

# Effects of Team Leadership Behavior of SME Organization on Teamwork and Job Satisfaction

Joon-Hwan Kim  
Department of Paideia, Sungkyul University

## 중소기업 조직의 팀 리더십행동이 팀워크와 직무만족에 미치는 영향

김준환  
성결대학교 파이데이아학부

**Abstract** The purpose of this study is to verify the relationship between teamwork and job satisfaction in team leadership behavior of SMEs. For this study, the survey data of 158 SME employees in the Seoul metropolitan area were analyzed by structural equation modeling. The results of the study are as follows. Team leadership behavior had a significant effect on teamwork. Teamwork was found to have a positive effect on job satisfaction. Therefore, this study identified ways to enhance competitiveness and stimulate team leadership behavior by cultivating team leadership behavior and teamwork competencies in accordance with the strategies of SMEs. It can also contribute to the development and strategy formulation and management of team leadership competencies to improve performance in SMEs.

**Key Words** : Team Leadership Behavior, Teamwork, Job Satisfaction, SME, Leadership Competency

요 약 본 연구는 중소기업의 팀 리더십행동이 팀워크와 직무만족 간의 관계규명을 검증하는데 목적이 있다. 본 연구를 위해 수도권에 위치한 중소기업 종업원 158명을 대상으로 설문조사한 자료를 구조방정식모형으로 분석하였다. 연구결과는 다음과 같다. 팀 리더십행동은 팀워크에 유의한 영향을 미치는 것으로 나타났다. 팀워크는 직무만족에 긍정적인 영향을 미치는 것으로 확인되었다. 팀워크는 팀 리더십행동과 직무만족 간의 관계를 유의하게 매개효과가 있는 것으로 나타났다. 따라서 본 연구는 중소기업의 전략에 맞게 팀 리더십행동 및 팀워크 역량을 함양함으로써 경쟁력을 강화하고, 팀 리더십행동을 활성화하기 위한 방안을 규명하였다. 또한 중소기업에서 성과를 향상하기 위한 팀 리더십 역량의 개발과 전략 수립 및 운영에 기여할 수 있다.

주제어 : 팀 리더십행동, 팀워크, 직무만족, 중소기업, 리더십 역량

## 1. Introduction

In today's competitive environment, the importance of team competency is becoming more important as the different core competencies of SMEs. In recent years,

leadership has been understood as an interaction process within the organization rather than individual characteristics, but the leadership competence model still plays a pivotal role in the leadership development process of many companies[1]. In Korea, leadership

\*Corresponding Author : Joon-Hwan Kim(kjh715@sungkyul.ac.kr)

Received March 20, 2018

Accepted April 20, 2018

Revised April 13, 2018

Published April 28, 2018

competency processes are spreading and widely used for providing basic data in leadership development process[2]. However, existing leadership competencies are not linked to organizational strategies, they are criticized mainly because they are based on past achievements and do not reflect the characteristics of differentiated organizations and can not be used properly by each company[3].

At the 2018 PyeongChang Olympic Games, the women's team overtaking team had teamwork controversy[4]. As mentioned above, the importance of leadership and teamwork within the company has been raised in order to develop a leadership competency model that directly affects the performance of SME organization and contributes to the formulation and implementation of strategy[5]. In other words, It is defined the leadership of the company from the viewpoint of the customer, confirm the corporate identity by constructing it as a teamwork, and reflect the unique strategy and characteristics of the SME organization throughout the leadership capacity model. Therefore, SMEs are required to develop unique leadership models to develop differentiated leadership capability models according to their strategies and actively use them in leadership development. However, research on leadership, teamwork, and job satisfaction of SMEs is hard to find. In addition to being able to establish a leadership competency model that is directly related to the organization's performance by determining the organization's identity and the behavior and characteristics of the behaviors that each organization member should show according to leadership in each company, It can be used effectively. Therefore, this study intends to explore ways to enhance competitiveness and stimulate team leadership behavior by cultivating team leadership behavior and teamwork competencies according to each organization's strategy for domestic SMEs. The main research questions of this study are stated as follows:

