© 2014

Mee Sook Kim

ALL RIGHTS RESERVED

A NEW PERSPECTIVE ON TEAM LEADERSHIP: THE ROLE OF THE LEADER'S SOCIAL CAPITAL, PERCEIVED POWER, AND TEAM COMMITMENT IN ENHANCING TEAM-LEVEL PERCEIVED SUPPORT, EFFICACY, AND COHESION

by

MEE SOOK KIM

A dissertation submitted to the Graduate School-New Brunswick

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Graduate Program in Industrial Relations and Human Resources

written under the direction of

Stanley M. Gully

and approved by

New Brunswick, New Jersey

May, 2014

ABSTRACT OF THE DISSERTATION

A New Perspective on Team Leadership: The Role of the Leader's Social Capital, Perceived Power, and Team Commitment in Enhancing Team-level Perceived Support, Efficacy, and

Cohesion

by Mee Sook Kim

Dissertation Director: Stanley M. Gully

The present study adopts a relational approach to leadership and examines a leader's role in enhancing team members' attitudes. Previous studies on the leader's social capital found that a leader's central position in social networks increased the leader's prestige and influence in the organization. Extending this research, the current study proposes that the leader's central position in social networks, especially with peer leaders and superiors, should enable the leader to provide valuable resources for the team, and as a result, lead team members to feel more supported and valued by the organization. In addition to the leader's centralities in the networks, the present study further suggests that team members judge their leader's power based on their own information, separate from the actual power that the leader holds. The leader's power perceived by team members is also proposed to positively affect team members' perceptions of organizational support provided for their team. Applying the theory of perceived organizational support to the team-level, this dissertation uses the notion of team climate for organizational support to capture the degree to which team members feel supported by the organization as a team. Furthermore, it is proposed that not all leaders are dedicated to their teams and motivated to utilize their social capital for the sake of their teams. Therefore, the present study proposes

ii

that the leader's team commitment will moderate the relationship between the leader's centrality and team climate for organizational support and the relationship between the leader's perceived power and team climate for organizational support, respectively. Team climate for organizational support enhanced by the leader's centrality and perceived power is further hypothesized to positively affect team-level attitudes including team efficacy and cohesion.

Data was collected from companies located in South Korea using paper surveys. The final sample consists of 44 executives, 84 leaders, and 469 team members. The study used hierarchical regression to test hypotheses. The results show that the leader's centralities in both advice and friendship networks with peer leaders were positively related to team climate for organizational support. However, the leader's centralities in advice and friendship networks with superiors had either marginal or no impact on team climate for organizational support. The leader's power perceived by team members was also positively and strongly related to team climate for organizational support. Contrary to expectations, however, the leader's team commitment did not moderate the hypothesized relationships. Team climate for organizational support was positively related to team efficacy and team cohesion as expected. Additional findings, implications for theory and practice, limitations, and directions for future research are discussed.

iii

ACKNOWLEDGMENTS

I have had the good fortune to meet many amazing individuals, scholars, and caring friends over the course of writing this dissertation. Without their aid, this dissertation might never have come to fruition. Foremost, I wish to thank Stanley Gully, most gifted and steadfast advisor, whose intellectual guidance and unflagging support have helped me to go through the difficult times when I was not sure I could finish this program. Oftentimes, I was reminded to believe in myself in large part because he believed in my ability to succeed. His exceptional intelligence, passion, and kindness have not only contributed immeasurably to the dissertation but also taught me a sense of what kind of intellectual I want to become. I was extremely lucky to meet Stan and be his last Ph.D. student at Rutgers. Jean Phillips, who served on my committee for both thesis and dissertation, has always been there every time I needed her help. Her acute insights has guided my thinking and made the dissertation more theoretically rigorous. Also as a mother of two lovely kids, she has understood my unusual situation and constantly encouraged me to keep pursuing Ph.D. degree. Jessica Methot was like a gift for my dissertation. If she hadn't joined our program at the time I was planning this project, I couldn't have pursued the topic that I have always been interested in. I have benefited enormously from her expertise and experience in the area of social capital and network analysis which was a completely new domain that I wanted to contribute. Yuan Jiang who used to be one of my good colleagues at Rutgers generously consented to serve as my outside committee member. Despite his busy schedule and transition to China, he offered insightful comments and suggestions especially regarding the literature of teams and leadership and statistical analysis.

Park, Won-Woo is my first advisor at Seoul National University where I embarked on a long journey toward Ph.D. degree in human resource management. He opened up a life-changing

iv

opportunity for me and helped me come this far. From the time I began Master's program, he has provided me with intellectual guidance and emotional support which has become foundation for my research. Most of all, he gave me the most crucial aid for dissertation- data collection. I'm deeply indebted to him and words are inadequate for expressing the gratitude I owe to him. I also want to express my special gratitude to CEO Kim, Mr. Hwang and Mr. Noh for facilitating my data collection process and I-group employees for responding to the survey. They made this whole dissertation process less arduous and even amusing.

At Rutgers, I've had the fortune of enrolling in several seminars, and I appreciate professors for teaching me how to comprehend professional work and conduct research. The discussion we had together not only generated ideas and directions for this dissertation, but also let me enjoy a genuine sense of belonging within an intellectual community. I continue to cherish memories I shared with Paula Caliguiri, Adrienne Eaton, Mark Huselid, Doug Kruse, David Lepak, and Patrick McKay. And my thanks also go to Ingrid Fulmer, our Ph.D. program director, who offered me helpful comments at the last stage of dissertation and facilitated graduation process. My wonderful colleagues have accompanied me along the way and still remain good friends. I wish to thank Kyonji Han, Andy Kim, Saba Colakoglu, Anne-Laure Winkler, Ying Hong, Kaifeng Jiang, John McCarthy, Sean Rogers, Bill Castellano, and Shahid Kahn for their friendship, intellectual exchange, and welcome distraction. They have made my years at Rutgers so memorable. While staying at Rutgers, I also have been lucky enough to spend time with friends outside the program, all of whom have touched and supported me in many ways. I am deeply grateful to Nami Shin, Wonsuk Lee, Jaeyoung So, Hyowon Park for lighting up my lonely days of the first year in the graduate program.

۷

Other friends and family have been invaluable to this project's development and my life in general. I thank Joohyun Jin, my best friend and mentor in my life, and Hyewon Yoon, also my best friend and caring sister, for always being on my side for good times and bad times. I am also grateful to a group of friends who I met in California – Ahra Lee, Bora Kang, Eunsun Cha, Kijung Sung, Yoonjin Won- for making me feel at home in the U.S. It's amazing to me how short time can produce family-like bonds.

Finally, I want to express special gratitude to my family. My parents, Jinwon Kim and Junghee Park, have sacrificed themselves for the past three years just to help me finish the graduate program and earn Ph.D. degree. Without their support, I couldn't make my dream come true. Their devotion and love has been the genuine force that generated this dissertation. I am also grateful to my parents-in-law, Changyoung Choi and Nokhee Kim, who welcomed me into their family and understood how much this dissertation means to me. I would like to convey thanks to my wonderful sister, Yoonlee Kim and my brother-in-law, Joohyung Lee, for encouraging and supporting my pursuit of Ph.D. degree. I am so grateful and proud that they are my family. My husband, Jungil Choi, who is the love of my life and best friend, has been my biggest supporter for this dissertation. Without his encouragement and aid, I wouldn't have dared to start this dissertation. He tolerated my dissertation crankiness and buoyed my spirits. I appreciate his understanding and concern for me and this dissertation. And my last thanks go to my precious gifts from God, Alyssa and Jayden. I could finish this dissertation smoothly because they are such wonderful babies. When they grow up many years later, I hope this acknowledgment reminds them how much I love them and appreciate their kindness.

vi

TABLE OF CONTENTS

| ABSTRACT OF THE DISSERTATION | ii |
|---|-----|
| ACKNOWLEDGMENTS | iv |
| TABLE OF CONTENTS | vii |
| LIST OF TABLES | x |
| LIST OF FIGURES ······ | xi |
| INTRODUCTION | 1 |
| LITERATURE REVIEW ······ | 13 |
| Social Capital and Management | 13 |
| The Evolution of Social Capital | 13 |
| Definition and Terminology of Social Capital | 15 |
| Dimensions/Forms of Social Capital | 16 |
| Social Network Perspective | 20 |
| Types of social ties | 20 |
| Ego-network and centrality | 22 |
| Structural holes | 23 |
| Introduction of Social Capital to Management | 25 |
| Social Capital of Leaders | 27 |
| Evolution of the Relationship Perspective in Leadership | 28 |
| Trait and behavioral approaches | 28 |
| Situational approaches | 30 |
| Power/influence approaches | 31 |
| Relation approaches | 35 |
| Leader, Social Capital, and Management | 38 |
| Roles of a leader's internal ties | 39 |
| Roles of a leader' external ties | 40 |
| Perceived power of a leader | 43 |
| Collective Perceptions of the Team | 47 |
| Team Climate for Perceived Organizational Support | 47 |
| Perceived organizational support | 47 |

| Team climate for perceived organizational support | 49 |
|---|----|
| Team Efficacy | 52 |
| Team Cohesion ····· | 55 |
| Leader's Team Commitment | 59 |
| Team Commitment ····· | 59 |
| Leader's Team Commitment ····· | 60 |
| THEORY DEVELOPMENT | 62 |
| Leader's Social Capital and Team Climate for Organizational Support | 62 |
| Perceived Power of Leader and Team Climate for Organizational Support | 68 |
| Moderating Role of Leader's Team Commitment | 72 |
| Team Climate for Organizational Support and Team Efficacy | 77 |
| Team Climate for Organizational Support and Team Cohesion | 79 |
| METHODS ····· | 81 |
| Participants and Procedure | 81 |
| Measures | 83 |
| Social Capital of Leader | 83 |
| In-degree centrality in advice network | 83 |
| In-degree centrality in friendship network | 85 |
| Perceived Power of Leader ····· | 86 |
| Leader's Team Commitment | 87 |
| Team Climate for Organizational Support | 87 |
| Team Efficacy | 88 |
| Team Cohesion ····· | 88 |
| Control Variables | 89 |
| Leader's demographic variables | 89 |
| Team size ····· | 90 |
| Prior team performance | 90 |
| Data Analysis | 91 |
| Confirmatory Factor Analysis | 91 |
| Aggregation | 92 |

| RESULTS | 93 |
|--|------|
| Network Characteristics | 93 |
| Descriptive Statistics | 97 |
| Hypothesis Testing | 98 |
| Leader's Social Capital and Team Climate for Organizational Support | 99 |
| Perceived Power of Leader and Team Climate for Organizational Support | 100 |
| Leader's Social Capital, Perceived Power of Leader, and Team Climate for Support | 101 |
| Moderating Role of Leader's Team Commitment | 102 |
| Team Climate for Organizational Support and Team Efficacy | 103 |
| Team Climate for Organizational Support and Team Cohesion | 104 |
| Supplementary Analysis: Structural Model | 104 |
| DISCUSSION | 105 |
| Theoretical Implications | 106 |
| The External Ties of Leaders and Team Members' Perception of Organizational Sup | port |
| | 106 |
| Social Network Approaches to Leadership | 111 |
| Distinct Role of Perceived Leader's Power ····· | 113 |
| Introduction of Leader's Team Commitment | 116 |
| Team Climate for Organizational Support, Team Efficacy, and Team Cohesion ···· | 118 |
| Potential Liability of Well-Connected Leaders | 119 |
| Alternative Model ····· | 120 |
| Practical Implications | 121 |
| Limitations | 123 |
| Directions for Future Research | 124 |
| CONCLUSION | 127 |
| REFERENCES | 129 |
| TABLE AND FIGURES | 149 |
| APPENDIX A: Executive Survey | 161 |
| APPENDIX B: Leader Survey | 177 |
| APPENDIX C: Member Survey | 179 |

LIST OF TABLES

| TABLE 1: | Composition of Survey 149 |
|------------|---|
| TABLE 2: | Confirmatory Factor Analysis Results 149 |
| TABLE 3-1: | Factor Loadings for Perceived Power of Leader Items 150 |
| TABLE 3-2: | Factor Loadings for TCOS Items 151 |
| TABLE 4-1: | Whole Network Descriptive Statistics |
| TABLE 4-2: | Density of Within and Between Company Ties 154 |
| TABLE 5: | Descriptive Statistics and Correlations |
| TABLE 6: | Regression Analysis of the Relationship between Leader's Social Capital and |
| | TCOS 157 |
| TABLE 7: | Regression Analysis of the Relationship between Leader's Social Capital (with all |
| | measures in one block) and TCOS 158 |
| TABLE 8: | Regression Analysis of the Relationship between Perceived Power of Leader and |
| | TCOS |
| TABLE 9: | Regression Analysis of the Relationship between Perceived Power of Leader (with |
| | all measures in one block) and TCOS 160 |
| TABLE 10: | Regression Analysis of Leader's Social Capital, Perceived Power of Leader and |
| | TCOS |
| TABLE 11: | Leader's Team Commitment as a Moderator of the Relationship between Leader's |
| | Social Capital and TCOS 163 |
| TABLE 12: | Leader's Team Commitment as a Moderator of the Relationship between Perceived |
| | Power of Leader and TCOS 164 |
| TABLE 13: | Regression Analysis of Team Efficacy and Team Cohesion 165 |

LIST OF FIGURES

| FIGURE 1: | Research Model ····· | 166 |
|-----------|--|-----|
| FIGURE 2: | Degree Centrality for Advice Network of Peer Leaders | 167 |
| FIGURE 3: | Degree Centrality for Advice Network of Superiors | 168 |
| FIGURE 4: | Degree Centrality for Friendship Network of Peer Leaders | 169 |
| FIGURE 5: | Degree Centrality for Friendship Network of Superiors | 170 |
| FIGURE 6: | Supplementary Analysis: Structural Model | 171 |

INTRODUCTION

The notion of social capital has multiple definitions and applications due to its multifaceted nature. In social science, social capital generally refers to tangible and intangible resources generated from social relationships and structures that constitute social networks. According to Adler and Kwon (2002), social capital has been an important key to understanding various social phenomena such as family problems, education, community life, and collective action. In these domains, social capital has been largely regarded as intangible resources arising from social networks, structures, and norms. Borrowing the concept, organization researchers have examined how social relationships embedded in the organization affect individual and organizational outcomes. With few exceptions, people do not work in isolation but rather engage in activities that are derived from social functioning. Particularly in the organizational setting, people form a network of relationships and rely on the network to identify career advance opportunities, hear about information, get support from their contacts, and manage reputation by diffusing information about themselves (Burt, 1992). Although human capital (e.g., employees' ability, knowledge, intelligence, and education) has been of major interest in management for the past decades (Becker, 1964; Huselid, 1995), more and more researchers and practitioners have recognized the importance of social networks in modern life and considered social capital as a requisite competency for employees to develop and maintain in order to produce desirable outcomes (Adler & Kwon, 2002; Brass, 1984; Goodwin, Bowler, & Whittington, 2009).

Social networks, a configuration of social ties that connect individuals and units, are the basis for social capital because social networks act as a channel that conveys resources and information, which confer competitive advantages to individuals. This social network perspective has offered a theoretical basis to examine and quantify social capital in more scientific terms and, thereby, dramatically developed social capital research as a distinct research domain. Particularly, the development of network analytical methods (such as UCINET software) has enabled researchers to extend social capital research and apply it to other research streams such as management.

The present study adopts the external view of social capital research, which treats social ties as main conduits of resource flows and examines the perceptual process through which a leader's social capital accrued from external ties turns into team performance (Carpenter, Li, & Jiang, 2012). First, I will review the importance of the team leader's social capital in work organizations. Second, I will provide a detailed review of two major approaches to a leader's social capital—leader-member exchange and social network analysis. Third, I will explain how I extend previous research on leader social capital by focusing on the relationship between external ties and team performance. Lastly, I will delineate the theoretical contributions that I expect to make.

Research on the effect of social capital across levels within the organization is becoming increasingly common. At the individual level, researchers have revealed the positive effect of employees' social capital on promotion (Burt, 1992; Podolny & Baron, 1997), power (Brass, 1984), compensation (Burt, 2007), and performance (Mehra, Kilduff, & Brass, 2001; Sparrowe, Liden, Wayne, & Kraimer, 2001). At the organizational level, researchers have focused on the relationship between a CEO's social capital and the quality of organizational strategic decisions (e.g., Carmeli, Tishler, & Edmondson, 2012), organizational reputation (Baron & Markman, 2000; Standifird, 2006), and firm acquisitions (Haunschild, Henderson, & Davis-Blake, 1999). Compared to individual and organizational levels, however, there has been little attention paid to the group leader's social capital and its effect (Balkundi & Harrison, 2006; Mehra, Dixon, Brass,

& Robertson, 2006). Group leaders are particularly important in theoretical attempts to integrate social capital literature with determinants of managerial effectiveness.

Because teams and groups have become a major work unit in modern organizations (Kozlowski & Bell, 2003; Mathieu, Maynard, Gilson, 2008; Shea & Guzzo, 1987), the competencies of leaders who lead the teams or groups have become a key determinant of organizational success. From a social network perspective, group leaders are embedded in hierarchical systems bridging upper management and employees. They build relationships with their superiors, peer leaders, and subordinates throughout the organization and, therefore the consequences of these relationships can be extended across levels through their ties with other organizational members. Due to the importance of team units and their bridging positions, a leader's social capital needs closer scrutiny because it is a foundation for understanding how the functional and social roles of leaders drive team dynamics.

Previous research on a leader's social capital has mainly benefited from two approaches: leader-member exchange and social network perspective. Prior research on leadership has tended to focus on a leader's functional role such as the development of team processes and the management of team performance (Kozlowski & Bell, 2003). Typically, leaders are expected to coordinate members' behaviors, encourage teamwork, provide feedback, monitor resource flow, solve problems, and clarify directions. However, a leader's role is not limited to functional management; it includes maintaining good relationships with subordinates. According to leadermember exchange theory (LMX), leaders form dyadic relationships with their subordinates and the quality of these dyadic relationships has been found to influence subordinates' performance (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). These studies suggest that leadership resides in social relationships that the leader holds with subordinates and they emphasize a social dynamic occurring in a team.

Another approach to considering a leader's social capital involves applying the social network perspective to leader effectiveness (e.g., Balkundi, Barsness, & Michael, 2009; Balkundi & Harrison, 2006; Balkundi & Kilduff, 2006; Balkundi, Kilduff, & Harrison, 2011; Bono & Anderson, 2005; Brass & Krackhardt, 1999; Hoppe & Reinelt, 2010; Mehra et al., 2006). The social network perspective shifts attention from dyadic relationships with subordinates to a broader scope of relationships through which a leader is connected to other organizational members both directly and indirectly. Also, this approach takes an informal network into account in examining the leader's social capital. Leaders not only build working relations but also form informal relations such as friendship ties with other members. Both relations serve as a basis of a leader's social capital. For example, Mehra et al. (2006) extended the view toward the leader's relational leadership to a set of contacts including their peers, superiors, and subordinates and assumed the leader could garner social capital from these ties. By analyzing informal social networks, they found the group leaders with high levels of social capital could create a good reputation and obtain more organizational support using their image as a leader with a good reputation. Moreover, the leader's centrality within his or her friendship network among group leaders was positively related to group performance and reputation.

More recently, researchers have attempted to integrate leadership and social network approaches to better understand the impact of a leader's social capital on both individual and group-level outcomes (e.g., Goodwin et al., 2009; Sparrowe & Liden, 2005; Venkataramani, Green, & Schleicher, 2010). For example, integrating LMX and social network perspective, Sparrowe and Liden (2005) found that members who had high-quality relationships with their leaders and occupied central positions in the advice network enjoyed more influence among other members. Furthermore, they found the positive impact of LMX and a member's centrality in the network on the members' influence became stronger as the leader was more likely to share trust with the member and the leader was in a central position in his or her own advice network. As found in Sparrowe and Liden (2005), attempts to integrate LMX theory and social network perspective enable researchers to enhance our understanding of how network positions and the quality of relationships interplay and jointly affect employees' outcomes.

