy of employees is attained from the empowering behavior of coaching, informing, leading by example, informing/interacting and participative decision making by their leader (Jung, Kang & Choi,2020).

The study also advance knowledge in existing literature by identifying team information sharing as a relevant intervening variable in the empowering leadership-team creativity relationship. Leaders in an empowering leadership structure are skillful in improving team members control on their working tasks. When employees in a team are empowered by their leader to make job decisions on their own, they need to hold adequate information to be able to make rational decisions. (Wang, et al., 2019; Wang & Noe, 2010). Enabling contact and information sharing is a strategic way to promote creativity within teams (Hu et al., 2018). Again, the ability to share technical and social information is imperative for teams to be creative (Hahm, 2017). Further, the mechanism by which information sharing promotes creativity in teams is that it enables team members to build on one another's ideas and can facilitate the process by which knowledge from different employees can be combined and adapted in unique ways (Harvey, 2014).

Managerial and Practical Implications

The research findings also offer some managerial and practical implications as detailed below.

1. First, organizational managers are encouraged to demonstrate empowering leadership skills when leading their subordinates in teams. The empowering leadership skills of existing team

leaders can be reinforced by adopting the five dimensions of leading by example, coaching, participative decision making, informing and showing concern proposed by Arnold et al. (2000).

2. Appropriate training programs can be provided to assist team leaders to recognize their empowering leadership strengths and weaknesses. Although such training might alter the organization's managerial status quo, it will still have a great propensity to improve the managers managerial and supervision skills.

3. Information sharing behavior is essential among employees in teams within the organization to enhance their creative performance. Practically, this study draws special attention to team strategy in organizations. In order to encourage information sharing, managers need to create an interactive team environment since team is the most relevant social context within which employees often interact with their peers (Liang, Xue, Ke, & Wei, 2010). They need to create unified innovative teams based on mutual trust. Facilitating interpersonal cooperation, interaction in gaining self-sufficiency, independence, and ensuring employees of their competence to produce something novel and useful is essential.

4. Leaders should also encourage in-group behaviors such as group integration, group learning and solidarity. They should also demonstrate a more supportive approach and concern towards their employees by emphasizing collaboration and behavioral integration (Zhang, & Kwan, 2019). Again, group harmony, initiatives, contributions and welfare rather than individually oriented self-interest, and pursuit of individual goals should be emphasized (Nguyen & Mohammed, 2011).

5. Finally, a more positive and rewarding work environment based on group-based activities and initiatives should be carried out to facilitate information sharing and team creative abilities.

Conclusion

In conclusion, this research explored the association between empowering leadership behavior and subordinates' creativity in teams, as well as the mediation mechanism of team information sharing following self-determination theory (SDT) in the banking sector of Ghana. A quantitave approach, using primary survey instrument in the form of questionnaires was used to obtain data. The data was analyzed using Hierarchical Regression Analysis. The two hypotheses tested established positive impact of empowering leadership on team creativity, while team information sharing revealed a significant mediation between empowering leadership and team creativity. In all, the study findings offer a distinct contribution to the leadership and creativity literature at the team level by incorporating a theory in an investigation of the mediation mechanism of information and knowledge sharing in the Ghana Banking sector. The authors are hopeful that the research findings will be of immense relevance to academicians and leaders of organizations in Ghana and the world at large.

Study Limitations and Future Research Directions

Although this study offer several contributions to the leadership and creativity literature, other limitations can also be acknowledged. Time is a very important factor that can influence research results. Testing the model from time to time using longitudinal data is a recommended future research agenda. The longitudinal design would allow researchers to draw and observe patterns of development of causal paths and mutual relationships (Tierney & Farmer 2011).

Second, even though data aggregation of individual responses were used to compute the team-level measures, prior research has identified consensus rating as having a more improved validity than the aggregation method (Kirkman, Tesluk, & Rosen, 2001). Future research can use this method to try the team analysis instead of the aggregation method. Third, empowering leadership was measured as a single construct without considering the effect of each dimension on other variables in the model. Future research can consider the effect of each dimension of the Arnorld et al.'s (2000) measure on the other variables in the model. Also recommended for future research on the study model are the effects of empowering leadership dimensions used by other researchers (e.g. Ahearne et al., 2005, Pearce & Sims, 2002). Fourth, this study has only examined the mediation effect of team information sharing. Future research can examine other potential mediators such as team learning and task interdependence. Finally, although data collected from 14 branches of a particular bank improved the validity of this study, all the institutions belonged to the banking industry. Future research in multiple organizational settings across different industries could improve the findings' generalizability. Furthermore, future studies could reexamine the relationships found in this study in other nations. This research has revealed favorable associations between empowering leadership and team creativity via team information sharing. It is the hope of the researchers that this study will stimulate future research to advance the theoretical and practical understanding of creativity in teams at all levels of the banking industry.

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