1. What is the relationship between team leadership behavior and teamwork?

2. What is the effect of teamwork on job satisfaction?

## 2. Research Model and Hypotheses

### 2.1 Team Leadership Behavior and Teamwork

In recent years, leadership has become increasingly viewed as an interaction process between organizational members rather than by individual characteristics or skills[6]. As a result, the concept of team leadership has emerged, and each scholar has set the components of team leadership in different ways[6]. It was developed a team leadership process model based on previous research, which shows that there are four types of team leadership processes[7]. The reason why the team is proposed as the basic unit of achieving the organizational goal is because the uncertainty of the environment has increased and the work to be performed by the members has become complicated and the area has expanded. Individuals have specialized abilities, but there is a limit to the task demands beyond that. In other words, by forming a team and cooperating with each other, it is possible to overcome individual ability and cope with environment flexibly[8].

Team leadership is to achieve the goals that the team is aiming to achieve, and to lead to the maintenance and development of the team. To achieve this goal, team leadership has two core functions. One is the ability to create high performance through job performance and the other is the team maintenance function that strengthens group unity. The effects of leadership behavior on the performance of the leader were related to the behavior formation and change of the team and the team performance[9]. Yukl (2012) distinguishes the behavior types of leader by task-oriented, relations-oriented, change-oriented, and external-oriented[10]. Task-oriented behavior is the act of making use of human resources, equipment and other resources in an efficient way to accomplish the task of a group or organization. Relationship-oriented

behavior refers to the talent of the organization's members, the relationship between the leader and the organization members, the integration with the unit of work or organization, and the act of encouraging immersion. Change-oriented behavior refers to change-oriented behavior to promote adaptation to innovation, group learning, and external change.

Teamwork was defined as work and social interaction among members, or cooperation. It was suggested that communication, coordination, balanced contribution, mutual support, effort, and cohesiveness are indicators for evaluating the level of interaction among members of the team[11]. Communication means that the members of the team are well-informed and that information is distributed well through informal, direct, and open methods. Coordination refers to the degree to which members in a team structure or combine their efforts. Balance of member contributions refers to how committed a team member is to achieving a team's goals. Mutual support is the degree to which other members can help achieve the team's goals. Effort refers to how much effort a member tries to accomplish in a team. Cohesion refers to the tendency to identify and remain with the team. In order to cope with rapidly changing management changes such as strengthening organizational capacity and expanding global organization, collective dynamics for team synergy and collective intelligence through brainstorming are more needed than ever. Therefore, a practical and professional business competency team is being formed with organization structure of small number of people, reducing time and geographical consumption, and responding more quickly. This is why the importance of teamwork is more emphasized. Team members who are entrusted with authority from a leader in a team with a strong organizational support atmosphere contribute to teamwork by helping other team members. Teamwork is formed by team synergy to achieve common goals through shared cooperative atmosphere where team leaders and members can trust each other, capacity sharing through interaction,

leadership and external support of the team leader[12]. Based on the results of the study above, set the following hypothesis.

H 1: Team leadership behavior is positively related to teamwork.

## 2.2 Teamwork and Job Satisfaction

Today, many organizations are aggressively adopting team systems to improve productivity and manage efficiency. Teamwork is the responsibility of team members to act responsibly and cooperatively according to their roles in order to achieve a common goal. Teamwork is slightly different according to teamwork research approach[13]. A group of individuals who are interdependent and share responsibility for performance to achieve common goals and values is called a team[14]. In the organizational structure of a team, individuals interact with each other to achieve team goals. The integration of their knowledge, skills and abilities is called teamwork[15]. Anhalt (1995) defined team-work as a separate, simultaneous and responsive unit of the organizational task itself[16]. Job satisfaction refers to the emotional state of positive emotions or job experience that an organization member represents toward his or her job[17]. Job satisfaction is related to variables such as role conflict, turnover intention, and outcome, and so much work has been done in organizational management[18]. Job satisfaction of these members is also closely related to attitude and behavior[19,20].