Although there has been growing interest in the impact of a leader's social influence on subordinates' attitudes and performance, much less attention has been paid to the relationship between leaders' social capital and the performance of the groups they lead (Brass & Krackhardt, 1999; Yukl, 2002; Mehra et al., 2006). As subordinates enjoy benefits from their leader's social ties with peer leaders and superiors, a leader's social roles are important in leveraging the organizational context in which teams operate (Kennedy, Loughry, Klammer, & Beyerlein, 2009). For example, a leader's dense social ties with peer leaders can facilitate information exchange and support when needed. Leaders who establish strong relations with their superiors are granted more access to privileged information and opportunities for strategically important projects (Sparrow & Liden, 2005; Venkataramani et al., 2010). These possible benefits arising from a leader's social capital are critical for team success. However, most previous research on the relationship between the leader's social capital and team effectiveness focused on the leader's social capital within the team (e.g., Balkundi & Harrison, 2006; Mehra et al., 2006). For example, Balkundi and Harrison (2006) conducted meta-analytic analyses and found that team performance increased when the leader was central within his or her team's internal social network (ρ =.29). That is, leaders who cultivate good relationships with other team members and

occupy central positions have more power to facilitate resource flow, enhance members' commitment to collective goals, and coordinate members' behaviors in a way to achieve goals more effectively. However, this meta-analysis did not address how a leader's external ties affect team performance.

In an effort to enhance our understanding of a leader's social capital, the present study aims to extend previous research in five ways. First, the present study investigates whether a leader's social capital accrued from relationships with other out-group members is positively related to team members' perception of their teams. Despite the popularity of social capital research, there is little knowledge about the impact of social relations that leaders build with outgroup members, such as other peer leaders and superiors, on how team members perceive their leaders and teams. Team performance has been of primary interest in social capital research, but it is also important to examine how a leader's social relations affect team members' attitudes. By doing so, we can clarify the process through which a leader's social capital improves team performance.

Second, the present study examines team members' perception of their leader's power as another important factor that affects team-level perceptions. Regardless of a leader's actual power emerging from his or her social capital, team members may develop their own perception of their team leader's social relations and estimate his or her power within the organization. Even when team members do not have access to a leader's social relations, they can collect information regarding their leader's social capital by observing their leader's social behaviors and social contacts or hearing about gossip. Based on the information, members may develop the perception of their leader's power regardless of how much power the leader actually holds in the organization. It is important to consider perceived power of a leader when examining his or her social capital because the two concepts may not correspond to each other. Leaders have differing styles and willingness to share the information about their power especially generated from social capital (Brass & Burkhardt, 1993). Some leaders tend to withhold the information regarding their social networks or intentionally hide their social connections to powerful figures but others tend to bluff their social influence. When leaders are reluctant to share the information about their social networks and potential influence, team members cannot but rely on their own information channels to judge their leader's power. Therefore, in addition to the direct impact of a leader's social capital, it is meaningful to investigate the members' perceptions of the leader's power and see how it affects team members' perceptions of their teams.

Third, this study suggests team climate for organizational support is as a perceptual consequence of a leader's social capital and perceived power of a leader. The present study argues that a leader's social capital affects the extent to which team members believe how well their team is supported by the organization. Although most previous studies on a leader's social capital argue that a leader's social capital results in a competitive advantage such as greater organizational support for the leader's team (Brass & Krackhardt, 1999; Sparrowe & Liden, 2005), there has been no attempt to examine the emergence of the organizational benefits. In fact, even if a leader induces more organizational support for his or her team using strong ties with superiors and peers, members in the team may not feel supported or just take it for granted when they overestimate their team's status in the organization.

It is also possible that team members feel lack of support if they rely on flawed sources for information or if they have low trust in the leader. Therefore, the present study focuses on how team members perceive organizational support for the team instead of actual organizational support because the perceptions drive team member attitudes and team dynamics. Focusing on individual perception of organizational support, Eisenberger and his colleagues (Eisenberger, Huntington, Hutchison, & Sowa, 1986; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Rhoades & Eisenberger, 2002; 2006) have studied employees' tendency to exert more effort at work as they perceive the organization recognizes their contribution and cares for their well-being, which is called perceived organizational support (POS).

Similar to individuals, teams need support from organizations to perform their collective tasks. For example, teams need supplies, training, information, and sufficient budget allocation to enable them to complete their tasks successfully. Extending POS to the team-level, some researchers have suggested team members share the perceptions of organizational support for the team and the perceptions evolve into team climate (Van der Vegt & Bunderson, 2005). Previous studies found that a team's perceived organizational support was related to team-level citizenship behaviors (Pearce & Herbik, 2004) and team performance (Bashshur, Hernández, & González-Romá, 2011; González-Romá, Fortes-Ferreira, & Peiró, 2009; Guzzo & Dickson, 1996; Patterson, Warr, & West, 2004).

Based on the previous findings on power and team climate for organizational support, the present study suggests that both a leader's social capital and perceived power of the leader strengthen team climate for organizational support. Team members may feel supported because their leader has a broad range of relationships with other powerful contacts and, therefore, the team is genuinely more supported than other teams. Additionally, team members may agree that their team is highly supported and valued by the organization because they believe their leader has more power than other leaders. As mentioned above, some leaders tend to exaggerate their influence over strategic decisions or brag about their acquaintance with upper executives. In this

case, team members may falsely believe their team is valued by the organization. On the contrary, even when leaders indeed have good social capital, they may not use it for their team. However, team members may think the organization highly supports their team because they are aware that their leader has such capital. Again, team members falsely attribute the organizational support for their team to the leader's social influence. Therefore, it is important to consider a leader's actual social capital and members' perception of leader's power together.

Fourth, the present study will incorporate a leader's commitment to the team and examine its moderating effects on the relationship between a leader's social capital and team climate for organizational support and the relationship between perceived power of leader and team climate for organizational support. Organizational commitment indicates an individual's attachment to the organization and willingness to maintain the membership (Porter, Steers, Mowday, & Boulian, 1974; Meyer & Allen, 1997). Organizational commitment has received substantial attention from organization researchers and has been confirmed to be a key determinant of individual outcomes.

Concurrent with the popularity of team research, researchers have argued that individuals also develop commitment toward smaller units, teams, and groups, regardless of organizational commitment and proposed a notion of team commitment to denote individuals' tendency to identify themselves with and feel attachment to the team (Becker, 1992; Bishop & Scott, 1997). Although team commitment has been generally employed as a team-level shared perception, the present study proposes that leaders develop their own sense of attachment and their team commitment does not necessarily correspond to those of other team members. As leaders identify themselves with their teams and care about team members' well-being, they should be more motivated to utilize their social capital to support team process and increase team performance. Fifth, the present study argues that team climate for organizational support will enhance both task-oriented and emotion-oriented perceptions toward the team among team members. First, team members' confidence about their team's abilities—team efficacy—a team specific form of collective-efficacy (Bandura, 1997)—should be increased as members believe the team will be provided necessary resources and support when needed. Second, team climate for organizational support will also foster emotional attachment to the team among members, which is team cohesion. In the literature of social identity, it has been found that positive and salient characteristics of groups are effective in enhancing a sense of identity because, by doing so, individual self-esteem increases accordingly (Ashforth & Mael, 1989; Hogg & Abrams, 1988). Likewise, it is assumed that members will be more likely to feel attached to and identify themselves with their team as they perceive their team is highly valued and appreciated by the organization. Such affective attachment to the team should generate cohesion among team members.

In summary, the present study intends to investigate how a leader's social capital—which represents actual social power—and perceived leader's power—which represents how team members perceive of their leader's power—affect team members' perceptions of their team. Consistent with the argument that perception is more effective in inducing behavioral outcomes (Robbins, 2005), the present study emphasizes members' perceptual changes resulting from a leader's social capital and perceived power. Specifically, team climate for organizational support will be enhanced by both a leader's social capital and perceived power and, in turn, these will engender positive attitudes (i.e., team efficacy and team cohesion) toward the team.

The present study is expected to make contribution in several ways. First of all, the study will advance the knowledge of social capital and team effectiveness by integrating two research

domains. Although a growing number of researchers in management have attempted interdisciplinary efforts applying social network perspective, these studies are often conducted at the individual level without consideration of multi-team systems. Although there are a handful of studies that examined the relationship between a leader's social capital and group performance, only a few studies have explicated the mediating process through which a leader's social capital leads to team performance (e.g., Venkataramani et al., 2010). By examining team-level perceptions, this study will provide more complete explanation as to how a leader's social capital affects members' perceptions and, eventually, increases team performance.

Findings regarding the effects of the leader's social capital are also expected to provide important implications for leadership. The previous research on leadership has sought to understand what makes a good leader. Early leadership researchers have presented trait, behavioral, and situational approaches to explain the determinants of leadership. Moving away from a leader-focused perspective, subsequent leadership researchers have recognized the importance of subordinates' roles and suggested more relation-oriented leadership styles are important (Uhl-Bien, 2006). Recently, extending the view on a leader's relationships, relational leadership has appeared and is receiving growing attention (Uhl-Bien, 2006). In this line, the present study hopes to contribute to the development of leadership theory by demonstrating both external social relations that the leader builds and a leader's commitment to team are critical for leadership effectiveness.

The present study is organized as follows. First, key theoretical constructs in the research of social capital and management are reviewed and explored. Second, based on the research review, an integrated theoretical model and hypotheses will be introduced. Third, methods and results will be provided. Lastly, a discussion of findings, including theoretical implications and practical implications, will be provided. Figure 1 illustrates a research model of the present study to guide discussion of each component of the model.

Insert Figure 1 about here

LITERATURE REVIEW

Social Capital and Management

The Evolution of Social Capital

The concept of social capital has a long history in sociology and economics. In sociology, the term first appeared about a hundred years ago in the works of a social reformer, L. J. Hanifan (1920); his writing invoked the idea of social contacts with neighbors for community development (Woolcock & Narayan, 2000), but the root of social capital is broadly linked to the theories of Durkheim, Weber, Simmel, and Marx in the eighteenth and nineteenth century (Portes & Sensenbrenner, 1993). Portes (1998, p.2) argued that the origin of social capital can be traced to "Durkheim's emphasis on group life as an antidote to anomie and self-destruction and to Marx's distinction between an atomized class-in-itself and a mobilized and effective class-for-itself." (p. 2). In economics, Polanyi, Arensberg, and Pearson (1957) first suggested the term in their book, 'Trade and market in the early empires: Economies in history and theory' (Portes & Sensenbrenner, 1993). Although the contribution of Polanyi, an eminent economic historian, has been often neglected in social capital research, his emphasis on the embeddedness of economy in society and reciprocity and redistribution as means of exchanging goods distinct from market exchange undoubtedly nurtured the development of the idea of social capital in the economy.

Although the term, social capital, was introduced in main intellectual streams a long time ago, it failed to receive sufficient attention from researchers and was even regarded as an impediment to development in the theory of modernization because of social burden and following sub-optimal behaviors (Woolcock & Narayan, 2000). Since the 1970s, however, the resurgent notion of social capital has emerged as a result of efforts to infuse sociological perspectives into economic explanation of individual actions and systematically synthesize the studies around social capital.

The seminal work by Pierre Bourdieu (1983, 1985) and James Coleman (1988) presented refined definitions and analyses of social capital that have fueled reinvestigation of social capital as a means to understand diverse social phenomena. Specifically, Coleman argued that economic approaches have focused on independent individual goals and self-interest seeking, and thereby often overlooked possible social influences on individual behaviors and emergence of social organization. His emphasis on social structure as a source of action has its roots in Granovetter's (1985) notion of embeddedness. Criticizing the economists' "undersocialized" perspective to individual actions, Granovetter (1985) presented the idea of embeddedness which posits economic actions are embedded in norms, social relations, institutions, and social contexts.

That is, sociologists viewed individual decisions as largely shaped by social influences (e.g., advice from family, social and cultural experiences, and peer pressure) even when those decisions are suboptimal from a rational standpoint. Since the work of Bourdieu (1983, 1985) and Coleman (1988), the interest in social capital has exploded and the concept has been widely applied to a variety of domains ranging from education to politics, appraising the impact of social networks and social organization on individual and organizational actions. Reviewing the history of social capital research, Woolcock and Narayan (2000) presented nine research domains that social capital has had a particular impact on: "families and youth behavior, schooling and education, community life, work and organizations, democracy and governance, collective action, public health and environment, crime and violence, and economic development" (p. 229).

Definition and Terminology of Social Capital

The extensive use of social capital indeed made a huge contribution to theory development and policy making across a wide range of research streams, but the meanings of social capital and terminologies have been used inconsistently. Because different researchers focused on different aspects of social capital, they have proposed similar yet different definitions of social capital. For example, Coleman (1988) explained "social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspects of social structures, and they facilitate certain actions of actors-whether persons or corporate actors-who are within the structure" (p.98). He emphasized the function of social capital and presented an open-ended definition.

Unlike Coleman, Bourdieu (1985) placed more weight on networks and defined social capital as "the aggregate of the actual or potential resources that are linked to a possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (p. 248). Putnam (1995), who also contributed to the revival of social capital, defined social capital as "features of social organization such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit" (p. 67). His definition is relatively simple but encompassed both structural features and perceptual aspects of social capital such as trust.

After a dramatic growth of social capital research in recent years, however, there is still disagreement on the definition. Some studies defined social capital rather narrowly, focusing on one aspect of social capital (i.e., norms or trust) while other studies presented a broad one, trying to encompass all possible aspects of social capital. For example, Woolcock and Narayan (2000)

defined social capital as "the norms and networks that enable people to act collectively" (p.226) while Nahapiet and Ghoshal (1998) defined social capital as "the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit" (p. 243). Conducting a comprehensive review on this topic, Adler and Kwon (2002) explained there are "bridging" forms and "bonding" forms of social capital and summarized definitions accordingly. According to them, the bridging view concerns external ties that an actor forms with other actors and these ties constitute direct and indirect links within a social network, whereas the bonding view focuses on internal relationships within a unit such as group, organization, and community. They also suggested a neutral view on social capital that encompasses both external and internal aspects of social capital.

Based on their analysis, Adler and Kwon (2002) concluded social capital differed from other types of capital (e.g., physical and human) in that social capital can be used collectively by actors who hold membership and therefore defined social capital as "the goodwill available to individuals or groups. Its source lies in the structure and content of the actor's social relations. Its effects flow from the information, influence, and solidarity it makes available to the actor." (p.23) Although researchers have offered slightly different definitions of social capital highlighting the different aspects of social capital that they are particularly interested in, they have largely agreed on the premise that social capital refers to resource generated from social relationships and structure, and it differs from physical and human capital in that it resides in the mutual relationships that exist.

Dimensions/Forms of Social Capital

As Coleman argued, social capital can be defined by its function, and social capital is a multi-faceted construct as evidenced by its broad application to research. The versatility of social capital is merited because it enables researchers to expand their view, incorporating multidisciplinary perspectives and, by doing so, improves our understanding the pattern of individual and organizational behaviors. However, the merit becomes the researcher's burden because its complex nature hampers development of a clear and coherent description of social capital. When it comes to measurement, the lack of clear understanding of social capital may even result in low construct validity, which would eventually restrict the rigorousness of research. A number of researchers have recognized the urgency of clarifying the construct and have worked to describe aspects of social capital more clearly (Putnam, 1995).

In this line, Coleman (1998) was the first to separate different forms of social capital and his typology has been cited repeatedly by subsequent research on social capital. First of all, he argued obligation and expectation are critical forms of social capital. He recognizes people who help others are likely to expect their goodwill to be reciprocated in the future and people who receive aid are also likely to feel obligated to repay the assistance. The exchange of goodwill breeds obligation and expectation among actors and this tendency becomes stronger as the people perceive their social networks to be more trustworthy. He cited a form of the rotatingcredit association of Southeast Asia as an example. In this kind of association, people regularly (usually monthly) contribute to a central fund and one of the members is given a credit to use the fund. This association persists until everyone takes his or her turn. However, because people are aware of the risk of an absconder taking the fund away, trustworthiness among members is a necessary condition for the existence of the association. Thus, people in this association use their obligation, expectation and trustworthiness as resources for their social capital and turn this social capital into financial capital.

Second, Coleman considered information as another important form of social capital. People exchange information through their social ties and obtained information provides a basis for action and judgment. The power of social capital as a source for acquisition of information has been frequently recognized in numerous studies. Mehra et al. (2006) and Burt (1992) further noted that people with an extensive social network also can monitor and diffuse information about themselves for their reputation. Lastly, Coleman suggested norms and sanctions as a form of social capital. As a more cognitive form, norms and sanctions rise within a collectivity and they function as a guideline for desirable actions. According to Coleman (1988), in some communities, effective norms inhibit crimes and foster selfless behaviors for collective benefits. Although Coleman's (1988) typology has been an oft-cited ground for following research, he did not address how these forms are related and how they should be measured.

Extending Coleman's typology, Nahapiet and Ghoshal (1998) suggested three dimensions that constitute social capital: structural, relational, and cognitive dimensions. The structural dimension concerns "overall pattern of connections between actors-that is, who you reach and how you reach them" (p. 244). This dimension encompasses impersonal aspects of social capital such as network ties and network configuration. They argued the position in the network or the configuration of network affects the pattern of social interaction and, therefore, emergence of social capital. They further suggested density, connectivity, and hierarchy are possible measurements to indicate the structural dimension. Contrary to the structural dimension, they suggested the relational dimension of social capital which concerns relational features that people develop through social exchange. Trust, as Coleman (1988) noted, is a good example of the relational dimension. People fulfill their need for support, care, and solidarity by developing relational ties with other people. Nahapiet and Ghoshal (1988) suggested that the relational dimension includes most of forms that Coleman (1988) discussed such as trustworthiness, norms and sanctions, and obligation and expectation. As the last dimension, they presented a cognitive dimension to indicate "resources providing shared representations, interpretations, and systems of meaning among parties" (p. 244). This dimension refers to the role of social capital as a cognitive map that interprets incoming and outgoing codes and languages in a way that is consistent with shared meaning and social context. Tsai and Ghoshal (1998) employed a shared vision as an indicator of cognitive dimension of social capital.

Based on the typology of Nahapiet and Ghoshal (1998), Tsai and Ghoshal (1998) examined the relationship among these three dimensions. They employed social interaction as a proxy of a structural dimension, trust and trustworthiness for a relational dimension, and shared vision for a cognitive dimension. By analyzing 15 business units at a multinational electronics company, they found these three dimensions to be interconnected. In particular, they argued that both social interaction among units and shared vision increased perceived trust and trustworthiness but they couldn't find support for the connection between social interaction and shared vision. They cautiously suggested that social interaction might not be a necessary condition for existence of shared vision but they also admitted their findings might be due to a limited measurement of shared vision.

As implied in Tsai and Ghoshal (1998), it is difficult to operationalize social capital because it resides in mutual social relations. Therefore, researchers draw on the social network perspective and network analysis to quantify social capital in a scientific manner. Also, the network perspective helps researchers systemize social relations from which social capital arises. In the next section, therefore, we first review the social network perspective, which provides a theoretical framework with which to measure social capital.

Social Network Perspective

In social capital research, the notion of social network has been frequently used interchangeably with social capital. The social network approach is similar to social capital in that both concern connections among actors which have the potential as a conduit for exchanging benefits. According to Borgatti and Foster (2003), however, a network is more likely to mean "a set of actors connected by a set of ties" (p.992). In other words, a network is similar to a map of relationships whereas social capital is more likely to indicate the resources arising from those relationships.