Hackman[21] argues that the teamwork process results in not only the performance of the task but also the outcome of the task. In addition to achieving higher productivity and product quality when performing work, the team members also gain psychological results that will increase their willingness and competence, and satisfaction with their work. In particular, job satisfaction, organizational commitment, and efficacy were the performance factors of teamwork revealed through previous teamwork studies[22]. The results of this study suggest that teamwork contributes

to job satisfaction as much as staffing in nursing organizations[23]. In the study on sports groups, it was reported that teamwork had an important effect on team success and team satisfaction. Hackman's teamwork theory and previous research show that high-level employee teamwork can increase job satisfaction. Based on these discussions, the following hypothesis was set.

H 2: Teamwork is positively related to job satisfaction.

### 2.3 Mediating Effect of Teamwork

Previous studies on team leadership and teamwork have focused on the relationship between performance and job satisfaction, and research on the variables that mediate the relationship is still lacking. The role of teamwork in the relationship between team leadership behavior and job satisfaction can be inferred. Namely, if an organization's team leadership behaviors have a greater impact on job satisfaction variables through teamwork, they will tell that teamwork should be accompanied by actual performance. Therefore, previous research has shown that leader's behaviors affect the atmosphere and also affect organizational performance[24]. Team leadership behavior have a direct relationship with job satisfaction, and teamwork is expected to have a decisive impact on job performance. Therefore, high level of team leadership behavior is assumed to have a positive impact on teamwork and job satisfaction by recognizing trust and ties.

H 3: Teamwork will mediate the relationship between team leadership behavior and job satisfaction.

## 3. Research Design

### 3.1 Method and Data Collection

The population of this study is set as employees who work for SMEs with 300 or fewer regular employees in the Seoul metropolitan area. The survey

was conducted with employees from six companies to write a self-report questionnaire. Of 180 employees selected as participants, 168 responded and 158 were used for the final analysis, except for 9 items that were inappropriate for data processing, such as missing response items or responding uniformly. For data analysis, correlation analysis, confirmatory factor analysis (CFA) and structural equation modeling (SEM) technique were used by SPSS 22.0 and Amos 22.0. The demographic characteristics of the sample are presented in Table 1.

Table 1. Demographic Information

	Variable	Frequency	%
Gender	Male	82	51.9
	Female	76	48.1
Age	29 and below	69	43.7
	30-39	47	29.7
	40-49	37	23.4
	50 and above	5	3.2
Education	College	29	18.4
	University	114	72.2
	Graduate school	15	9.5
Employment type	Full-time	80	50.6
	Incentive contract	78	49.4
Job title	clerk/senior clerk	55	34.8
	assistant manager	73	46.2
	manager	25	15.8
	senior manager	4	2.5
	general manager	1	0.6
	total	158	100

### 3.2 Measurements

To measure team leadership behavior consist of 15 questions, including 5 task-oriented leadership, 5 relational-oriented leadership, and 5 change-oriented leadership were adapted from Yukl's (1999)[25]. Teamwork consisted of 12 items related to teamwork such as communication (4), work coordination (3), collaboration (3) and cohesion (2) developed by Hoegl and Gemuenden (2001)[12]. To measure job satisfaction, 5 items adapted from the Job Diagnostic Survey (JDS)[26].

### 3.3 Statistical Analyses

The inventories will be revised to improve its reliability and validity if required. A confirmatory

measurement model specifies the relations of the observed measures to their posited underlying constructs, with the constructs allowed to intercorrelate freely. A confirmatory structural model then specifies the causal relations of the constructs to one another. In evaluating the adequacy of the measurement and structural models, the following fit indices was used: the chi-square goodness-of-fit statistic, the comparative fit index (CFI) and the root mean square error of approximation (RMSEA), etc. An alternative model that adds direct paths from team leadership behavior to job satisfaction also was tested.