Although the distinction between social capital and the concept of social network is blurry in many cases, comparing the social network perspective to social capital research yields four distinct features (Balkundi & Kilduff, 2006). First, the relationships among organizational actors are the most important feature of the social network perspective. The network perspective places more emphasis on the relations rather than individual attributes. Second, the network perspective posits actors are all embedded in a larger social system. As actors are embedded in a certain social system, a boundary between in-group and out-group becomes distinct. Third, the network perspective posits actors accrue social capital from the social connections and thus explains the utility of social capital. Fourth, network researchers tend to focus on structural patterns as determinants and descriptions of the nature of the network and its function.

Types of social ties

In the social network perspective, the configuration of a social network, which consists of actors connected by ties, has been of particular interest. A set of actors, often called nodes, constitutes a social network, and types of networks vary depending on the content of ties. Social ties are like channels for information and resource flows (Tsai & Ghoshal, 1998).

Podolny and Baron (1997) differentiated among the types of social ties and suggested a typology of content network tie content. As resource-conveying ties, informational ties refer to ties that facilitate access to interpersonal information and strategic gossip and task advice ties convey the flow of task advice such as workflow input/outputs and financial support. Enhancing organizational identity, buy-in ties convey performance feedback, authority over job-related initiatives, and organizational rules whereas friendship ties transfer interpersonal support like trust and affect.

Other researchers, however, have simply categorized social ties into instrumental ties and expressive ties. Instrumental ties refer to the channels that convey work-related advice and information that is particularly important for performance; such ties include informational ties, buy-in ties, and task advice ties. These ties usually emerge from formal relationships exchanging resources necessary for work completion. On the other hand, expressive ties facilitate emotional support and care among actors, which parallels friendship ties. Through these ties, people exchange their value and affect. Different ties convey different information and resources and, by doing so, determine the nature of social network and forms of social capital that actors can accrue from the ties. That the content of social ties determines the types of resources also clarifies the difference between social capital and the social network. Leenders and Gabbay (1999) argued that a social network differs from social capital in that a social network may convey social liabilities when constituent social ties impede flow of resources or cost too much time and energy to maintain whereas social capital only refers to positive outcomes derived from social ties.

In addition to the configuration of nodes and ties within a network, the density of the network structure is another crucial construct in the social network perspective. Density in the network, which refers to interconnectedness of nodes, has been confused with group cohesion because both concern the magnitude of social interaction among members (Marks, Mathieu, & Zaccaro, 2001). However, density in the network structure presumes a pattern of interaction among members but does not necessitate affective states among members, and in contrast group cohesion is based on members' attraction to each other. Density of the network is commonly measured as a "ratio of existing ties between members relative to the maximum possible number of such ties" (Marks et al., 2001, p. 357).

Ego-network and centrality

According to the social network perspective, an individual (an actor) is the smallest unit of analysis and the focal actor (ego) is connected to numerous neighbors (alters). The social network, which includes an ego and alters, is called an ego-centric or ego network. The concept of the ego-network is useful to investigate social dynamics among individuals and estimate the social capital of the focal actor. As a main type of social capital, researchers have focused on power over other actors as power is the ultimate benefit that actors can expect by utilizing the resources from social ties. In this regard, an actor's relative position within the network has been of particular interest in the network perspective because actors who occupy a central position in networks have been found to exercise more power and control over resources. Researchers have found that centrally located individuals are better positioned to gain new information, monitor resources, and receive social support (Mehra et al., 2006). Thus, multiple types of measurement have been introduced to capture the degree of centrality: betweenness, degree centrality, and closeness (Hanneman & Riddle, 2005). Betweenness refers to the extent to which a focal actor connects two other actors on the shortest path. As actors communicate and exchange resources only through the focal actor, the power of the focal actor relative to other actors increases. Degree centrality refers to the number of ties that a focal actor has. Specifically, in-degree centrality refers to the number of ties in which other actors choose the focal actor as a primary contact, which illustrates the focal actors' prestige or importance. In contrast, out-degree centrality refers to the number of ties in which the focal actor reaches out to other actors. This index represents the focal actor's influence over other actors. Closeness refers to the extent to which the focal actor is closely related to other actors in the social network. The more an actor has connections with other actors in the network, the more influential the actor becomes.

Structural holes

In the social network perspective, social capital is generally operationalized as network centrality using one of the aforementioned indices, and density of connections, which concerns the frequency and closeness with others in the network (Brass, 1984). However, there has been a debate over which network configuration is more effective in generating resources. Researchers who adopt a more relational perspective toward social capital (e.g., Coleman, 1988; 1990) assert that social capital is a product of dense ties with closure. They believe people tend to exchange more resources, support, and information when they build strong trust, interdependence, and affect through their social ties. Therefore, a dense network with closure (i.e., a network comprised of actors highly interconnected to one another) better facilitates social exchange and gives rise to norms within the unit, which consequently produces richer social capital.

In contrast to the relational perspective, some network analysts studying social capital propose a different aspect of social networks that is instrumental to actors. According to the structural holes perspective (Burt, 1992; 1997; Podolny & Baron, 1997), a sparse network that has weak connections among actors creates more advantages than a closed network represented by a dense network with strong connections. Burt (1992), who examined managerial mobility in a high-technology firm, argued that social capital resides in the patterned absence of ties and he called the absence a structural hole.

The idea of structural holes is rooted in Granovetter's (1974) work on the strength of weak ties. Granovetter (1974) explained the strength of ties is determined by trust, intimacy, and interdependence shared by two actors. Contrary to intuition, he argued weak ties are more instrumental for goal attainment. If a network consists of close friends and most of them are interconnected, the network density and individuals' motivation to help each other might be greater. However, there will be fewer opportunities to get access to novel and nonredundant information. Expanding Granovetter's (1974) weak tie theory, Burt (1992) further proposed the notion of "tertius gaudens (the third who benefits)" which focus on the actor who bridges two other actors who are not themselves connected. The tertius occupies a brokerage position between unconnected alters and enjoys information and power benefits by controlling the inflow and outflow of resources. Until recently, there has been debate over which network perspective (network closure vs. structural hole) is more beneficial in generating social capital (Lin, Cook, & Burt, 2001). Regarding the topic, Adler and Kwon (2002) asserted that the value of each perspective depends on the objective of social capital research and the type of task. They explained Coleman's relational perspective is more useful in encouraging solidarity among actors while Burt's structural hole is more effective in facilitating information and resource flow.
In this section, I have reviewed the social network perspective and key network terms that are frequently used in the social capital research. The social capital network perspective enables researchers to systemize social capital in a way that it can be applied to multiple analyses. Drawing on the social network perspective, therefore, this study will employ the notion of centrality, not structural holes, to indicate team leader's social capital in the organization because centrality is more appropriate to measure individual power and prestige while structural holes are more effective in understanding the flow of information (Burt, 2001; Ibarra & Andrews, 1993) The next section reviews how social capital research has been applied to management by adopting the social network perspective.

Introduction of Social Capital to Management

The growing popularity of social capital as a concept and subsequent findings has influenced management research enormously. In management, it was not until the 1980s that organization researchers began to find social capital useful in explaining a variety of organizational phenomena as well as inter-organizational dynamics (Leenders & Gabbay, 1999). Researchers have found that social capital brings about positive outcomes to both individuals and organizations through social ties. For example, social capital helps individuals get promoted faster (Burt, 1992), exercise more power and/or be perceived as powerful by others (Brass, 1984; Kilduff & Krackhardt, 1994; Krackhardt, 1990; Ibarra & Andrews, 1993), gain more compensation (Burt, 1997), facilitate creativity and innovation (Burt, 2003; 1998; Tsai & Ghoshal, 1998), reduce turnover (Krackhardt & Hanson, 1993), and perform better (Sparrowe et al., 2001). Social capital has also been found to be useful in creating good-quality applicant pools in the recruiting process (Fernandez & Weinberg, 1997) and job search (Granovetter, 1995; Lin, Ensel, & Vaughn, 1981). At the top level, a CEO's social capital has been associated with corporate acquisitions (Haunschild et al., 1999) and CEO compensation levels (Belliveau, O'Reilly, & Wade, 1996).

Although most of the literature has focused on individual outcomes, the prevalence of flat organizations and the greater autonomy of middle managers has invoked group and team researchers' interest in social capital. For example, Sparrowe and colleagues (2001) focused on the social network within a group and demonstrated that group performance was significantly affected by negative social networks (e.g., hampering others' jobs and uncooperative behaviors) within the group. Social networks among groups as well as within a group play a critical role in management. Consistent with Granvoetter's (1973) weak-tie perspective, Hansen (1999) argued weak ties among groups were beneficial to group task completion when the task was not complex. Reagans, Zuckerman, and McEvily (2004) similarly demonstrated that the diversity of team composition was positively associated with the range of the team's social network because team members with diverse backgrounds had various yet non-overlapping social ties with external constituents and, thus, expanded the range of the team's network. This finding provided important managerial implications for team staffing.

The manager's social network has been specifically reported to exert substantial impact on group performance. Mehra and colleagues (2006) paid attention to the fact that the leader develops multiple social networks within the organization and tried to examine whether the leader's centrality in these different networks was related to group performance. After analyzing data collected from 88 sales groups in the mid-western United States, they found that a group leader's centrality in both the friendship network with peer leaders and the friendship network within his/her group was positively related to group performance. Examining the effect of social capital of middle managers who lead teams is of particular importance in management. The increasing use of team units and greater autonomy of managers has resulted in the growth of group-level analyses in management and, as a result, the leader's role and social influence has gained more prominence in terms of interest in determinants of group effectiveness. The social capital of leaders is a relatively new concept in management but the leader's social roles have been traditionally diagnosed in leadership literature. Given the significance of a leader's role in the modern organization in which teams have become a major work unit, the next section will focus on a leader's social capital and discuss its implications for management in more detail.

Social Capital of Leaders

The concept of the leader's social capital has not received sufficient attention from researchers given its importance in management (Brass & Krackhardt, 1999). Before we begin a review of research on leaders' social capital, it is useful to clarify the terms, *leader* and *manager*. Most studies on leadership have agreed that they are conceptually different, but the degree of difference has been an issue (Bedeian & Hunt, 2006; Yukl, 1989). Yukl (1989) suggested that leaders provide care and support for their subordinates whereas managers are merely interested in completing tasks and exercising authority. While exchanging letters with Hunt, Bedeian similarly pointed out that many studies on leadership equated managers with leaders even when managers did not possess necessary qualifications as a leader (Bedeian & Hunt, 2006). He believed a leader is more than a manager who depends on authority and power to get things done. Contrary to Bedeian, Hunt was more generous about using the terms interchangeably;

leadership can be viewed as one important aspect of management. Despite the previous effort to differentiate the terms, the distinction is still unsettled and, in many cases, managers are perceived as leaders by their subordinates. Because attitudes, perceptions, and behaviors of subordinates are of interest and they are likely to view managers as leaders, the current study will use the terms leader and manager interchangeably.

As discussed briefly above, social network research and social capital researchers are expanding their view of leaders' social capital from a dyadic relationship toward multidirectional relationships linking various actors, both inside and outside the organization. Mehra et al. (2006) suggested that the social capital arising from these relationships provide competitive resources for the leader and teams that he or she leads. When discussing the contribution of social capital to management, most researchers rely on either sociological or economic grounds, but examining the relational aspect of the leader is not unprecedented in the leadership literature. Although traditional leadership studies did not use the term "social capital," they did consider the leader's social influence, either implicitly or explicitly. More recent studies even separated a leadership style that particularly focused on the relational aspect of the leader and labeled it relational leadership or relationship-oriented leadership. Before we discuss the social capital of leaders, we need to understand how the leadership literature has traditionally conceptualized and incorporated the relational aspect of leaders.

Evolution of the Relationship Perspective in Leadership

Trait and behavioral approaches

Traditional approaches toward leadership generally began with examining the leader's traits and behaviors. The trait approach posits that leaders have extraordinary individual attributes such as energy, insight, and abilities and it gained considerable attention in early leadership literature (Boyatzis, 1982). The behavioral approach is more interested in identifying a successful leader's behaviors and examining their effect on managerial effectiveness (Blake & Mouton, 1982; McCall & Segrist, 1980). The behavioral approach is of particular relevance here because it is one of the first theoretical attempts to take the social aspect of managerial responsibilities into account in discussing leadership. The two-factor approach categorized leadership behaviors into task- and relationship-oriented behaviors and research from this perspective tried to investigate possible connections to subordinates' performance. Despite the widespread use of the two-factor approach, there is inconsistent evidence for the effect of both orientations on leadership effectiveness (Yukl, 1989).

Based on the behavioral approach, Blake and Mouton (1982) presented a managerial grid model that suggests five leadership styles based on the leader's concern for task and concern for people. Although people have criticized overly simplistic conceptualizations of behaviors and scant empirical support for the effects of both types of orientations, it is noteworthy that people realized the significance of leaders' efforts to maintain good relationships with people in implementing strategies. Structuring the leader's relational behaviors in terms of leadership effectiveness provides a basis for understanding the social capital approach in leadership. Yet, the scope of social relationships in the research on leader behaviors was usually limited to the relationship with subordinates and the possible appropriability of social relationships, which is a main issue in the social capital research, was neither identified nor pursued. Trait and behavioral approaches gained popularity from early leadership research, but attributing the emergence of leadership to individual qualifications has been criticized for lacking theoretical grounding and having limitations of measurement (House & Aditya, 1997). Realizing the limitations that the trait and behavioral approaches entail, leadership researchers turned their attention toward situational approaches that emphasize situational factors for effective leadership. This approach posits there is no single best leadership style; rather the emphasis is on different situational conditions that call for different leadership types.

Situational approaches

Under the situational approach, a number of different theories emerged to describe distinct leadership styles appropriate for certain situations. For example, path-goal theory (Evans, 1980; House, 1971) focuses on situational factors such as the type of work and the nature of the environment and posits these factors determine the optimal level of the leader's behavior to attain goals. Along similar lines, situational leadership theory or life cycle theory (Hersey & Blanchard, 1969; 1988) postulates four different leadership styles that may be appropriate depending on the level of subordinates' maturity. Leadership substitutes theory (Kerr & Jermier, 1978) posits subordinates, environmental factors, and tasks can replace leadership roles. Fiedler's LPC contingency theory (1967; 1978) uses a leader trait called LPC (Least Preferred Co-worker score) and specifies situations in which high LPC leaders are more effective. Fiedler and Garcia (1987) further developed contingency theory and introduced the cognitive resource theory of leadership. Cognitive resource theory suggests that the leader's intelligence interacts with stress experienced by the leader and the followers, which, in turn, affects performance. Vroom and Yetton (1973) proposed normative decision theory which specifies an optimal decision procedure in a particular situation.

These studies under the situational approach contributed to the development of relationship-oriented leadership in three ways. First, the situational approach recognized the importance of subordinates' roles. Scholars realized leadership effectiveness is largely determined by subordinates' maturity (Hersey & Blanchard, 1969; 1988), stress (Fiedler & Garcia, 1987), and schemas (Lord & Maher, 1991). That is, these studies imply that leadership is a social process between a leader and subordinates. Second, when these situational approaches were predominant, the concept of social network or social capital was not yet introduced in management and, therefore, there was no discourse on how social structure affects the leader's behaviors and how the position that the leader holds influences the leader's power and influence. However, these leadership studies serve as groundwork for a social network approach to management for they reveal the significance of situational factors, which include key elements of social network research, such as the relative position of the leader (i.e., centrality) in social structure, distance to central authority (i.e., network proximity), and relational constraints (i.e., social liabilities) that affect the leader's behaviors. Third, the situational approach extends the scope of leadership from a dyadic relationship to organization-wide relationships. Leadership researchers have begun to consider leadership as phenomena occurring in a complex social system and have begun to pay attention to organizational influences on leadership (Phillips, 1995).

Power/influence approaches

Another stream of leadership literature concerns the power and influence that a leader holds. The studies under the power and influence approach posit that a leader exercises power stemming from either personal expertise or position to influence subordinates' behaviors and attitudes (Yukl, 1989). The findings show that effective leaders appropriately use their power without damaging their subordinates' esteem and, as a result, succeed in inducing commitment, loyalty, and compliance (Taber & Yukl, 1983). Charismatic leadership is a representative leadership style of power and influence approaches. Charismatic leadership is based on the followers' perception of their leader as charismatic (Conger & Kanungo, 1987; 1988; House, 1977; Weber, 1947). As followers perceive their leaders as extraordinary and heroic, they tend to associate positive outcomes with the leader's charismatic qualities (Conger & Kanungo, 1987). Although most of studies on charismatic leadership emphasized the leader's behaviors, charismatic leadership is basically a relationship-oriented perspective because the perception of the followers plays a critical role in establishing the leader's charismatic image (Galvin, Balkundi, & Waldman, 2010).

Based on a social process approach to charismatic leadership, Howell and Frost (1989) argued that the key to charismatic leadership stems from maintaining a good relationship with followers. More recently, Howell and Shamir (2005) criticized the leader-centered perspective of charismatic leadership prevalent in the previous leadership literature and emphasized the role of followers and their relationship with the leader. This study viewed charismatic leadership as a social process occurring between the leader and followers rather than idolizing certain individuals. In this line, Pastor, Meindl, and Mayo (2002) linked the social network perspective to the distribution of employees' perceptions and evaluation of the leader's charisma. They demonstrated that charisma attributions were distributed and converged through the employees' social ties. Extending Pastor et al.'s (2002) finding, Galvin et al. (2010) also adopted a network approach to charismatic leadership, and sought to understand the mechanism through which the leader's charismatic leadership spreads and reaches to distant employees.

Drawing on the social network perspective (Burt, 2004, 2007), Galvin et al. (2010) posit that individuals who are proximal to the leader and hold central positions in the network of subordinates are better at influencing the degree to which distant employees perceive their leader as charismatic through promoting and defending the leader, and modeling followership. Balkundi et al. (2011) tested two contradicting models about the relationship between perceptions of charisma and the leader's central position in an informal network within a team. They confirmed more compelling evidence for the argument that charisma is constructed through a social process with subordinates. Their findings suggested that charisma may derive from a central position within a network.

Another popular stream in leadership, transformational leadership, is also subsumed under the power and influence approach. Transformational leadership refers to the process enhancing the followers' motivation, morale, commitment, and performance by encouraging their identity with the organization, influencing their attitude, and providing support (Bass, 1985; Burns, 1978). Bass (1985) viewed transformational leadership as broader than charismatic leadership because transformational leadership is a process that involves charisma (articulating vision and expressing confidence), intellectual stimulation (encouraging creative thinking), and individualized support. Transformational leaders have been found to affect followers' motivation and performance (Judge & Piccolo, 2004), job satisfaction and effort (DeGroot, Kiker, & Cross, 2000), and citizenship behaviors and commitment (Podsakoff, MacKenzie, Moorman, & Fetter, 1990).

Given the relationship-oriented nature of transformational leadership, an increasing number of studies are attempting to associate social capital or the social network perspective with transformational leadership (Bono & Anderson, 2005; Zohar & Tenne-Gazit, 2008). For example, Bono and Anderson (2005) assumed transformational leaders would be more trusted and sought out for advice by employees because they promote inspiration and creativity and, most of all, they are good performers themselves. They showed that the leader's transformational behaviors were related to the leader's centrality in advice and influence networks. In addition, they found that an employee who reports to a transformational leader was also perceived as central in both advice and influence networks by other employees. Zohar and Tenne-Gazit (2008) also demonstrated that transformational leadership enhanced the density of the communication network within a group, which in turn strengthened safety-climate. The link between transformational leadership can appear at the group level, which refers to the group's collective ability to take a transformational leader's role, and a number of studies (i.e., Gupta, Huang, & Yayla, 2011) confirmed the positive link between collective transformational leadership and the group's social capital.

The relationship-oriented analysis of leadership that appeared under the behavioral approach has proliferated in a new guise as part of the more recent charismatic or transformational leadership studies. More leadership researchers view leadership as a social process and recognize the significance of social dynamics occurring around the leader. In addition, the popularity of social capital and the social network perspective in management has accelerated the changes with respect to the way people perceive leadership in modern organizations. The growing interest in these new approaches have evolved into a distinct stream that emphasized social influences and it is called relational leadership. The research on relational leadership is evolving but in some ways, still at a nascent stage. It deserves more in-depth

discussion here given its growing prevalence and potential to be a new direction for future leadership theory.