Table 2. Descriptive Statistics and Correlations

Variables	1	2	3
1. team leadership behavior	(.699)		
2. teamwork	.592**	(.838)	
3. job satisfaction	.234**	.293**	(.902)
Mean	3.65	3.60	3.35
S.D.	.552	.550	.438

Descriptive statistics and correlations of the variables included in the research are presented in Table 2. The Cronbach alpha coefficient have in adequate levels of reliability. In order to confirm the multicollinearity problem, the variance inflation factor (VIF) was calculated to be smaller than 10, and it was confirmed that there was no problem.

## 4. Results

### 4.1 Assessment of the Measurement Model

Before assessing the structural model, confirmatory factor analysis (CFA) was conducted to assess the measurement model, following Anderson and Gerbing's (1988) two-step method[27].

AMOS 22.0 was used for analyzing the data, and it was found that the standardized regression coefficients for each item were in an acceptable range of .54 and .80. In addition, The CFA provided a marginally

acceptable fit to the data ( $\chi^2= 79.08$ ,  $df= 72$ ;  $RMR= .028$ ;  $RMSEA= .025$ ;  $CFI= .990$ ;  $TLI= .988$ ;  $GFI= .938$ ). As shown in Table 3, it can be confirmed that average variance extracted (AVE) also has a value of .50 or more.

Table 3. Results of Confirmatory Factor Analysis

Variables		C.R.	Standard factor loading	CCR	AVE
team leadership behavior	task-oriented leadership	5.080	.729	.879	.711
	relational-oriented leadership	5.149	.577		
	change-oriented leadership	5.012	.683		
teamwork	communication	7.024	.661	.961	.862
	work coordination	8.059	.782		
	collaboration	8.100	.790		
job satisfaction	cohesion	7.108	.692	.924	.764
	JS1	-	.668		
	JS2	7.753	.801		
	JS3	6.529	.717		
	JS4	7.446	.742		
JS5	5.829	.542			

### 4.2 Assessment of the Structural Model

The hypothesized model indicated a good fit in all indices ( $\chi^2= 113.83$ ,  $df= 100$ ;  $RMR= .030$ ;  $RMSEA= .030$ ;  $CFI= .984$ ;  $TLI= .980$ ;  $GFI= .922$ )[28]. As presented in Table 4, Team leadership behavior showed a significantly positive relationship with teamwork and thus, hypothesis 1 was supported (path coefficient= .172,  $t= 2.576$ ,  $p<.05$ ). Second, hypothesis 2 was supported since teamwork showed a positive relationship with job satisfaction (path coefficient= .639,  $t= 5.969$ ,  $p<.01$ ). Third, 5,000 bootstrapping samples were extracted and validated by bias-corrected method to verify the mediating effects of teamwork. As a result, If not included both percentile and bias-corrected median effect is significant at  $\alpha= .05$  level. Therefore, hypothesis 3, which assumes mediating effects of teamwork, was adopted. This is consistent with previous work on teamwork. The results of the analyses based on all two methods are presented in Table 5.

Table 4. Hypotheses Testing:  
Effects of Path Estimates

Hypothesis	Standardized Coefficient	T-values	Result
H 1	.172	2.576*	Supported
H 2	.639	5.969**	Supported

\*p &lt; .01, \*\*p &lt; .05

Table 5. Test of Indirect Effects

Indirect Effect	Estimate	SE	Bootstrap 95% Confidence Interval	
			Percentile	BC
TLB→TW→JS	.012	.080	(.033, .555)	(.023, .542)

Note. Based on 5,000 bootstrap samples; TLB= team leadership behavior, TW= teamwork, JS= job satisfaction

## 5. Discussion

In this study, It was examined the effect of team leadership behavior on the teamwork and job satisfaction of SME organization. The results of the study are summarized as follows.

First, team leadership behavior had a positive effect on teamwork. It was not the leadership by the team leader but the distributed and shared leadership among the team members which was a new concept was important from the past traditional leadership paradigm. Effective teams enable flexible adaptation to rapidly changing environments, enabling them to create higher levels of products and services in the face of increased external competitiveness and increased pressure from customers.

Second, teamwork had a positive effect on job satisfaction. These results showed that teamwork played an important role in various attitudes related to job performance and job satisfaction, which were behavioral variables[29]. In other words, employees who are highly aware of their teamwork are more committed to higher job satisfaction. Third, team

leadership behavior showed positive recognition of job satisfaction by recognizing that teamwork was higher than direct job satisfaction improvement. Finally, it was shown that team leadership behavior had a positive effect on job satisfaction because teamwork had a significant mediating effect. Therefore, it enabled the smooth coordination of different tasks among the team members, which led the team members to lead organizational innovation through job satisfaction and self-development.

In this study, based on the results of Zarraco et al. (2001), the team leadership process can be reviewed and implications for designing a training course for developing the competencies needed for each process can be suggested[7]. Therefore, team leadership behavior will contribute to promoting interaction among team members. And team leadership behavior can be decisive in identifying the weaknesses and strengths of a particular team within an organization. Through this study, It can be contributed to development of leadership capacity model which can contribute to organizational strategy establishment and operation by improving team leadership behavior and teamwork from the viewpoint of organization, and can be practically utilized to improve performance in organization. Organizational team leadership competencies can be effectively used to develop leadership that is unique to an organization. In terms of effective sharing of leadership, this section provides clues as to how team leadership behavior under teamwork should be exercised. In other words, demonstrating leadership under teamwork means that not only the leader but also the team members including the team must exert themselves in leadership form. The limitations of this study are that the collected data did not include employees engaged in various industries. Also, it is necessary to confirm the influence of the common method bias by measuring each variable in the form of self report. Further research is needed on which factors among the sub-factors influence which sub-factors of the other variables.