Relational approaches

As we reviewed above, the relational approach to leadership has been around in traditional leadership research, but relational leadership differs from the traditional approach in that it views leadership as a social process. Uhl-Bien (2006) stated traditional leadership generally used the term "relational," indicating the leader's behaviors that emphasized developing trust, commitment, and support in work relationships or the leader's pro-social tendencies. However, relational leadership starts with viewing persons and organizations as "made in processes not the makers of processes" (p. 655). Drawing on the relational perspective, Uhl-Bien (2006) defined relational leadership as "a social influence process through which emergent coordination (i.e., evolving social order) and change (e.g., new values, attitudes, approaches, behaviors, and ideologies) are constructed and produced" (p.668). In this sense, leadership is not a product of position but an outcome of ongoing social processes throughout the organization. Viewing leadership as social dynamics evolving in any direction in the organization, however, makes it difficult to prescribe and measure leadership (Uhl-Bien, 2006). Therefore, despite the growing interest in relational leadership, such research has been abstract in terms of operationalizability and, as a result, has served as more of an overarching framework that provides theoretical grounds for attempts to examine the relational factors and social processes in leadership.

There are other alternative leadership styles that focus on social processes in terms of leadership emergence such as shared leadership (Carson, Tesluk, & Marrone, 2007) and

distributive leadership (Brown & Gioia, 2002), but the most dominant form of relational leadership is leader-member exchange theory (LMX, Graen & Scandura, 1987; Graen & Uhl-Bien, 1995). In fact, some studies have used LMX as a synonym for relational leadership or vice versa (Ford & Seers, 2006). LMX, also called vertical dyad linkage theory, assumes a leader builds different relationships with different subordinates (Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975; Graen & Uhl-Bien, 1995).The vertical dyad linkage is not restricted to a relationship between a leader and a subordinate but also includes a leader's relationship with his or her own boss (Cashman, Dansereau, Graen, & Haga, 1976; Graen & Uhl-Bien, 1995).

According to LMX, the quality of relationship between a leader and a subordinate determines individual attitudes and performance. Drawing on social exchange theory (Gouldner, 1960), LMX posits that employees who receive support and care from their leader feel more obligated to reciprocate the benefits through higher trust, commitment, and respect toward the leader, which leads to a high-quality relationship. To date, LMX has been one of the most popular research topics in leadership and has been empirically found to be related to a variety of individual outcomes such as performance ratings, supervisor satisfaction, role conflict, organizational commitment, and citizenship behaviors (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Kacmar, Witt, Zivnuska, & Gully, 2003).

Because LMX is mostly based on the relationship between a leader and a subordinate, interpersonal dynamics within a team have been of particular interest. Network features such as the leader's centrality within a team, network density among team members, and proximity of members to the leader all influence the way employees perceive their relationship with their leader and group performance. For example, Sparrowe and colleagues (2005) integrated LMX theory and social network features to explicate how members obtain influence in the organization. They demonstrated the leader's centrality in the advice network, as well as the members' centrality in determining the quality of LMX relationships and following outcomes.

Responding to House and Aditya's (1997) call for group-level investigations, recent researchers have begun to examine the effect of LMX at the group level as well focusing on aggregated LMX (average level of team members' perceived LMX) and LMX differentiation (within-group variance in LMX) (Liden, Erdogan, Wayne, & Sparrowe, 2006; Scandura, 1999; Stewart & Johnson, 2009). Previous studies found that group-level LMX was associated with team effectiveness (Zhang, Waldman, & Wang, 2012), team potency and team conflict (Boies & Howell, 2006), and team-level affective commitment and team performance (Le Blanc & González-Romá, 2012). In group-level LMX studies, the social network perspective is particularly instrumental in understanding social dynamics occurring among team members within a group.

It is genuinely inspiring that the leadership literature is continuously evolving by embracing diverse perspectives of leadership. In particular, moving from focusing on the leader's individual traits and behaviors to recognizing other actors' roles (i.e., subordinates) and social processes occurring around the leader has changed our lens on leadership. Today, along with the popularity of the social capital literature, relational approaches are at the forefront of leadership. In this vein, Hoppe and Reinelt (2010) provided more specific explanation as to how the social network perspective can enhance the leadership literature. In describing core social network terms, they attempted to show how the advanced techniques of social network analysis can be applied to diagnose four types of leadership networks: peer leadership networks, organizational leadership networks, field-policy networks, and collective leadership networks. Their study makes an important contribution to the movement toward integrating the social network perspective with leadership by raising key network questions for each leadership style. The review shows us basic steps to apply network analysis techniques to the leadership domain.

Despite growing interest in integrating leadership, social capital, and the social network perspective, theoretical efforts to organize previous relationship-based approaches to leadership, especially in terms of the social capital perspective, have been scarce. Moreover, empirical evidence to support the relational approach to leadership effectiveness is lacking. Therefore, based on the review of the evolution of relation-based perspectives in leadership, this study will further discuss current findings regarding the social capital of leaders, as an outcome of integrating the social network perspective and management, and its effect on managerial outcomes.

Leaders, Social Capital, and Management

In management, less attention has been paid to social ties and the social capital of the leader in spite of the prevalence of relation-oriented leadership behaviors (Brass & Krackhardt, 1999). Thus, it is still premature to conclude the effect of a leader's social status on their work unit, but recent studies have provided compelling evidence with regard to the potential for the leader's social capital to be a key determinant of both individual and group performance. Most of these studies rely on the social network perspective to support the logic underlying their arguments. In particular, a leader's centrality in the social network is critical in evaluating the degree of the leader's social capital and its effects. However, it should be noted that not all previous findings support the positive role of the leader's social capital and social network.

There is debate over whether the leader's social ties and following social capital are indeed beneficial to team effectiveness. On one hand, it is argued that leaders who have an extensive social network are in a better position to help team performance because it is easier for them to monitor information flow, get access to strategic opportunities, and deploy valued resources in a way to facilitate team processes. On the other hand, the negative effects of the leader's social ties have been also raised. Some researchers have warned of the perils of dense social relationships because leaders' behaviors may be constrained by close relationships with other actors (Boyd & Taylor, 1998; Krackhardt, 1999).

Leaders may give up a project opportunity or concede to a strategic decision that may impede their team projects just to maintain good relationships with their peer leaders or superiors. A leader's social network within a team also may constrain the leader's behaviors and abilities (Balkundi & Harrison, 2006). Intimate relationships with certain subordinates may hamper unbiased performance ratings, promotions, and task allocation, which eventually causes conflict and mistrust toward the leader among members. Some have found evidence for both positive and negative effects of social networks (Sparrowe et al., 2001). A leader who acts as a broker in a team network can facilitate the flow of information among team members by connecting otherwise unconnected members. However, a leader as a broker is prone to bringing in negative consequences to the team because brokers may involve information distortion or create conflict within a team (Balkundi, Barness, & Michael, 2009). Despite the possible constraints of a dense social network, a majority of the previous studies tend to advocate the utility of the leader's social capital and its significance in determining group effectiveness.

Roles of a leader's internal ties

The research on a leader's social capital can be categorized based on the types of social ties: internal vs. external. The leader's internal social ties indicate the resources that the leader garners from the relationships that the leader holds with his or her subordinates within a team. Social structure and patterns of social ties exist within a team. The leader's position in the network is a key determinant of the leader's social influence within a team. In network terms, the degree to which an individual is trusted, respected, and sought out for advice in the network is referred to as centrality. An individual's centrality is associated with more control over valued resources, influence on important decisions, and access to strategic opportunities. Leader centrality within a team has been studied most frequently by researchers who have adopted a network perspective toward the leader's role in enhancing group effectiveness. As strong evidence, Balkundi and Harrison (2006) conducted a meta-analysis and found that there is a significant correlation between a leader's centrality within a team's informal social network and team task performance. This supports the argument that central leaders can coordinate tasks, induce commitment to collective goals, and dissolve conflict better than peripheral leaders and, thereby, help team members perform better.

In terms of what precedes a leader's centrality within a team network, there is still some debate. One perspective argues that a leader who exhibits desirable leadership behaviors such as communication with optimism and encouraging risk-taking is more likely to occupy a central position in a team network (Bono & Anderson, 2005) whereas others view that a leader centrally located has more opportunities to engage in social interaction with subordinates, exhibit supporting behaviors and, therefore, influence how subordinates perceive their leader (Balkundi et al., 2011).

Roles of a leader's external ties

In addition to the internal ties with in-group members, leaders also build relationships outside the team with peer leaders and superiors and utilize the resources accrued from those external ties. Previous studies on the leader's external ties mostly focused on top managers' external activities and their impact on organizational outcomes (Baron & Markman, 2000). With the increasing use of team units, more and more attention is being paid to the external ties of leaders who lead teams. The leader's ties with peer leaders are called horizontal ties and those with superiors are called vertical ties. Both horizontal ties and vertical ties are found to be associated with the leader's performance and group performance. As Burt (1992) noted, in many cases, leaders rely on interpersonal relations to utilize resources located outside their groups. In particular, important strategic decisions are generally made by upper-level executives and, therefore, vertical ties with these superiors should provide a competitive advantage for the leader.

In addition to the tangible resources, a leader who is regarded as a friend of superiors also enjoys a reputation as an influential figure. Empirical evidence that supports the effect of these external ties is increasing. Although conducted in educational settings, Pil and Leana's (2009) study investigated the effect of leaders' (i.e., teachers) external ties on group performance (i.e., students' performance). They found that strong horizontal ties with peers were beneficial to students' performance and the strength of the vertical ties with the administrator was associated with greater benefits that their students received. This finding corroborates the argument that a group of leaders who are closely connected are more likely to exchange information and provide support, and, by doing so, enhance each other's team performance. The strength of vertical ties served as a conduit for the flow of benefits from the upper level to the lower level. In the context of work organizations, Mehra et al. (2006) found that teams whose leaders were central in the informal network of peer leaders exhibited higher performance. The benefit that employees can enjoy from the leader's external ties is not confined to work-related resources and support. Sparrowe and Liden (2005) argued that employees whose leaders are central in the social network throughout the organization also obtain influence through high-quality LMX with their leaders.

In fact, in many cases, the benefits emerging from the leader's internal and external ties are interconnected and jointly comprise the leader's social capital. Thus, recent studies have moved toward taking both external and internal ties into account to examine the effect of the leader's social capital by adopting a cross-level perspective. They provide a more complete picture of how a leader's internal and external ties interplay and affect individual and team performance. The logic upon which these studies are based is that the benefits accrued from the leader's external ties with peer leaders and superiors are transferred to their teams through relationships with in-group members. For instance, the benefits of social capital that leaders garner from their external ties affect the quality of relationships with subordinates within their teams (Sparrowe & Liden, 2005) and the relationship between a leader and a subordinate becomes more important when the leader is central in a team network as well (Goodwin et al., 2009). Furthermore, the strength of external ties that leaders hold has an impact on the perceptions of the subordinates, particularly with regard to their ability as a leader, within their teams. Employees tend to construct the image of their leaders based on their observations and direct experience with the leader. The leader's social connections outside the team also provide information about the leader's ability and power throughout the organization. Leaders who have strong social connections with upper supervisors and peer leaders are perceived to hold a higher

status by subordinates, and such perceptions positively affect the quality of LMX from employees' perspectives (Venkataramani et al., 2010).

In summary, leaders who are central in social networks with peer leaders and superiors hold greater social capital such as reputation, information, control over resources, and authority. They are better at obtaining necessary resources for their own teams (Balkundi & Harrison, 2006). When the leaders also hold dense social ties with team members, those internal ties facilitate the transfer of a leader's social capital to members and, thereby, increase team performance over time. As a distinct form of leaders' social capital, the next section will further discuss how team members' perception about power, which is the main interest of the present study, is particularly influenced by how they perceive their leader.

Perceived power of a leader

Power has been often referred to as one form of social capital that actors expect to develop through social relationships. In organizational settings, people are embedded in a social structure and the hierarchy of power emerges accordingly. The source of power, however, is not restricted to hierarchical positions. Power is a social phenomenon shared by two or more people in which multiple factors interact (Brass & Burkhardt, 1993; Pfeffer, 1981). Thus, it is possible that a leader who is influential within one group may seem powerless in the eyes of others outside the group (Balkundi & Kilduff, 2006). The discussion on power has adopted diverse perspectives over a long period of time (Brass & Burkhardt, 1993; Hinkin & Schriesheim, 1989; 1994; Liao, 2008; Pfeffer, 1992; Raven, 1993). In terms of the definition, some simply describe power as the ability to mobilize resources to achieve goals (McClelland, 1975; Kanter, 1979) whereas others view power as the ability to get things done (Salancik & Pfeffer, 1977). Based on the previous discussion, Liao (2008) suggested a relatively broad definition of power: "the ability of an agent to change or control the behavior, attitudes, opinions, objectives, needs, and values of another agent" (p. 1882).

As noted above, power is not a personal trait or behavior; it is a complex social process that emerges from diverse sources. French and Raven's (1959) five bases of social power have been most popular in power research. They proposed five bases of power: reward, coercive, legitimate, referent, and expert. Reward power refers to the ability to manage rewards for the outcomes he or she desires. As opposed to reward power, coercive power is the ability to manage punishments for those who do not comply. Legitimate power stems from established belief about the actor's right to influence others and others' obligation to accept the influence. Legitimate power explains the power resulting from supervisory positions. Referent power stems from others' desire to become closely associated with the actor. Expert power refers to the credibility of the actor's knowledge, expertise, information, and abilities. Although some studies have criticized French and Raven's (1959) bases of power for lack of clarity (Ward, 2001), their study has been useful in understanding the multidimensional nature of power and for investigating the effect of power on numerous outcomes (Carson, & Roe, 1993).

As the previous research on power reveals, a leader's power does not come from an individual trait or skills but from a mutual interaction between a leader and subordinates. In other words, a leader's power is partially determined by subordinates' attitudes. Although not specified, referent power and expert power of French and Raven's (1959) also implicitly assumes the relativity of power emergence. Because power is constructed through a social process, it should be noted that a leader's absolute power and power perceived by subordinates may not be identical. In other words, a leader's power accorded by the organization may not coincide with

the power perceived by others because of biases in perceptions and contextual constraints. Subordinates cannot collect every piece of information regarding the leader's power and even collected information can be distorted in social processes. Furthermore, contextual constraints such as organizational regulations, organizational culture, and implicit norms may keep leaders from directly exercising power to subordinates, which leads subordinates to rely on indirect sources (e.g., gossip) and, as a result, have limited knowledge about the leader's power. Some individuals have influence on others even when they rarely exercise power (Balkundi & Kilduff, 2006). Thus, it is more appropriate to distinguish perceived power from the actual power that a leader holds, as the perception of power is mostly constructed based on incomplete information and individual interpretation instead of comprehensive assessments in absolute terms.

Failure to distinguish the two concepts inevitably leads to incorrect measurement. Most previous studies on power have confused absolute and perceived power and have erroneously measured perceived power to represent individual power. It is not surprising given that it is almost impossible to measure power in an absolute sense. Therefore, the most common method to measure power, especially a leader's power, has been to ask subordinates to indicate the extent of their leader's power, which actually captures perceived power. Despite the method of measurement, interestingly, there has been little discussion about subordinates' perceptions of a leader's power per se with some exceptions (Hinkin & Schriesheim, 1994; Ragins & Sundstrom, 1990; Venkataramani et al., 2010). In particular, Venkataramani et al. (2010) is noteworthy, as it successfully demonstrated how the leader's social capital influences subordinates' perception of the leader's status in the organization. In their study, they stated "Leaders are perceived to have high status when they are judged to have influence over important organizational decisions, have greater authority, autonomy, and support in the organization, have the ability to garner resources during times of scarcity, are considered valued contributors to the organization, and, in short, are known to get things done" (p. 1072).

Although Venkataramani et al. (2010) used a different terminology, they focused on status as analogous to power and distinguished it from a leader's power presumed or perceived to exist. Likewise, instead of simply assuming the existence of power, it is more meaningful to separate perceived power, as a distinct form, and examine its separate effect because power is a product of mutual interaction, which is a relative term.

Therefore, perceived power is of particular importance in this study, as team members' perceptions are assumed to be a main consequence of a leader's social capital. A leader's centrality can be a good proxy of a leader's power as previous social capital researchers have argued but, as mentioned above, how team members perceive of the leader's power may not be parallel to the leader's centrality. Thus, in the current study I will simultaneously examine leader centrality, as a key aspect of leader power, and team member perceptions of leader power, as determinants of team outcomes.

Next, I will review team-level perceptions, which are assumed to be key consequences of centrality and perceived power of a leader. Most previous research on the social capital of leaders has focused on the direct impact of the leader's social capital on team performance but team members' perceptions of their team plays an important role in determining their attitudes and performance. Thus, understanding the perceptual process linking a leader's social capital with team performance should occur first. However, we still have little knowledge about the mediating process through which subordinates identify, interpret, and receive the leader's social capital and the influences on team outcomes. Specifically, I will review team-level perceptions

of organizational support, team efficacy, and team cohesion. Also, I will further review team commitment that a leader holds toward his or her team.

Collective Perceptions of the Team

Team Climate for Perceived Organizational Support

Perceived organizational support

In examining organizational commitment, Eisenberger, Huntington, Hutchison, and Sowa (1986) suggested that employees develop perceptions concerning the extent to which their organization rewards employees' effort, recognizes contributions, and cares about their wellbeing, referring to such beliefs as perceived organizational support (POS; Eisenberger, Huntington, Hutchison, & Sowa, 1986). According to social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), people expect their favors to be reciprocated even when they are not sure about when and how. Eisenberger and colleagues (Eisenberger et al., 1986; Rhodes & Eisenberger, 2002; 2006) applied the logic of social exchange and reciprocity to the relationship between the organization and employees. Although unspecified, employees believe their effort and commitment will be recognized and rewarded by the organization in some form. Based on this belief, employees develop global beliefs regarding the extent to which the organization values their contribution and provides support. Once they form POS, they feel obligated to work harder, engage in extra-role behaviors, and strive to maintain the relationship. That is, employees provide effort and dedication for the duration of employment in exchange for organizational support and this exchange continues and becomes stronger as they meet each other's expectations.

Employees' POS plays an important role in shaping employees' attitudes and behaviors because the treatment offered by the organization often serves as a signal of the organization's overall orientation toward them. As employees believe the organization is favorable toward their abilities and efforts, they feel more motivated to engage in desired behaviors. Consistent with this assumption, the bulk of previous studies has shown that POS is associated with a variety of individual attitudes and behaviors such as organizational commitment (Shore & Tetrick, 1991), leader-member exchange (Wayne, Shore, & Liden, 1997), job satisfaction (Shore & Tetrick, 1991), perceived justice (Ambrose & Schminke, 2003), organizational identification (Zagenczyk, Gibney, Few, & Scott, 2011), organizational citizenship behaviors (Chen, Eisenberger, Johnson, Sucharski, & Aselage, 2009; Moorman, Blakely, & Niehoff, 1998), and psychological contract (Aselage & Eisenberger, 2003; Coyle-Shapiro & Conway, 2005). A meta-analysis based on the accumulation of previous findings on POS identified fairness, supervisor support, and organizational rewards and job conditions as major antecedents of POS, and organizational commitment, affect, job involvement, performance, strains, desire to remain, and withdrawal behaviors as major consequences (Rhodes & Eisenberger, 2002).

These previous studies on POS implicitly assume that individuals develop their own POS independently but recent studies have argued POS is determined during social interactions in which a great deal of information concerning organizational events is exchanged (Eisenberger et al., 2004; Zagenczyk et al., 2010). Employees need to collect and interpret the information to evaluate whether they are well supported by the organization, and social contacts with other co-workers, particularly those in similar positions or closely connected, influence the process of forming POS (Zagenczyk et al., 2010). Indirect experience of organizational support through witnessing the way the organization treats co-workers also influences employees' views about

overall organizational support (Eisenberger et al., 2004). As these studies found, POS not only resides in individuals' minds independently but it also can be shared by people who are in a similar situation.

These findings enable researchers to conclude that POS can be more than an individual's perception and propose a collective sense of POS as POS is established through a social process including comparison, interpretation, learning, and sharing. Regardless of how individuals perceive POS, therefore, team members may share collective perceptions of how the organization treats their team as a unit.

Team climate for perceived organizational support

Focusing on the possible sharedness of POS, some researchers proposed a team-level shared perception of organizational support as a distinct construct from individual POS (Bashshur, Hernández, & González-Romá, 2011). The compositional model in the discussion of levels in organizational research (Chan, 1998; James, 1982; Rousseau, 1985) posits constructs found at the individual level can be aggregated to an upper level when the constructs share similar conceptualization across levels and sufficient agreement among individuals within a group exists.

Accordingly, individual POS can be aggregated to a group-level POS and serve as a distinct construct because both perceptions concern the extent to which the organizational values contribution, cares about well-being, and provides support, as long as the perception is shared among members within a group. Cannon-Bowers and Salas (2001) also noted that people are more likely to share their beliefs and use them in interpreting external cues and events in a compatible way within a boundary. When we employ team-level POS, the recipient of

organizational support is the team as a unit. In other words, members collectively evaluate the extent to which the organization provides support for team processes, recognizes the team's contributions, and cares about team members' well-being. As is true for individuals, teams need external support and sufficient resources to perform a series of tasks successfully. This is termed a referent-shift in Chan's (1998) typology because the referent shifts from individual POS to team POS as an intact entity.

Organizational support for teams can exist in a variety of forms. Prior research has suggested organizational supports such as reward, control, and training (Gladstein, 1984; Hackman, 1987) and organizational structure (Guzzo & Dickson, 1996) affect team process, and in turn, team effectiveness. Based on Hall's (1998) study on the types of organizational support provided to teams, Kennedy et al. (2009) suggested seven categories in which teams need organizational support: group design, management support, information systems, integration, performance measurement, teamwork training, and rewards and recognition. They argued that team process and potency would be swayed by how the organization coordinates support in each category.

Focusing on the shared perception of organizational support for the team, some studies have labeled it as either team climate for organizational support (Bashshur et al., 2011; González-Romá et al., 2009) or perceived team support (Pearce & Herbik, 2004). Although Pearce and Herbik (2004) described perceived team support as "the extent to which teams perceive that management provides them with all the 'tools' that they need to succeed" (p. 296), the term *perceived team support* is prone to cause confusion; the term has also been used to denote an individual perceptions of support received by their team in other studies (Bishop, Scott, & Burroughs, 2000; Bishop, Scott, Goldsby, & Cropanzano, 2005). As individuals

develop beliefs about organizational readiness to provide support when needed, they infer how much their teams value their efforts and are willing to support their task completion. This is inconsistent with the notion of members' *shared* perception of organizational support to their teams. Due to the possibility of such confusion, the present study adopts the term *team climate for organizational support* (TCOS) to indicate the extent to which team members agree about how the organization provides support for their team as a unit.

According to Kozlowski and Bell (2003), team climate refers to "group-level shared perceptions of important contextual factors that affect group functioning and group outcomes via mediating climate perceptions" (p. 347). That is, multiple types of team climate emerge depending on the behaviors it elicits, and these climates coordinate members' behaviors in a way to conform to shared beliefs and norms. When a team receives organizational support, team members develop a shared perception regarding the organization support available and these perceptions evolve through social interaction to become TCOS.

Bashshur et al. (2011) defined TCOS as "team members' shared perceptions of how the organization values the contributions of the team members, provides support to the team members, shows interest in team members, and takes team members' needs into account" (p. 559). In their study, Bashshur et al. (2011) pointed out that TCOS, which is perceptual, is as influential as the absolute level of support in affecting members' behaviors and attitudes. Furthermore, even when there is little difference regarding the absolute amount of support that the organization provides to teams, TCOS may vary across teams due to different team composition, types of task, work environment, social dynamics within a team, and leadership styles. Each team faces unique opportunities and threats and the organization may seem

supportive or unsupportive depending on the situation that their own team faces, even if absolute levels are constant.

As other research on team climate has demonstrated (Liao & Chung, 2007; Schneider, Ehrhart, Mayer, Saltz, & Niles-Jolly, 2005; Zohar & Luria, 2005), there is high possibility that TCOS significantly affects both individual and group-level outcomes but only a little attention has been paid to the possible effect of TCOS to date. Therefore, the present study incorporates TCOS as a key consequence of the social capital and perceived power of leader. In the following sections, I will review other collective perceptions of team that are assumed to be closely related to TCOS and that function as important mediators between the leader's social capital and team performance.

Team Efficacy

Bandura (1982; 1986; 1997) asserted that group members share beliefs about their abilities as a group and such beliefs lead members to decide which task they will perform and how much effort they will exert on performing the task, and whether they will persist in the face of difficulties. According to Bandura's (1997) definition, collective efficacy is "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment" (p.477). Collective efficacy has received considerable attention and advocacy from group researchers along with the increasing use of team units in the work organization (Gully et al., 2002; Jung & Sosik, 2003; Kozlowski & Bell, 2003; Stajkovic, Lee, Nyberg, 2009). In addition to collective efficacy, however, there are other constructs that also concern the collective perception of the group's capabilities. For example, group potency and collective efficacy have been found to play an important role in determining group effectiveness (Guzzo, Yost, Campbell, & Shea, 1993). According to Shea and Guzzo (1987), group potency is "the collective belief of a group that it can be effective" (p. 335). Although some studies have confused group potency with collective efficacy, strictly speaking, they are clearly different constructs. Gully et al. (2002) explained that collective efficacy refers to the perception of taskspecific capabilities and group potency concerns the belief about group effectiveness across multiple tasks in a wide range of situations. Another construct similar to collective efficacy is collective self-esteem. Collective self-esteem draws on social identity theory's premise that an individual's esteem is influenced by not only individual traits such as personality and abilities, but also by group identity such as beliefs toward the group they belong to (Tajfel & Turner, 1986).

Crocker and Luhtanen (1990) introduced the concept of collective self-esteem and defined it as "the extent to which individuals generally evaluate their social group positively" (p. 60). Although collective self-esteem concerns shared perception of groups, it differs from collective efficacy in terms of the sources and foci of the perception. Although collective selfesteem develops from members' positive social identity (i.e., membership), collective efficacy arises from positive beliefs about a team's capabilities to successfully perform tasks.

Lastly, team efficacy and collective efficacy have been often used interchangeably in the prior research. According to Gully et al. (2002), however, team efficacy differs from collective efficacy in terms of unit of focus. Team efficacy only focuses on a small unit of groups (i.e., teams), whereas collective efficacy encompasses diverse collective units from teams to

organizations and even nations. Because the focus of the present study is on teams, it is appropriate to employ the term team efficacy instead of collective efficacy but, because a majority of prior research has employed the terms collective efficacy or group efficacy, even when it focused on team units, the present study will refer to the findings on collective efficacy as a theoretical basis of team efficacy as well.

In management, prior research has found that team efficacy is positively associated with a wide range of group-level outcomes. Team efficacy is positively related to team performance (Dithurbide, Sullivan, & Chow, 2009; Feltz & Lirgg, 1998; Lindsley, Brass, & Thomas, 1995; Marks, 1999; Gibson, 1999; Gully et al., 2002; Stajkovic et al., 2009), team effectiveness (Campion, Medsker, & Higgs, 1993; Prussia & Kinicki, 1996), group learning (Edmondson, 1999), and problem solving (Kline & MacLeod, 1997). Although most previous findings support the positive linear effect of team efficacy on team outcomes, some researchers have raised possible liabilities caused by excessive team efficacy (Goncalo, Polman, & Maslach, 2010; Tasa & Whyte, 2005; Whyte, 1998). As demonstrated at the individual level (Vancouver, Thompson, Tischner, & Putka, 2002), teams with high efficacy are also prone to becoming complacent and overconfident and, as a result, reduce efforts for innovation and decrease performance. Given the evidence of possible perils of excessive efficacy, it should be meaningful and interesting to investigate whether a nonlinear relationship between team efficacy and team performance exists and, if so, under which circumstances such a nonlinear relationship appears. So far, however, there is little evidence to support the nonlinear relationship and most prior research has found a linear and positive relationship. Therefore, it is more appropriate to conclude that confident teams are more likely to perform successfully until we are able to find out when and why a nonlinear effect of team efficacy might occur.

Due to the cumulative findings on the effect of team efficacy, the understanding of team efficacy has been enhanced enormously over the past decades and it has become one of the key concepts in organizational research. Higher levels of team efficacy have been associated with high levels of team performance, and team efficacy is likely to be a core component of team effectiveness. Hackman (1987) defined team effectiveness as (1) the productive output of the team; (2) the capability of members to work together in future as a function of the social processes used within the team to complete tasks; and (3) the degree to which the team experience meets the personal needs of team members. Team efficacy is likely to influence all three components of team effectiveness. Therefore, the present study aims to highlight team efficacy as an outcome variable because of its association with adjacent team-level perceptions. However, there still exist some missing links between team efficacy and other team-level perceptual variables that might explain the mediating process connecting a leader's social capital with important team outcomes.

Team Cohesion

Team cohesion has been regarded as an important determinant of group process and performance (Gully, Devine, & Whitney, 1995; Stogdill, 1972). According to Hogg (1992), cohesion is defined as a member's level of attractiveness toward the group and is measured by how long a person wants to stay in the group or by the level of affect toward other members. Although Hogg's definition focused on individual attachment to the group, Carron, Brawley, and Widmeyer (1998) treated cohesion as a group-level construct and added the task-related aspect of cohesion. They defined cohesion as "a dynamic process that is reflected in the tendency of a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (p.213). The focus of definitions vary slightly but team cohesion generally concerns a positive attitude toward a team and other team members. However, some researchers have lamented that a unidimensional view toward cohesion is incomplete and suggested the need to distinguish different aspects of cohesion (Beal, Cohen, Burke, McLendon, 2003; Carless & De Paula, 2000; Carron, Widmeyer, & Brawley, 1985; Carron, Brawley, & Widmeyer, 2002; Mullen & Cooper, 1994; Zacarro & Lowe, 1986).

Mullen and Cooper (1994) addressed that cohesion is composed of interpersonal attraction, group pride, and task commitment and examined whether each component was related to group performance. Carless and De Paola (2000) similarly argued cohesion is a multidimensional construct and proposed a scale that measures social and task-related aspects of cohesion separately. Carron et al. (1985; 2002) also viewed cohesion as a multidimensional construct consisting of group integration and individual attraction. Revisiting Mullen and Cooper's (1994) examination on the relationship between three components of cohesion and group performance, Beal et al. (2003) conducted a meta-analysis and found that all three components were significantly related to group performance. Overall, these studies reached the conclusion that team cohesion is a broad construct that involves diverse factors that drive team members to stick together, feel attached to their teams, stay committed to the goals of the team, and maintain membership. Even when the different dimensions of cohesion were not specifically identified, cohesion has been measured by asking respondents a set of different aspects of cohesion (i.e., Lee & Farh, 2004).

Early research on cohesion mostly focused on individual perceptions of the group (i.e., Festinger, 1950; Hogg, 1992) but researchers have questioned the appropriateness of the level at which cohesion is measured. Because cohesion is built on collective perceptions of the group, they argued cohesion is more correctly operationalized at the group level and the effect of cohesion on other group outcomes was stronger when tested at the group level (Gully et al., 1995; Beal et al., 2003). Recent studies have acknowledged the level issue and have begun to examine cohesion at the group level.

There has been little doubt of the importance of cohesion in team process and performance but the impact of team cohesion on team-level outcomes has been inconsistent. Team cohesion was found to increase team performance (Beal et al., 2003; Carless & De Paula, 2000; Gully et al., 1995; Lee, Tinsley, & Bobko, 2002), team effectiveness (Carless & De Paula, 2000), team performance in sports (Mach, Dolan, & Tzafrir, 2010), communication among team members (Friedkin, 1993), conformity to group norms (e.g., Shields, Bredemeier, Gardner, & Boston, 1995), collective efficacy (e.g., Paskevisch, Brawley, Dorsch, & Widmeyer, 1999), team satisfaction, and team viability (Tekleab, Quigley, & Tesluk, 2009). These studies showed that members in cohesive groups tend to identify themselves with the team, tend to share perceptions, communicate with each other in a positive manner, adhere to team norms, and thereby improve team performance.

On the contrary, other studies argued that cohesion might be harmful for team effectiveness. Strong identification and interaction with other team members might breed pressures for conformity and hinder task conflict, which inevitably result in reduced efforts for improvement. For example, cohesion was found to be associated with groupthink (Park, 2000), pressures for conformity and deindividuation (Paskevich, Estabrooks, Brawley, & Carron, 2001), self-handicapping behaviors (Carron, Prapavessis, & Grove, 1994), impaired quality of group decision making (Mullen, Anthony, Salas, & Driskell, 1994), and reduced team performance (Rovio, Eskola, Kozub, Duda, & Lintunen, 2009). The logic underlying these studies is that members tend to minimize conflict and reach consensus without carefully considering and analyzing decision alternatives when cohesion is high. This tendency leads to biased information processing and, as a result, decreases team effectiveness.

Given there has been inconsistent evidence for the effect of team cohesion on team effectiveness, recent meta-analyses on the relationship between team cohesion and team performance have reached a similar conclusion. Beal et al. (2003) and Chiocchio and Essiembre (2009) showed that the positive effect of cohesion depends on a set of moderators and choice of outcome variables. Beal et al. (2003) asserted that cohesion was positively related to efficiency but not to effectiveness. Also, cohesion was positively related to team performance only when performance was conceptualized as a behavior. That is, the positive effect of cohesion can be found when proper outcomes are taken into account. Chiocchio and Essiembre (2009) argued that the degree of positive effect of cohesion on team performance depends on team types (project, production, or service teams) and settings (organizational and academic) such that the positive effect of cohesion was largest for project teams in organizational and academic settings. Gully et al. (1995) similarly demonstrate that cohesion has the strongest relationship with performance when members are high in task interdependence and the relationship with performance is much weaker when members perform tasks more independently. These metaanalyses imply that team cohesion may not be beneficial in all cases but, in combination with other group factors, cohesion will play an important role in group process.

In summary, cohesion has been mostly conceptualized as individual affection to the group in the previous research. However, recent researchers argue that cohesion should be regarded as a group-level concept with diverse facets and it can be generally categorized into

social and task-related cohesion. Although there have been inconsistent findings regarding the effects of cohesion, recent meta-analyses found support for the positive impact of team cohesion on a variety of team outcomes. They showed that cohesion is one of the most important factors that determine group effectiveness and, therefore, should be taken into account, especially when attempting research to explicate a complex group process that involves perceptual dynamics among team members. Accordingly, the current study will examine cohesion as a critical outcome of team processes and team context that will influence team effectiveness.

Leader's Team Commitment

Team Commitment

Although team research in management has thrived in the past decades and numerous group-level constructs have been studied widely, team commitment has been less explored. Until recently, researchers have been focused on an individual's commitment to the organization, labeled organizational commitment. Mowday, Porter, and Steers (1982) suggested individuals differ in the degree of willingness to exert effort for the sake of the organization and continue organizational membership. Meyer and Allen (1997) advanced the concept of an individual's commitment to the particular organization and suggested three types of organizational commitment: affective, normative, and continuance. Organizational commitment has been powerful in predicting individual outcomes (Riketta, 2001; Tett & Meyer, 1993; Wright & Bonett, 2002) but it also has been noted that an individual develops a sense of commitment toward his or her team as well, because a team is the more proximal entity that generates identification.

Researchers have argued that individuals tend to identify with and feel attachment to a particular team regardless of their level of organizational commitment (Becker, 1992; Bishop & Scott, 1997; Bishop et al., 2000; 2005). Bishop and colleagues (2000a, 2000b, 2005) demonstrated individuals can separate their commitment toward their organization from commitment to teams and confirmed the construct validity of team commitment by analyzing similar constructs such as organizational commitment, organizational support, and team support. Furthermore, they found that team commitment was positively associated with desirable outcomes such as organizational citizenship behaviors and job performance and negatively associated with intention to quit (Bishop et al., 2000b). Incorporating levels issues, Pearce and Herbik (2004) viewed team commitment as a team-level construct, which indicates members' shared affective attachment to their team and commitment to their team's goals. They found that team commitment is pehavior (e.g., altruism, civic virtue, conscientiousness, courtesy, teamwork, and team mindedness).

Leader's Team Commitment

Although there is not currently a lot of evidence, there appears to be a growing amount of support for the validity and positive effects of team commitment at both individual and team levels. Extending the current research on team commitment, the present study further proposes and examines the construct of team commitment of the leader. With no exception, to my knowledge, the research on team commitment focuses only on employees' perspectives toward their team. Leaders, however, may not share members' collective perceptions and may hold different attitudes toward their teams. In fact, there have been numerous studies that have
examined disagreement between a leader and team members with regard to perceptions of their team from diverse research areas. For example, Bashshur et al. (2011) found that agreement in perceptions of organizational support between team managers and members was related to higher team performance and positive team affect. In exploring the relationship between diversity climate and team performance, McKay, Avery, and Morris (2009) found support for their argument that positive consistency between diversity climates from managers' and subordinates' perspectives leads to highest team performance. In the literature of strategic human resource management, Liao, Toya, Lepak, and Hong (2009) differentiated members' and managers' perspectives of high performance work systems (HPWS) and revealed managers' perspectives of HPWS affected employees' human capital regardless of employees' perspectives of HPWS. As demonstrated in the previous studies, leaders' perspectives toward their teams do not necessarily correspond to those of members and, by virtue of their key role in the team, should have a differential impact on team processes and outcomes. In this sense, a leader's team commitment can be separated from members' team commitment. According to role theory (Katz & Kahn, 1966), leaders and members develop a cognitive framework regarding a set of norms, behaviors, duties, and expectations that they should assume, and social positions and status define the roles. As leaders take different roles in team processes, their perspectives toward the teams cannot be the same as members' perspectives and such differences inevitably lead to divergent perceptions of team commitment.

In summary, apart from organizational commitment, which has been frequently used in organizational research, team commitment has begun to receive attention from researchers since teams have become a major unit of research focus. However, team commitment has been examined only from team members' standpoints, either at the individual level or at the team level. As demonstrated in the previous research, leaders may develop views toward their teams that differ from that of team members. The present study proposes the construct of leader's team commitment, which represents the extent to which leaders feel attached to and identify themselves with their team and how much they are willing to stay in their teams.

THEORY DEVELOPMENT

Leader's Social Capital and Team Climate for Organizational Support (Hypothesis 1)

As reviewed above, the positive effects of the leader's social capital on team-level outcomes have been examined in several studies (i.e., Mehra et al., 2006). The logic underlying these arguments is that the leader's social capital emerging from his or her social ties with other actors brings benefits to team members so they can facilitate team process effectively and, therefore, increase team performance. For example, socially well-connected leaders have more access to privileged resources, exercise control over resource flow, hear about new information faster, have influence on making strategic decisions, and monitor reputation regarding their own teams to higher-level executives. Previous studies assumed these benefits afford competitive advantages to the leaders' teams and enable them to outperform as compared to other teams. However, there has been little discourse on the perceptual process linking the leader's social capital and team performance, with a few exceptions (e.g., Venkataramani et al., 2010). Researchers presume teams would enjoy those benefits when they have leaders with social capital but have not examined whether the benefits really appear and what role member

perceptions play in influencing processes and outcomes. In other words, we have very little knowledge about how the leader's social capital transforms into team performance.