## REFERENCES

- [1] G. Hernez-Broome & R. L. Hughes. (2004). Leadership development: Past, present, and future. *People and Strategy*, 27(1), 24-32.
- [2] K. B. Baik & J. H. Kim. (2013). A Review of leadership development research. *Korean Journal of Business Administration* 26(7), 1929-1946.
- [3] J. Intagliata, D. Ulrich & N. Smallwood. (2000). Leveraging leadership competencies to produce leadership brand: Creating distinctiveness by focusing on strategy and results. *People and Strategy*, 23(3), 12-23.
- [4] DongA.com. (2018). Cheong Wa Dae "Women Team Overtaking Teamwork Controversy". DongA.com. <http://news.donga.com/3/all/20180307/88984567/1>
- [5] D. Ulrich & N. Smallwood. (2007). Building a leadership brand. *Harvard Business Review*, 85(7/8), 92-100.
- [6] P. G. Northouse. (2018). *Leadership: Theory and practice*. USA: Sage publications.
- [7] S. J. Zaccaro, A. L. Rittman & M. A. Marks. (2001). Team leadership. *The Leadership Quarterly*, 12(4), 451-483.  
DOI : 10.1016/S1048-9843(01)00093-5
- [8] Q. A. Rae Grant & D. J. Marcuse. (1968). The hazards of teamwork. *American Journal of Orthopsychiatry*, 38(1), 4-8.  
DOI : 10.1111/j.1939-0025.1968.tb00548.x
- [9] C. S. Burke, K. C. Stagl, C. Klein, G. F. Goodwin, E. Salas & S. M. Halpin. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, 17(3), 288-307.  
DOI : 10.1016/j.leaqua.2006.02.007
- [10] G. Yukl. (2012). Effective leadership behavior: What we know and what questions need more attention. *The Academy of Management Perspectives*, 26(4), 66-85.  
DOI : 10.5465/amp.2012.0088
- [11] M. Hoegl & H. G. Gemuenden. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organization Science*, 12(4), 435-449.  
DOI : 10.1287/orsc.12.4.435.10635
- [12] C. E. Larson & F. M. LaFasto. (1989). *Teamwork: What must go right/what can go wrong* (Vol. 10). USA: Sage publications.
- [13] E. Salas, T. L. Dickinson, S. A. Converse & S. I. Tannenbaum. (1992). Toward an understanding of team performance and training.
- [14] J. R. Hackman. (1987). *The design of work teams*. in J. Lorsch (ed.), *Handbook of Organizational Behavior* (pp. 315-342).
- [15] S. Y. Kang, H. K. Kwon & M. R. Cho. (2014). Effects of nurses' teamwork on job satisfaction at Hospital: Mediating effect of self-efficacy. *The Journal of the Korea Contents Association*, 14(12), 881-894.  
DOI : 10.5392/JKCA.2014.14.12.881
- [16] R. L. Anhalt. (1996). *Exploring the relationship between personality characteristics and effective teamwork behaviors*. Colorado State University, USA.
- [17] M. N. Shim. (2014). A study on the effects of complication level of information security professional in the public entity on job satisfaction and job withdrawal intention. *Journal of Digital Convergence*, 12(9), 387-406.  
DOI : 10.14400/JDC.2014.12.9.387
- [18] S. Y. Bae & S. H. Kim. (2017). Analysis of convergent influence of self-efficacy, job characteristics and occupational stress on job satisfaction among hospital administrative staff. *Journal of Digital Convergence*, 15(7), 239-246.  
DOI : 10.14400/JDC.2017.15.7.239
- [19] S. C. Choi, J. S. Lee, S. Y. Sim, J. H. Lee & J. H. Park. (2017). The effect of job stress and depression on job satisfaction among workers in small and medium sized enterprises. *Journal of Convergence for Information Technology*, 7(1), 1-9.  
DOI : 10.22156/C4SMB.2017.7.1.001
- [20] J. H. Kim. (2017). Effects of informal learning and positive psychological capital on job satisfaction and customer orientation. *Journal of Digital Convergence*, 15(12), 195-202.  
DOI : 10.15207/JKCS.2018.9.1.067
- [21] J. R. Hackman. (2002). *Leading teams: Setting the stage for great performances*. USA: *Harvard Business Press*.
- [22] T. H. Rasmussen & H. J. Jeppesen. (2006). Teamwork and associated psychological factors: A review. *Work & Stress*, 20(2), 105-128.  
DOI : 10.1080/02678370600920262
- [23] B. J. Kalisch, H. Lee & M. Rochman. (2010). Nursing staff teamwork and job satisfaction. *Journal of Nursing Management*, 18(8), 938-947.  
DOI : 10.1111/j.1365-2834.2010.01153.x
- [24] C. Watkin & B. Hubbard. (2003). Leadership motivation and the drivers of share price: The business case for measuring organizational climate. *Leadership & Organization Development Journal*, 24(7), 380-386.

DOI : 10.1108/01437730310498578

- [25] G. Yukl. (1999). An evaluative essay on current conceptions of effective leadership. *European Journal of Work and Organizational Psychology*, 8(1), 33-48.  
DOI : 10.1080/135943299398429
- [26] J. R. Hackman & G. R. Oldham. (1974). *The job diagnostic survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects* (No. TR-4). Yale Univ, New Haven : CT, Dept of Administrative Sciences.
- [27] J. C. Anderson & D. W. Gerbing. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411-423.
- [28] J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson & R. L. Tatham. (1998). *Multivariate data analysis*, 5(3), 207-219. Upper Saddle River, New Jersey: Prentice hall.
- [29] S. K. Yang & E. Jeong. (2017). Convergence effects of positive psychological capital and self-leadership in clinical nurses on job satisfaction. *Journal of Digital Convergence*, 15(6), 329-337.  
DOI : 10.14400/JDC.2017.15.6.329

김 준 환(Kim, Joon Hwan)

[정회원]



- 2003년 8월 : 서울시립대학교 경영학과(경영학석사)
- 2010년 8월 : 서울시립대학교 경영학과(경영학박사)
- 2014년 4월 ~ 현재 : 성결대학교 파이데이아학부 조교수

▪ 관심분야 : 조직행동, B2B 마케팅, 영업 관리

▪ E-Mail : kjh715@sungkyul.ac.kr