In an effort to enhance understanding of the intervening mechanisms, therefore, the present study argues that team members' perceived organizational support, TCOS, is one of the crucial mediating variables between the leader's social capital and team performance. The reason the present study focuses on members' perception of organizational support instead of the actual amount of support is that perception is more powerful in predicting behavioral consequences. According to Robbins, (2005), "people's behavior is based on their perception of what reality is, not on reality itself" (p. 134). Even if teams are granted incomparable support by the organization, members may fail to utilize the resources or even feel deprived of organizational support unless they perceive it. In the literature of organizational support, perceived support at the group level has been recognized as essential as the absolute amount of support (Bashshur et al., 2011). Therefore, it is important to investigate whether the leader's social capital increases TCOS before we attempt to conclude whether the leader's social capital increases team performance.

Although no previous study has yet examined the relationship between a leader's social capital and TCOS, there exist some theoretical basis to consider the possibility. In the literature of POS, a meta-analysis (Rhodes & Eisenberger, 2002) confirmed that individuals' POS is swayed by their supervisor's behaviors and attitudes toward them. The logic underlying the finding is that employees are likely to view their leader as indicative of their organization and, therefore, the leader's treatment of the employees is often interpreted as an indicator of organizational orientation toward employees. Although the meta-analysis did not include a leader's social capital emerging from the external ties with peer leaders or superiors under the

category of supervisor's support, it addressed that employees are generally aware that supervisors could exercise influence on employees through social ties with upper executives.

Consequently, employees who believe their leader is supportive tend to expect their leader to diffuse a positive reputation about them through external social ties and such expectations, in turn, enhance employees' POS. At the team-level, however, the findings on the antecedents of TCOS are sparse but we may assume the relationships found at the individual level can also hold at the team-level, according to the composition model. The compositional model posits that relationships between variables can be isomorphic across levels when the variables share similar conceptualization except a referent of agency (Chan, 1998; James, 1982; Rousseau, 1985). Because TCOS captures a similar perceptual process with respect to the treatment received by the organization and the only difference is the recipient of the support (Bashshur et al., 2011; González- Romá et al., 2009; Kennedy et al., 2009), it is possible to assume a similar relationship between a leader's social capital and POS would appear at the team-level as well.

In addition to the findings of POS, social capital research similarly supports the premise that employees oftentimes identify their leaders as organizational agents who govern the treatment toward employees. One dimension of social capital concerns the cognitive aspect, which includes shared presentation, interpretation, and systems of meaning (Nahapiet & Ghoshal, 1998). Thus, as the leader cultivates greater social capital through social ties with peers and superiors, he or she is more likely to be perceived as the manifestation of organizational values and culture and, as a result, the way the leader treats team members can be indicative of the organization's overall orientation toward the team. Previous studies on the positive impact of a leader's social capital have suggested potential benefits that teams can exploit (e.g., Balkundi & Harrison, 2006; Balkundi et al., 2011; Mehra et al., 2006; Pil & Leana, 2009; Sparrowe & Liden, 2005; Venkataramani et al., 2010). However, these studies are insufficient to enhance our understanding about the process through which a leader's social capital enhances team performance and the roles that team members' perceptions play in the process. If leaders provide competitive resources by virtue of their social networks with other peer leaders and superiors, their team members should feel supported. Therefore, the present study posits that a leader's social capital will be positively related to TCOS.

Specifically, the present study assumes the leader's centrality in social networks will be particularly relevant to TCOS. There are different types of indices that capture the degree to which a leader is central in the social networks, which serves as an indication of his or her social capital. For example, *betweenness* refers to the shortest paths connecting a leader to other organizational members by occupying a central position, whereas closeness indicates the extent to which a leader is closely connected to all other members. Of various types of centrality, the present study focuses on degree centrality, which refers to how often other organizational members nominate the leader as a primary source (in-degree) and the leader reaches out to other organizational members (out-degree). In-degree centrality has been commonly used by other network researchers because it is particularly useful to measure a leader's power (Bono & Anderson, 2005). Leaders with high in-degree centrality are generally regarded as successful and powerful as they have outstanding abilities and expertise that other members need. The more organizational members rely on a certain leader, the more powerful he or she becomes in the organization. Out-degree centrality is also useful to measure how much leaders diffuse their

opinions, control information flow, and influence other members' behaviors. Because the primary interest of the present study involves leaders' power and influence over leveraging organizational support for their teams, in-degree centrality will be used to denote the degree of a leader's social capital.

In terms of a leader's network types, this study focuses on advice and friendship networks consisting of peer leaders and superiors. A leader's ties with out-team members, particularly with peer leaders and superiors, are of particular relevance in this study because the goal of the study is to investigate leaders' possible control over organizational support and resources located outside teams. According to previous studies (Mehra et al., 2006; Venkataramani et al., 2010), leaders exchange information and resources with both peers and superiors. In particular, centrality within a network with superiors provides exclusive support and access to resources that are not available to other organizational members. The advantages resulting from the leader's connectivity to peer leaders and superiors should be more related to contextual resources (e.g., training, group design, and rewards) and differ from the resources that the leader's internal ties provide (e.g., cooperation, commitment, and bonding).

Although such external ties represent structural elements of a leader's social network, the content of the ties defines a type of resource that a leader can expect (Balkundi & Harrison, 2006; Ibarra, 1993; Lincoln & Miller, 1979). For example, instrumental ties convey work-related advice and information whereas expressive ties facilitate friendship and trust among members. Leaders may not only exchange work-related advice but also share their personal concerns and affection with peers and superiors. As found in the previous studies (Balkundi & Harrison, 2006; Mehra et al., 2006; Sparrowe & Liden, 200), expressive ties are sometimes more effective in developing strong relations and instrumental in soliciting necessary resources. Therefore, the

present study intends to examine a leader's centrality in both advice networks and friendship networks.

Taken together, the present study employs a leader's degree of centrality in both advice and friendship networks with peer leaders and superiors to represent a leader's social capital. Further, the present study particularly focuses on leaders' external ties with peer leaders and superiors because those external ties serve as channels to organizational dynamics occurring outside the teams.

Leaders not only perform functional roles within a team but also assume bridging roles connecting upper level and lower level members. Also, leaders may be socially connected to peers and superiors; both advice network and friendship networks are included because it has been found that both networks are effective in eliciting necessary information and support (Mehra et al., 2006; Sparrowe & Liden, 2005). For degree of centrality, the study examines only in-degree because it is an important index of power and prominence that a leader holds in the organization (Henneman & Riddle, 2005). Although both in-degree and out-degree centralities measure the aspects of leader's social capital in a different manner, I decided to use only in-degree centrality because the focus of the present study is to examine a leader's potential power resulting from social capital. Also, out-degree is susceptible to response bias because it is measured by respondents' self-reporting. That is, out-degree goes up as a respondent checks more and more names in the survey list. It is possible that some respondents have low out-degree just because they are not cooperative enough to check all the names they recognize.

In summary, this study assumes that a leader's centrality in advice and friendship networks with peers and superiors is positively related to TCOS. Specifically, in an advice 67

network, leaders with high in-degree centrality tend to have outstanding abilities and knowledge so they are frequently sought by peer leaders and upper executives and, subsequently, have authority over important decisions. In a similar vein, leaders with high in-degree centrality in friendship networks are the ones whom other peers and superiors personally count on and emotionally attach to and, therefore, they can easily lead other peers and superiors to support them. Therefore, the present study first hypothesizes that a leader's in-degree centrality in both advice and friendship networks with peer leaders and superiors will be positively related to TCOS.

Hypothesis 1a: A leader's in-degree centrality in advice networks with peer leaders will be positively related to team climate for organizational support.

Hypothesis 1b: A leader's in-degree centrality in advice networks with superiors will be positively related to team climate for organizational support.

- Hypothesis 1c: A leader's in-degree centrality in friendship networks with peer leaders will be positively related to team climate for organizational support.
- Hypothesis 1d: A leader's in-degree centrality in friendship networks with superiors will be positively related to team climate for organizational support.

Perceived Power of Leader and Team Climate for Organizational Support (Hypothesis 2)

A leader's social capital is assumed to impact TCOS directly but it is also possible that team members' perceptions about the leader's social capital, especially power, affect TCOS. In

other words, team members may feel supported by the organization because team members collectively perceive their leader as a powerful figure in the organization. The potential benefits from the leader's social connections may not translate into employees' perception of organizational support unless they perceive the leader as socially competent. Employees' perceptions of leadership can be more important than the leader's absolute abilities.

Implicit leadership theory posits that leadership emerges from employees' perceptions of the leader (Lord, Binning, Rush, & Thomas, 1978; Lord, De Vader, & Alliger, 1986; Lord, Foti, & De Vader, 1984; Lord & Mahler, 1991). Employees do not necessarily accept a leader because he or she holds an authority position, but they tend to evaluate the leader's competencies and engage in a cognitive process to define the leader as their leader. According to implicit leadership theory, it is employees' own perceptions of the leader—not the traits, behaviors, and even social network that the leader displays—that induce members to feel motivated to engage in high-quality relationships with the leader. This theory is the first attempt to illustrate leadership as a representation of employees' orientations toward the leader without relying on legitimate power or structural positions. Drawing on implicit leadership theory, the present study argues that team members believe their team is well supported by the organization because they expect their leader to be powerful and, thus, have the ability to furnish the resources that their team needs. If employees believe their leader has power in the organization and, therefore, has control over organizational supports for their team such as training, rewards, organizational structure, and group design, they will presume their leader will exercise his or her leverage on the use of the support in a favorable way to the team and, consequently, reach the collective belief that their team is sufficiently supported.

This study specifically focuses on the leader's power perceived by members instead of other leadership perceptions such as transformational or charismatic leadership because the latter encompass a broader concept of leadership. Power is undoubtedly one crucial aspect of leadership but either transformational or charismatic leadership encompasses the leader's diverse abilities such as inspiring, offering vision, and managing rewards and punishments. Because the purpose of this study is to examine how much the team members believe their leader has discretion or authority (i.e., power) over them rather than whether the leaders are good leader, this study focuses on the leader's perceived power

One might argue that, in reality, team leaders usually are located in parallel positions and given similar discretion and, therefore, sufficient variance in the perception of leaders' power might not appear across teams. However, it should be noted that employees tend to rely on incomplete information to figure out their leader's social capital. Some leaders may be reluctant to share information regarding their social influence and network. On the contrary, other leaders tend to exaggerate their social skills and overstate their network of acquaintances. Burt (1992) noted that individuals may pretend to be potentially powerful in the organization or distort information regarding others' social influence. Similarly, Brass and Burkhardt (1993) argued individuals differ in willingness and styles to exercise power toward others. Some leaders are apt to use tactics such as demanding compliance or providing rewards to show off their power but others are reluctant to display their power. Such differences lead to variance in perceptions regarding the degree of the leader's power across teams. Employees also do not solely depend on the leader's remarks or behaviors to evaluate their leaders. They often refer to multiple sources such as gossip, social events, and reputation, both inside and outside the organization. Thus, it is highly likely that team members may develop their own judgment of the leader's power based on their interpretation of the leader's behaviors and contextual cues (i.e., recognition and reputation) regardless of the leader's actual social capital.

As bases of power, following French and Raven's (1959), the study explores reward, referent, and expert power, which are particularly relevant to a team leader's social influence. Coercive power may imply the degree of power a leader may exercise over team members, but coercive power is more related to a leader's leadership and, in actual work organizations, it is very unusual to lead team members using threats or punishment. Also, legitimate power is a type of power that is accorded to the position rather than a person. Because the study views power as a social influence that an individual holds, the study includes only reward, referent, and expert dimensions of power when diagnosing members' perception of a leader's power.

In conclusion, it is important to examine team members' perceptions of their leader's power in addition to the social capital that leaders possess. Employees develop shared perception regarding their leader's influence by monitoring the leader's formal and informal contacts, observing social behaviors, and hearing about reputation. Although there has been discourse on the relationship between social capital and power (Adler & Kwon, 2002; Coleman, 1988; Portes, 2000) there has been no attempt, with the exception of Venkataramani et al. (2010), to examine whether a leader's power perceived by team members increases TCOS. Also, research has not generally not simultaneously considered the relationship between perceived power and social networks when examining their effects on outcomes such as TCOS. Therefore, this study hypothesizes that team members' collective perception of their leader's power will be positively related to TCOS. In other words, team members will believe their team is better supported by the organization if they perceive their leader as powerful in terms of reward, referent, and expert power.

71

Hypothesis 2a: Perceived reward power of leader will be positively related to team climate for organizational support.

Hypothesis 2b: Perceived referent power of leader will be positively related to team climate for organizational support.

Hypothesis 2c: Perceived expert power of leader will be positively related to team climate for organizational support.

Moderating Role of Leader's Team Commitment (Hypothesis 3 & 4)

The social capital of a leader does not necessarily guarantee the leader's willingness to utilize such social capital for the sake of the team. Leaders may exert efforts to garner the resources using his or her power only to seek self-serving goals. Thus, it is assumed that a leader's social capital will be perceived as beneficial to team effectiveness only to the extent the leader is affectionate to team members and has goodwill to support members' interest. To capture the degree to which the leader is willing to devote the resources available from his or her social capital to the team, the present study employs the notion of leader's team commitment. According to Bishop et al. (2005), commitment involves a strong belief in the unit's goals and values, willingness to exert efforts on the behalf of the unit, and a strong attachment to the membership. Extending the concept, the current study argues that leaders may develop commitment to their team such that they have a strong belief in the team's goals, willingness to utilize their resources and abilities for the development of the team, and desire to stay in the team.

A leader's affect and devotion has received attention as a motivational factor driving the leader's behaviors beneficial to team members and the team. In particular, a leader's commitment to team members has been regarded as an important component in the literature of LMX. When leaders build good relationships with their subordinates and share trust, respect, and commitment through the relationships, leaders are more likely to provide support and care with regard to both work and personal issues beyond their obligation (Graen & Uhl-Bien, 1995). These findings show us that leaders display different attitudes and behaviors according to their affective commitment to the relationships with subordinates. Likewise, we may presume that not every leader feels committed to and works on the behalf of his or her team.

The literature of team-person fit also parallels the idea of differing commitment that leaders perceive toward their teams. Just as individuals perceive a different level of fit to their teams (DeRue & Morgeson, 2007; Hollenbeck, Moon, Ellis, West, Ilgen, Sheppard, Porter, & Wagner III, 2002; Kristof, 1996), leaders may or may not feel compatible with other team members and the characteristics of teams such as composition, goals, and external environment. Low perception of fit inevitably leads leaders to feel less attached to their team and, as a consequence, have less desire to engage in desirable behaviors for team effectiveness and maintain membership. On the contrary, if leaders find that their teams fulfill their needs, they should have high team commitment toward their teams and behave in a way to support them.

Given that a leader's team commitment may vary across teams due to their fit to their teams, the present study suggests that a leader's team commitment should moderate the relationship between a leader's social capital and TCOS and the relationship between the perceived power of the leader and TCOS, respectively. Specifically, it is assumed that a leader's team commitment is assumed to positively moderate the relationship between a leader's

centrality in advice and friendship networks and TCOS such that team members will feel better supported by the organization as their leader is central in both advice and friendship networks and the leader is strongly committed to the team. That is, team members will believe their team is valued, supported, and cared for by the organization when their leader is central in the networks and, thus, has power over managing organizational resources. Such beliefs will be even stronger as the leader is committed to the team and, thus, he or she is more eager to transform their social capital into benefits for the team. Based on this logic, the present study proposes the moderating role of a leader's team commitment on the relationship between a leader's social capital and TCOS.

Hypothesis 3a: Leader's team commitment will moderate the relationship between leader's indegree centrality in an advice network of peer leaders and team climate for organizational support such that team members will perceive more organizational support for their team when their leader is central in an advice network of peer leaders and is committed to the team. In contrast, when the leader is uncommitted to the team, the relationship between leader centrality in an advice network of peer leaders and team climate for organizational support will be weakened.

Hypothesis 3b: Leader's team commitment will moderate the relationship between leader's indegree centrality in an advice network of superiors and team climate for organizational support such that team members will perceive more organizational support for their team when their leader is central in an advice network of superiors and is committed to the team. In contrast, when the leader is uncommitted to the team, the relationship between leader centrality in an advice network of superiors and team climate for organizational support will be weakened.

Hypothesis 3c: Leader's team commitment will moderate the relationship between leader's indegree centrality in a friendship network of peer leaders and team climate for organizational support such that team members will perceive more organizational support for their team when their leader is central in a friendship network of peer leaders and is committed to the team. In contrast, when the leader is uncommitted to the team, the relationship between leader centrality in a friendship network of peer leaders and team climate for organizational support will be weakened.

Hypothesis 3d: Leader's team commitment will moderate the relationship between leader's indegree centrality in a friendship network of superiors and team climate for organizational support such that team members will perceive more organizational support for their team when their leader is central in a friendship network of superiors and is committed to the team. In contrast, when the leader is uncommitted to the team, the relationship between leader centrality in a friendship network of superiors and team climate for organizational support will be weakened. Similarly, it is assumed that a leader's team commitment will moderate the relationship between the perceived power of the leader and TCOS. As mentioned earlier, leaders may reveal or withhold the information regarding their power and they may display different leadership styles, which causes variance in members' perceptions of the leader's power. Such variance should explain differences across teams in terms of team members' perception of organizational support. Therefore, hypothesis 4 is as follows.

Hypothesis 4a: Leader's team commitment will moderate the relationship between perceived reward power of leader and team climate for organizational support such that team members will perceive more organizational support for their team when they view their leader as having high reward power and the leader is committed to the team. In contrast, when the leader is uncommitted to the team the relationship between leader reward power and team climate for organizational support will be weakened.

Hypothesis 4b: Leader's team commitment will moderate the relationship between perceived referent power of leader and team climate for organizational support such that team members will perceive more organizational support for their team when they view their leader as having high referent power and the leader is committed to the team. In contrast, when the leader is uncommitted to the team the relationship between leader referent power and team climate for organizational support will be weakened. Hypothesis 4c: Leader's team commitment will moderate the relationship between perceived expert power of leader and team climate for organizational support such that team members will perceive more organizational support for their team when they view their leader as having high expert power and the leader is committed to the team. In contrast, when the leader is uncommitted to the team the relationship between leader expert power and team climate for organizational support will be weakened.

Team Climate for Organizational Support and Team Efficacy (Hypothesis 5)

In an effort to elucidate the process through which the leader's social capital affects collective perceptions of teams, the present study further proposes two types of team members' cognitive and affective reactions toward their team as important consequences of team climate for organizational support: team efficacy and team cohesion. First, just as individual POS is known to affect individual performance indirectly through encouraging positive attitudes and affect (Rhodes & Eisenberger, 2002), it is assumed that team climate for organizational support positively affects team efficacy. Team efficacy concerns shared beliefs about the team's abilities to successfully perform given tasks (Bandura, 1997; Gully et al., 2002; Jung & Sosik, 2003). Although previous research has shown that team efficacy is linked to team citizenship behavior (Pearce & Herbik, 2004) and team performance (Guzzo & Dickson, 1996), there has been no attempt to examine the relationship between team climate for organizational support and team efficacy to date.

Drawing on social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), it has been suggested that team members will make greater efforts to achieve goals set for the team and engage in extra-role behaviors when they believe the organization values the contribution of their team and provides support when needed. Furthermore, it is highly likely that team members will feel more confident in their abilities to achieve collective goals when they perceive their team is sufficiently supported by the organization because organizational support acts as an indication of organizational expectation and trust toward the team. Also, an organization tends to allocate valuable resources to teams that have the potential to be high performers. Knowing that the organization has great interest and positive affect toward the team, members will feel more confident about successful task completion. As team members perceive more organizational support endowed for their team, they should feel more confident of their competency as a team.

In terms of team-level confidence, generally there are two constructs: group potency and group efficacy. Group potency concerns overall confidence that the group can be effective (Guzzo et al., 1993) whereas group efficacy indicates task-specific confidence (Gully et al., 2002). Previous studies have found compelling evidence for the relationship between team climate for organizational support and team potency. For example, organizational support has been identified as an important driver of team potency (Guzzo et al., 1993). Guzzo et al. (1993) suggested resources and rewards as external factors that would enhance members' perception of potency. They did not touch on perceptions of organizational support but pointed out the importance of organizational support in promoting members' confidence. Empirically, Kennedy et al. (2009) found that team members' POS was positively and significantly related to group potency. They argued that organization support facilitates team process by providing necessary

resources, opportunities, and guidance about the task performance, which, in turn, increases team potency.

In the context of work organizations, however, it is more appropriate to examine the effect of team climate for organizational support on team efficacy instead of team potency because most work teams are assigned a certain type of task rather than multiple tasks. Teams are distinguished based on their task types such as sales, customer service, HR, strategic planning, marketing, etc. There may be variance with regard to job details but work teams are generally expected to perform activities that converge on a certain type of task. Therefore, when the organization provides support to teams, it should match teams' specific task-related needs. Thus, the present study hypothesizes that TCOS is positively related to team efficacy by providing resources and support that enhances a team's abilities required to perform a specific task.

Hypothesis 5: Team climate for organizational support will be positively related to team efficacy.

Team Climate for Organizational Support and Team Cohesion (Hypothesis 6)

The present study further proposes that team cohesion is another important outcome of TCOS. Kozlowski and Chao (2012) addressed that cohesion emerges from team members' shared identification with their team. According to social identity theory, individuals rely on not only personal traits, but also their membership in social groups to define their identities (Ashforth & Mael, 1989; Hogg & Abrams, 1988; Tajfel, 1972; 1978; Tajfel & Turner, 1979). In

other words, people create their social identity based on intergroup comparisons seeking favorable distinctiveness and, by doing so, fulfill the need for self-esteem (Hogg & Terry, 2000). Ashforth and Mael (1989) argued that team identification is more definite and proximal than organization-based identification because the latter can be a composite of multiple identities in a complex organization. Team identification has been found to relate to low intrateam conflict (Somech, Desivilya, & Lidogoster, 2009; Van der Vegt & Bunderson, 2005), goal interdependence, helping behavior, and loyal behavior (Van der Vegt, Van de Vliert, & Oosterhof, 2003), as well as members' citizenship behaviors (Janssen & Huang, 2008). Therefore, team members may expect more positive team-level outcomes as they are more likely to develop team identification.

According to Hogg and Terry (2001), individuals are more motivated to identify themselves with a team that is highly valued by the organization because their self-esteem can be enhanced as much as they identify themselves with the prominent traits of their team. Applying this logic, it is possible to assume that team members whose team is highly valued by the organization are more likely to have higher team identification and, as a result, engage in teamsupporting behaviors such as citizenship behaviors. The quality of organizational support for the team serves a signal of the extent to which the organization values the team. As team members feel more valued based on their team identification, it is more important for them to maintain the positive features of the team. Thus, they should make more effort to facilitate team process, strengthen teamwork, share information, and defend for other team members. These behaviors are believed to enhance team members' emotional attachment to the team and coordinate members' behaviors for the sake of collective goals, which eventually increases team cohesion. Therefore, the present study hypothesizes that team members' perceived organizational support will be positively related to team cohesion

Hypothesis 6: *Team climate for organizational support will be positively related to team cohesion.*

METHODS

Participants and Procedure

The present study collected data from a group of ten companies in Korea. These ten companies are owned by a single president and are closely connected to each other. Business areas include chemistry, construction, IT, and bio-technology. Some executives move across the companies on their request or by order of the president. Executives of these companies have regular interactions about three times a year (e.g., golf events and seminars). The executives within the company interact more frequently either at the work or personally which provides opportunities for building both advice and friendship networks with peer leaders, across companies. The complete group has 55 executives, 84 teams, and about 500 team members across companies and all of the employees were invited to complete the survey. The participation of executives was particularly critical for this study because a leader's networks with superiors was measured by the vertical ties with these executives. With the help of organizational contacts, the HR departments agreed to participate in the survey.

I distributed paper surveys to all executives, team leaders, and team members of the participating companies in March, 2013. However, 10 executives were excluded from the survey because either they were located in overseas offices or they refused to participate. Because the present study is interested in team-level variables, each survey was assigned team identifiers and the responses of leaders and members were matched accordingly. To encourage participation, I visited all participating companies and handed paper surveys to each of the contact persons in charge. Also, I met executives and some leaders in person and explained the survey process and the potential contribution of the present study to the research field.

In particular, the survey included the measurement of social network, which asks respondents to provide the names they contact for work-related and personal matters. Inquiry of personal relationships may cause uneasiness and discourage responses so I assured confidentiality of responses and no retaliatory behaviors. The completed survey was collected from March to May, 2013 via mail. Executives were asked to return the completed survey directly to the researcher after sealing it in an enclosed envelope. Team members were asked to seal the completed survey in individual envelopes and hand them to their leaders. Team leaders were asked to collect team members' and their own surveys and return them as a bundle via mail to the researcher. This enabled me to identify teams. Prior team performance of 2012 was provided by HR department.

The response rate was 97% for executives, 100% for team leaders, and 93% for team members. A total of 44 executives, 84 leaders, and 469 members completed the survey. However, I excluded teams that had less than 2 members because there should be at least 2 members in a team to ensure emergence of interaction and shared perceptions. Thus, there were usable 80 teams and team size ranged from 2 to 10. Executives were 100% male, 51 years old on average (standard deviation = 3.48), and had worked for the company for an average of 17 years (s.d. = 8.14). Team leaders were 97% male, 47 years old on average (s.d. = 4.04), and had worked for the company for an average of 16 years and for their current team for an average of 5 years (s.d. = 2.95)¹.

Measures

Social Capital of Leader

In-degree centrality in advice network

To measure a leader's centrality in the advice networks of peer leaders and superiors, I used sociocentric sampling methods, which focuses on the whole network of all actors. As noted above, a leader's superiors refers to the executives in this study. To collect data on advice networks, I provided leaders and executives with a list of names of both executives and peer leaders and asked them to provide the names of individuals from whom they seek advice about work-related matters and the frequency of seeking advice based on a 6-point Likert scale (0 = "no acquaintance", 1 = "a few times a year", 2 = "a few times in 6 months", 3 = "every month", 4 = "every week", 5 = "every day").

The list of 45 executives and 84 leaders was provided as a separate sheet. Respondents were free to write as many names as they wanted because setting an upper limit on the number could cause bias in measurement (Holland & Leinhardt, 1997). Although some researchers

¹ The companies in the sample were wary of including demographic questions in the survey so there was no way to track the demographic data of team members. The demographic data of executives and team leaders were provided directly by HR department.

advocate forcing respondents to indicate the degree of frequency to every name on the list Sparrowe and Liden (2005) noted that such methods could cause too much fatigue and result in inaccurate responses when there are hundreds of names on the list. Because the roster used in the present study contains over 100 names (including both executives and leaders), I asked respondents to write only the names of peers and executives from whom they have sought advice in separate columns. The unchecked names were coded as 0.

To calculate in-degree centralities for the network with superiors and for the network with leaders separately, I used Mehra and colleagues' (2006) approach. First, to assess a leader's in-degree centrality in advice networks with superiors, I created a separate matrix of each advice network per team leader and each matrix included 44 executives and one of the team leaders. Each 84 matrix (same as the number of team leaders) contained 45 rows and 45 columns (44 executives + 1 team leader). Second, to create advice network data of peer leaders, I separated responses of only peer leaders, which contains 84 rows and 84 columns (84 team leaders).

Then, for each matrix, I calculated a focal leader's in-degree centrality using UCINET 6 (Borgatti et al., 2002). In-degree centrality refers to the number of times a focal individual is nominated by others. In-degree centrality is known as an appropriate index to measure an individual's power and prestige (Balkundi et al., 2009) and matches the theoretical interest of the present study. Because UCINET 6 can read only dichotomized data when calculating centrality (Hanneman & Riddle, 2005), I had to select a cut-off point and transform the responses into either 0 or 1. I concluded that there exist regular social interactions when people have contact at least once a year. To dichotomize, therefore, I selected 0 as a cut-off. So I assigned 0 to "0 (no acquaintance)" and 1 to "1 (a few times a year), 2 (a few times in 6 months), 3 (every month), 4

(every week), 5 (every day)." After dichotomizing the data, I calculated each leader's in-degree centrality for their advice network using Freeman's approach in UCINET.

In-degree centrality in friendship network

To measure a leader's friendship networks with peer leaders and superiors, I used the same approach as measuring advice networks. The only difference is that, in this case, I asked leaders and executives to provide the names of individuals whom they consider friends and share personal matters with, and indicate the quality of friendship based on 6-point Likert scale (0 ="no acquaintance", 1 = "acquaintance", 2 = "met a few times privately", 3 = "close colleague", 4 = "friend", 5 = "best friend"). The list of 45 executives and 84 leaders was also provided as a separate sheet. Again, respondents were asked to write as many names as they wanted and the number that appropriately described the quality of relationship in blank columns. Then, I repeated the same procedure to create friendship network data for superiors and peer leaders, respectively. I created 84 matrices (45×45) to calculate each leader's in-degree centrality in their friendship network of superiors and 1 matrix (84×84) to calculate each leader's in-degree centrality of their friendship network among peer leaders. Then, to analyze the data in UCINET 6, I dichotomized the data using 0 as a cut-off. That is, I transformed 1, 2, 3, 4, and 5 to 1. With the dichotomized data, I calculated two types of in-degree centralities for each leader, one for the friendship network of superiors and one for the friendship network of peer leaders.

In summary, I obtained 4 indices of a leader's social capital. The first index is in-degree centrality of advice networks with peer leaders, which captures the leader's horizontal advice ties with peer leaders. The second index is in-degree centrality of advice networks with superiors, which captures the leader's vertical advice ties with superiors. The third index is in-degree

centrality of friendship networks with peer leaders, which captures the leader's horizontal friendship ties with peer leaders. And the fourth index is in-degree centrality of friendship networks with superiors, which captures the leader's vertical friendship ties with superiors. These four indices ranged from 0 to 37. Higher values of in-degree centrality indicates greater centrality in the focal network. I also compared normalized degree centrality with raw degree centrality and found that there was no difference in conclusions. Therefore, I decided to use raw degree centralities for both advice and friendship networks.

Perceived Power of Leader

Team members' perception of their leader's power was measured using Liao's (2008) social power scale. Adopted from Hinkin and Schriesheim's (1989) power scale which was proposed to measure French and Raven (1959)'s bases of power, Liao (2008) suggested 20 items to measure the extent to which members perceive their leader has power over other employees' behaviors, attitudes, and needs. Consistent with French and Raven's (1959) theory, Liao's (2008) power scale is comprised of five bases of power: reward, coercive, legitimate, referent, and expert. Each base of power is measured by four items. Because the present study examines only reward, referent, and expert power as relevant to the research topic, 12 items regarding the three types of power were included in the survey. Sample items are "I feel my manager can increase my salary (reward)," "I feel my manager can make me feel valued (referent)," and "I feel my manager can give me good technical suggestions (expert)." Team members were asked to indicate the extent to which they agree with each survey item on a 7-point Likert scale ranging

from 1 (strongly disagree) to 7 (strongly agree). Cronbach's alpha at the team member level was .78 for reward power, .96 for referent power, and .93 for expert power, respectively.

Leader's Team Commitment

To measure a leader's team commitment, leaders were asked to indicate the extent to which they feel attached to and identify with their own teams. Following Bishop and colleagues' (2000, 2005) approach, I used a modified version of Meyer and Allen's (1997) affective commitment scale. Responses were rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Sample items are "I would be very happy to spend the rest of my career with this team," "I really feel as if this team's problems are my own," and "I enjoy discussing my team with people outside of it." Cronbach's alpha for team commitment of leader was .79.

Team Climate for Organizational Support

TCOS was measured using Kennedy et al. (2009)'s 25 items. TCOS indicates the extent to which team members perceive how well their team is supported and valued by the organization. Kennedy et al. (2009) modified Hall's (1998) original scales and proposed 25 items under seven categories: group design, integration system, information system, management support, performance measurement, teamwork training systems, and rewards and recognition system. These categories represent the types of organizational support for teams that have been regarded as critical for team effectiveness. Kennedy et al. (2009) found all items were loaded on one factor by conducting a secondorder CFA so the present study used all 25 items to represent TCOS. Sample items are "My team can easily get information about customers (information system)," "My work group has the skills it needs to perform work well (group design)," "My company uses multifunctional (crossdisciplinary) teams to integrate work (integration system)," "My company's managers/supervisors are open to multiple perspectives (such as different points of view) (management support)," "My team can easily get training on communication skills (teamwork training systems)," "After we get more responsibilities, our team gets rewarded or is recognized in a timely manner (reward and recognition system)." Responses were rated on a 7-point Likert scale ranging from 1(strongly disagree) to 7 (strongly agree). Cronbach's alpha was .94 at the team member level.

Team Efficacy

A seven-item questionnaire developed by Riggs and Knight (1994) was used to measure team members' perceptions of team efficacy. Members were asked to indicate the extent to which they perceive their team is capable of performing tasks successfully on a 7-point Likert scale ranging from 1(strongly disagree) to 7 (strongly agree). Sample items are "The team I work with has above average ability" and "The members of this team have excellent job skills." Cronbach's alpha was .88 at the team member level.

Team Cohesion

Researchers have argued that team cohesion is a multi-faceted concept and suggested various measurements (Beal et al., 2003; Carron et al., 1985, 1998). Social and task cohesion has been the primary focus of most research on cohesion. Most measures tend to tap both aspects of cohesion. The present study also considers both social and task aspects of cohesion and used Carless & De Paola's (2000) cohesion scale. Carless and De Paola (2000) suggested 4 items to measure task cohesion and 4 items to measure social cohesion. The sample items for social cohesion are "Our team would like to spend time together outside of work hours," and "Our team members rarely party together." The sample items for task cohesion are "Our team is united in trying to reach its goals for performance," and "I'm unhappy with my team's level of commitment to the task." Responses were rated on a 7-point Likert scale ranging from 1(strongly disagree) to 7 (strongly agree). Cronbach's alpha was .88 at the team member level.

Control Variables

Leader's demographic variables. A leader's demographic variables were collected to rule out possible bias. First, a leader's gender was controlled because a leader's gender was found to influence employees' perceptions toward the leader (Eagly, Makhijani, & Klonsky, 1992). The present study assumed TCOS might be biased because of a gender effect and, therefore, controlled leader gender. Male was coded as 0 and female was coded as 1. Second, a leader's age was controlled for similar reasons as gender. Some leaders may be perceived as influential and powerful because they are older. Especially in Korea where the sample was collected, the hierarchy of age is strong and people are compelled to respect and obey older people. To rule out the possible impact of a leader's age on TCOS, the present study controlled a leader's age. Third,

the length of time that leaders have worked for their teams was controlled because it might influence a leader's team commitment. Fourth, a leader's organizational tenure was controlled to rule out the possibility that leaders might be perceived as socially influential because they have worked for the organization for a long time.

Team size. Team size has been found to affect team members' motivation and cooperation, and team performance (Kozlowski & Bell, 2003) and level of team climate (Colquitt, Noe, & Jackson, 2002). In the same vein, the present study assumed team size would influence team members' perceptions of the team. In particular, team size can affect how team members perceive organizational support for their team because the positive effect of organizational support can be diluted in large teams. So, the present study measured team size as a control variable. The number of team members in a team was used to represent team size in this study.

Prior team performance. The present study obtained prior team performance evaluated in 2012 directly from the HR departments. The CEO of each company evaluates teams based on multiple criteria at the end of every year. Team performance is mainly assessed based on the extent to which teams have fulfilled the assigned goals. The performance score ranged from 0 to 100.

Table 1 is presented below to guide understanding of the composition of the survey in terms of sources of measurement. Table 1 shows survey components that constitute each questionnaire for executives, team leaders, and members. Appendices A1 through C2 show the specific survey items for each questionnaire provided to executives, team leaders, and members.

Insert Table 1 about here

Data Analysis

Confirmatory Factor Analysis

After data collection, I conducted confirmatory factor analysis (CFA) using LISREL 9.1 on the items of leader's power and TCOS. Because the scales to measure these variables contained relatively a large number of items, it was necessary to confirm the items were loading on previously specified factors for each variable. In the case of Liao's (2008) power scale, the author measured five different types of power individually and examined their relationships with dependent variables, respectively. Likewise, the present study assumed reward, referent, and expert power types were distinct constructs and a three factor model would fit the data better than a one factor model. Table 2 shows that a three factor-model fit the data significantly better than a onefactor-model ($\Delta X^2 = 1348.18, p < .001$). So, I concluded that reward, referent, and expert types of reward should be independently examined and tested in the analysis of the relationship between a leader's power and TCOS. The factor loadings for the 12 items are reported in Table 3-1.

> Insert Table 2 about here Insert Table 3-1 about here

The TCOS scale contained 25 items but Kennedy et al. (2009) confirmed that these items loaded on one factor by conducting a second-order CFA. Following Kennedy et al. (2008), the present study conducted both first-order and second-order CFA on 25 items to ensure they are loaded on a single second-order factor. The results are reported in Table 2. When I loaded 25

CFI= .80, SRMR= .12, RMSEA= .19). When I loaded the items on a single second-order factor, the model fit the data well (X^2 = 921.68, CFI= .97, SRMR= .08, RMSEA= .07) and significantly better than a single factor model (ΔX^2 = 4210.58, df= 7, *p*< .01). Therefore, I concluded that the 25 items loaded on separate support factors which then loaded on a single second-order factor. Table 3-2 also shows that the factor loadings of all items surpass the general cut-off of .40 for both first-order and second-order factors.

items on a single first-order factor, the model had a poor fit with the data ($X^2 = 5132.26$,

Insert Table 3-2 about here

Aggregation

Because all variables in the present study are team-level constructs, I aggregated members' responses that were measured by self-report to team-level variables. To justify aggregation, I first conducted one-way ANOVAs based on team membership for perceived power of leader, TCOS, team efficacy, and team cohesion. The results showed that all individual variables had significantly sufficient variance across teams to justify aggregation (perceived power of leader, F = 2.01, df = 79, p < .001; TCOS, F = 2.22, df = 79, p < .001; team efficacy, F= 2.22, df = 79, p < .001; team cohesion, F = 2.92, df = 79, p < .001). Then, I checked withingroup interrater agreement (r_{wg} ; James, Demaree, & Wolf, 1984) for the individual level variables. The mean r_{wg} was .81 for perceived power of leader, .84 for TCOS, .80 for team efficacy, and .80 for team cohesion, respectively. All of these r_{wg} s easily surpassed a cut-off of .70 which is generally accepted by previous research (Bliese, 2000; Klein & Kozlowski, 2000). To justify aggregation, I further calculated intraclass correlation coefficients (ICC(1) and ICC(2); Bartko, 1976) for each variable. The value of ICC(1) indicates the portion of the variability of individual member responses associated with team membership and the value of ICC (2) indicates the reliability of team means. The ICC (1) values were .14 for perceived power of leader, .16 for TOCS, .17 for team efficacy, and .24 for team cohesion, respectively. The ICC (2) values were .48 for perceived power of leader, .53 for TCOS, .53 for team efficacy, and .64 for team cohesion. These values showed that there was sufficient homogeneity within groups and sufficient between-group variance to justify aggregation (James, 1982).

Taken together, all indices suggested that there was sufficient variance based on team membership in perception of leader's power, TCOS, team efficacy, and team cohesion. Therefore, I proceeded to aggregate these individual perceptions to the team-level variables.

RESULTS

Network Characteristics

Before proceeding to test hypothesized relationships, it is useful to explore network characteristics to diagnose the pattern of ties as a whole. This study investigates 4 types of networks in total: advice network with leaders, advice network with superiors, friendship network with leaders, and friendship network with superiors. Of network types, the network with superiors, which refers to a leader's vertical ties with superiors, should be created with as many networks as the number of leaders. That is, each leader has his or her own network with superiors and the characteristics of the networks with superiors should differ across leaders. For the characteristics of networks with superiors, therefore, I used averaged scores. Table 4-1 shows descriptive information of all network characteristics. Insert Table 4-1 about here

First, network centralization for the networks is presented. Network centralization indicates the population as a whole. Henneman and Riddle (2005) explained network centralization can be understood as "the degree of inequality or variance in our network as percentage of that of a perfect network of the same size." That is, high network centralization indicates that some individuals hold central positions and power is unequally distributed in the network. In the sample of this study, in-degree centralization is 29% for advice network with peers, 33% for advice network with superiors, 29% for friendship network with peers, and 30% for friendship network with superiors. Based on these results, I can conclude that there is substantial inequality of power in all networks. That is, there is substantial variance in a leader's social capital, which is operationalized as a leader's in-degree centrality in this study, in all networks.

Next, Table 4-1 also presents the density of networks in the sample. When we use binary data, the density of network indicates the proportion of all possible ties that are actually present (Henneman & Riddle, 2005). According to Henneman and Riddle (2005), it is important to explore the density of networks in discussing social capital because the density tells us the extent to which individuals have high levels of social capital and/or social constraint. For the networks in this study, the density of the networks with peer leaders is lower than that of the networks with superiors. Density is 16% for advice network with peers, 35% for advice network with superiors, 15% for friendship network with peers, and 33% for friendship network with superiors. This result reveals that only 16% of possible advice ties among peer leaders exist and 15% of possible

friendship ties among peer leaders exist. Compared to leaders, superiors have denser networks. For superiors we observe 35% of possible advice ties and 33% of possible friendship ties exist. The difference might be due to the size of networks. Because the networks with superiors have a smaller number of constituents, more interaction among superiors is likely to occur.

Insert Table 4-2 about here

Additionally, Table 4-2 shows the density of peer leader's advice networks between and within companies. UCINET provides a tool to calculate density by groups. In this study, I divided density based on companies. In the final sample, there are eleven different companies. Leaders may tend to interact more with the leaders from certain companies. To check this, I present density by groups in Table 4-2. Although this study examines four different networks types, as a sample, I only present the density of peer leaders' advice network. Table 4-2 shows that leaders apparently interact more with peers in the same company. However, some companies have closer connections with certain companies than others. For example, company A and company E have more social interactions than other companies while company E rarely interacts with company J.

Lastly, the reciprocity of networks is presented in Table 4-1. Because the network data in the sample is asymmetric, it is meaningful to examine the extent to which the ties presented in the sampled networks are reciprocated. In UCINET, however, there are two different ways to calculate the degree of reciprocity. One method is to focus on the degree of reciprocity among pairs that have any ties. That is, it is to calculate the number of reciprocated pairs divided by the number of pairs with any tie. In this case, the pairs with no ties are excluded. Henneman and Riddle (2005) called this method as the dyad method. The other method focuses on the ties and calculates the number of reciprocated ties relative to all actual ties. Henneman and Riddle (2005) called this method the arc method. In the present study, I used the dyad method to calculate reciprocity. The reciprocity of networks is 35% for advice network with peers, 56% for advice network with superiors, 33% for friendship network with peers, and 50% for friendship network with superiors, respectively. The networks with a high ratio of reciprocity can be understood as being more stable and horizontally connected. The result shows that superiors hold more reciprocal relationships with one another than leaders.

Insert Figure 2 about here Insert Figure 3 about here Insert Figure 4 about here Insert Figure 5 about here

In addition to the descriptive information of networks, the present study visualizes the degree centrality of the networks in Figure 2, 3, 4, and 5^2 . Figures 3 and 5 illustrate one of the advice networks of superiors and one of the friendship networks of superiors as examples, respectively. In Figure 2, we find that certain leaders have higher degree centralities and occupy more central positions in the advice network than other leaders and these leaders work for the same company (shapes indicate the affiliated company). In contrast, there is a leader who

² Figure 2, 3, 4, and 5 show both in- and out degree centrality.
received only two in-coming ties from other peer leaders. Leaders also tend to interact more frequently with the leaders who work for the same company. This finding is consistent with the generic findings in sociology that information circulates more within than between groups (Lin et al., 2001). The friendship network of peer leaders (Figure 4) shows a similar configuration of relationships as that of the advice network of peer leaders. Social ties are centralized for certain leaders and they all work for the same company. As expected, leaders who work for the same company share more friendship ties than with leaders from different companies. Compared to the networks of peer leaders, the networks of executives (Figures 3 and 5) have higher network centralization as found in Table 4-1. This implies that superiors have more unequally distributed social capital than leaders.

Descriptive Statistics

Table 5 reports means, standard deviations, and zero-order correlations for all variables examined in this study. Table 5 shows that, on average, leaders have the largest number of ties for the advice network with peer leaders and the smallest number of ties for the friendship network with superiors. As it is more difficult for leaders to build relationships with superiors, especially friendly ones, it is not surprising to find that leaders report fewer ties for the friendship networks with superiors.

The correlations presented in Table 5 provides interesting associations among variables in the study. Although not hypothesized in the study, perceived referent power and expert power of leader are positively related to the leader's team commitment. And a leader's team commitment is negatively related to a leader's centrality for the networks with both peers and superiors. Of a leader's demographic variables, a leader's age is negatively related to a leader's gender, which means that most of older leaders are men. This result implies that glass ceilings may exist in the sampled companies or that only recently women – young as a result – had a chance to become leaders. And a leader's job tenure is positively related to prior team performance. As one of the team characteristics, team size is negatively related to team efficacy. Table 5 also provides preliminary support for the relationships hypothesized in this study. A leader's centrality in the networks with peer leaders and all three types of power are positively related to TCOS as expected. TCOS is also positively related to team efficacy and team cohesion.

Insert Table 5 about here

Hypothesis Testing

To test hypotheses, I used hierarchical regression as it is a single-level analysis, all at the team level. I found three outliers for which the standardized residual was close to 3 so three teams were further excluded from the sample. Thus, I used 77 teams in all regression analyses. For all hypotheses, I first entered control variables in Step 1 and added hypothesized predictors in Step 2 to test main effects. I also computed the variance inflation factor (VIF) to detect multicollinearity. There was no multicollinearity found in all regression analyses.

Leader's Social Capital and Team Climate for Organizational Support³

Hypothesis 1 predicts that a leader's social capital will be positively related to TCOS. As noted earlier, a leader's social capital is a theoretical concept so it is operationalized as the leader's in-degree centralities in the networks with peer leaders and superiors. Specifically, it is hypothesized that a) a leader's in-degree centrality of the advice network with peer leaders will be positively related to TCOS, b) a leader's in-degree centrality of the advice network with superiors will be positively related to TCOS, c) a leader's in-degree centrality of the friendship network with peer leaders will be positively related to TCOS, and d) a leader's in-degree centrality of the friendship network with superiors will be positively related to TCOS. To test hypothesis 1, I first controlled for a leader's demographic factors (i.e., age, gender, job tenure, and team tenure) to rule out their possible impact on TCOS. And I also controlled for team size and prior team performance as they might influence TCOS regardless of the leader's social capital. The result is shown in Table 6. Because there are 4 different measures of a leader's social capital, I regressed TCOS on each measure independently. Instead of reporting each result in separate tables, for simplicity's sake, I summarized the results together in Table 6. Therefore, Step 2a, 2b, 2c, and 2d in Table 6 should be interpreted separately as distinct results of each regression analysis. The result shows that a leader's in-degree centralities in the advice networks with peer leaders (β = .34, p < .01) and superiors (β = .29, p < .05) and the friendship network with peer leaders (β = .22, p < .10) were positively related to TCOS, supporting Hypothesis 1a,

³ Although CFA results supported the use of one second-order factor model for TCOS, I additionally regressed 7 separate organizational support factors onto each measure of a leader's social capital. The results showed that all measures of a leader's social capital had similar impact on 5 organizational support types (i.e., group design, integration system, information system, management support, and teamwork training systems). However, all measures of a leader's social capital had no significant effects on the TCOS dimensions of performance measurement and reward and recognition systems.

1b, and 1c, respectively. Additionally, I added four types of in-degree centralities together as one block in each regression to supplement testing Hypothesis 1 and the result is reported in Table 7. When all four measures were entered together, only a leader's in-degree centrality in the advice network with peer leaders was found to be significantly related to TCOS (β = 1.25, *p* < .05).

Insert Table 6 about here Insert Table 7 about here

Perceived Power of Leader and Team Climate for Organizational Support⁴

Hypothesis 2 states that a leader's power perceived by team members will be positively related to TCOS. Table 8 reports the results of regression analyses. A leader's demographic factors, team size, and prior team performance were entered as control variables in Step 1. Similar to the way the leader's in-degree centralities were entered separately to test Hypothesis 1, I entered each base of power individually in regressions and reported each result in Step 2a, Step 2b, and Step 2c in Table 8. The results show that all three types of power – reward, referent, and expert power – were positively related to TCOS at a significant level (β = .46, *p* < .01 for reward power, β = .61, *p* < .01 for referent power, and β = .56, *p* < .01 for expert power, respectively). Therefore, I found support for Hypothesis 2a, 2b, and 2c. Additionally, I entered all three types of power as one block in regression to test whether it would change the results. As

⁴ Again, I regressed 7 different organizational support types onto 3 measures of perceived power of leader to see if the results would change when I used 7 factor model of TCOS instead of one second-order model. The results did not change when I regressed 7 separate organizational support types onto 3 measures of perceived power, respectively.

reported in Table 9, all three types of power were still positively related to TCOS even when entered as one block. This result corroborates support for Hypothesis 2a, 2b, and 2c.

> Insert Table 8 about here Insert Table 9 about here

Although not hypothesized, it was additionally found that leader's social capital interacted with leader's perceived power in affecting TCOS. Specifically, leader's centrality in advice networks with superiors had a stronger impact on TCOS when team members believed their leader was powerful in terms of rewards (β = 1.5, *p* = .04). Leader's friendship networks with both peer leaders and superiors also weakly interacted with leader's reward power such that team members felt more supported by the organization when their leaders were central in friendship networks with peer leaders (β = 1.4, *p* = .07) and superiors (β = 1.2, *p* = .09) and powerful in terms of rewards.

Leader's Social Capital, Perceived Power of Leader, and Team Climate for Organizational Support

Although I found support for both Hypothesis 1 and 2 in previous sections, I further tested the effects of leader's social capital and perceived power of leader on TCOS as I entered all measures of leader's social capital and perceived power as one block in a regression. The result is reported in Table 10. All control variables were added in Step 1 and four measures of leader's social capital were added together in Step 2. In Step 3, I entered control variables and three types of perceived power for the ease of comparing results. In Step 4, all control variables, four measures of leader's social capital, and three types of perceived power were entered. Surprisingly, only referent power was found to be positively related to TCOS (β = .31, p < .05) whereas other predictors were found to be insignificant in Step 4.

Insert Table 10 about here

Moderating Role of Leader's Team Commitment

In addition to the relationship between a leader's social capital and TCOS and the relationship between perceived power of leader and TCOS, the present study further proposes that a leader's team commitment will moderate these relationships such that both relationships will be strengthened. First, to test the moderating effect of a leader's team commitment on the relationship between a leader's social capital and TCOS (Hypothesis 3), I ran regression analyses and report the results in Table 11. I first entered control variables (i.e., leader's demographic factors, team size, and prior team performance) in Step 1 and one of the in-degree centrality measures and leader's team commitment in Step 2. To test the moderating effect, I computed the interaction term of the specific in-degree centrality that had been entered and a leader's team commitment and entered the interaction term in Step 3. Because there are four different measures of a leader's social capital in this study, I repeated this procedure for each measure. For simplicity's sake, I report only the result of Step 3 for each regression analysis in Table 11. Although a leader's team commitment was positively related to TCOS, no interaction terms of a leader's social capital and team commitment were found to be significant. Therefore, I found no support for Hypotheses 3a, 3b, 3c, and 3d.

Insert Table 11 about here

Next, to test Hypothesis 4, which predicts the moderating effect of a leader's team commitment on the relationship between perceived power of leader and TCOS, I repeated the procedure used to test Hypothesis 3. I first entered control variables in Step 1 and perceived power of leader and a leader's team commitment in Step 2 to test main effects. Then I entered the interaction term of each specific perceived power of the leader and leader's team commitment in Step 3 to test the moderating effect. The results are reported in Table 12. Again, I conducted regressions for each type of power individually and report only Step 3 in Table 12. The results show that there were no moderating effects for all types of power. Therefore, Hypotheses 4a, 4b, and 4c are not supported.

Insert Table 12 about here

Team Climate for Organizational Support and Team Efficacy

As a consequence of TCOS, team efficacy is proposed to be positively related to TCOS in Hypothesis 5. I used regression to test the relationship and report the result in Table 13. All control variables were entered in Step 1 and TCOS was added in Step 2. TCOS was found to be a strong predictor of team efficacy (β = .60, p < .01). Therefore, Hypothesis 5 is strongly supported. As found in the correlations among variables (Table 5), however, team size was consistently negatively related to team efficacy in the regression. Team Climate for Organizational Support and Team Cohesion

Team cohesion is hypothesized to be another important consequence of TCOS (Hypothesis 6). To test the effect of team cohesion on TCOS, I regressed team cohesion on TCOS after controlling for a leader's demographic factors, team size, and prior team performance. The result is reported in Table 13. It was found that TCOS is also a strong predictor of team cohesion (β = .54, p < .01), supporting Hypothesis 6.

Insert Table 13 about here

Supplementary Analysis: Structural Model

In addition to testing the proposed hypotheses, I further examined whether the data supported the structural model using LISREL 9.1. I first specified a latent model with all hypothesized paths among 6 variables except the moderating effect of leader's team commitment as it was not supported in the previous analysis. The result showed the model fit the data poorly $(\chi^2[5] = 30.93, CFI = .84, SRMR = .09, RMSEA = .26)$. Therefore, I explored alternative models and found that one structural model showed relatively good fit $(\chi^2[2] = 3.70, CFI = .96, SRMR = .05, RMSEA = .10)$. Figure 6 presents the modified structural model. In this model, a leader's social capital was operationalized by leader's central in the advice network with peer leaders. This result showed that leaders who were central in the advice network with peers were less likely to feel committed to their teams ($\beta = -.22$) but their team members felt more supported by the organization ($\beta = .58$). Higher team climate for organization support, in turn, increased group efficacy at the team level ($\beta = .84$). I also tested mediational

effects. First, leader's centrality significantly and negatively affected TCOS through leader's team commitment (β = -.19). Second, leader's centrality also significantly and positively affected group efficacy through leader's team commitment and TCOS (β = .25).

DISCUSSION

In a series of regression analyses, I found support for many of the relationships hypothesized in this study. First, a leader' social capital significantly influenced how team members perceive the organizational support provided for their team. A leader's in-degree centralities in advice and friendship networks with peer leaders and superiors were found to be positively related to TCOS as hypothesized. When entered simultaneously, three of the four types of in-degree centralities were positively associated with TCOS but in-degree centrality in the friendship network with superiors was not. Second, results strongly supported the relationship between perceived power of leader and TCOS. The relationship was also supported even when all types of power were entered together as one block in regression. This shows that these measures of perceived power play distinct roles in affecting team-level perceptions. Third, this study further proposed that a leader's team commitment should moderate the relationship between a leader's social capital and TCOS and the relationship between perceived power of leader and TCOS, respectively. Contrary to my expectations, none of the hypothesized moderating effects were supported in this study. Lastly, I proposed that TCOS would influence two important team-level outcomes, including team efficacy and team cohesion. Team efficacy involves team members' task-oriented perception of team whereas team cohesion concerns members' emotional attitudes toward their team. The results showed that both team efficacy and team cohesion were positively related to TCOS. The theoretical implications and practical implications are discussed below.

Theoretical Implications

The findings of this study provide important theoretical implications in several ways. Overall, this study extends the research of social capital by incorporating team-level perceptions that are known as key determinants of team performance and suggests new approaches to leadership in team settings.

The External Ties of Leaders and Team Members' Perception of Organizational Support

According to Adler and Kwon (2002), social capital may take different forms depending on whether the focus is on the actor's external ties or internal ties. Although previous research found both types of ties are relevant to team outcomes, the present study focused on the social capital that arises from the leader's external ties with peer leaders and superiors because gaining access to valuable resources and limited information located outside a team confers to the team competitive advantages over rival teams. That is, leaders serve as a conduit of valuable resources that are not easily obtained by team members. Compared to research on the leader's internal social network within a team (e.g., Balkundi & Harrison, 2006; Balkundi, Kilduff, & Harrison, 2011), however, research on the leader's external network is scarce. Recognizing the importance of a leader's external ties, only a few studies have begun to examine its impact on both individual and group outcomes. For example, a leader's external ties have been found to associate with team performance (Mehra et al., 2006) and perceived leader's status (Venkataramani et al., 2010).

To enhance our understanding of the effect of a leader's external ties on team members' perceptions, the present study examined the relationships between a leader's social capital emerging from his or her external ties and team members' collective perceptions of organizational support for their team (i.e., team climate for organizational support, TCOS). The reason that this study focuses on TCOS as an important team-level perception particularly related to the leader's social capital is that it demonstrates the extent to which the team perceives organizational support in indirect, yet accurate terms. Many researchers have asserted that the teams of those leaders who hold central network positions will enjoy greater organizational support such as strategic project opportunities and privileged information. However, there has been as of yet no attempt to empirically test whether team members indeed receive more support when their leader is central in social networks, instead of simply assuming such potential benefits. In this regard, the current study employed the concept of TCOS. Although a team's perceived organizational support may not precisely match the actual amount of organizational support provided for the team, perceptions can be a more appropriate indicator of critical team processes because perceptions are "more important and more closely related to attitudes and behaviors than an actual situation" (Ostroff, Shin, & Kinicki, 2005, p. 595).

By examining the relationship between a leader's social capital, measured as in-degree centralities in advice and friendship networks, and TCOS, the present study found that three types of in-degree centralities were positively related to TCOS. Specifically, a leader's in-degree centrality in an advice network with peer leaders was most strongly related to TCOS. This means that team members believe their team is more supported when their leader holds a central

position among peer leaders in terms of work-related interactions. Similarly, when a leader holds a central position in the friendship network with peer leaders, team members felt supported as well. Interestingly, however, a leader's centrality in the networks with superiors had either marginal or no impact on team members' perceptions of organizational support. This finding is quite unexpected given a leader's superiors (i.e., executives in this sample) are the ones who make strategic decisions and have ultimate authority over the flow of valuable resources in the organization. Or, it might be because it is difficult for members to witness and experience those ties easily.

These results imply that a leader's social ties with peer leaders have more influence on how team members perceive organizational support for their team than the ties with superiors. When we recall that there has been little evidence for the effect of a leader's social ties with superiors on team-level outcomes (Mehra et al., 2006), in fact, the marginal effect of a leader's ties with superiors makes some sense. Mehra et al. (2006) addressed that strong connections with top supervisors may seem rather negative in the eyes of subordinates. Actually, they found a negative relationship between a leader's centrality in the friendship network with superiors and the leader's reputation among their subordinates.

My interpretation for the stronger support for the relationship between a leader's centrality in the networks with peer leaders and TCOS is that peer leaders may have more information and resources particularly related to immediate work demands so the team with leaders who are central in the network of peer leaders perceive more support for their team. It is indisputable that top executives possess more authority over the use of resource and long-term strategic planning. However, a leader's close connections with other team leaders may provide more hands-on information in performing team tasks. Teams accumulate distinct knowledge and

skills by experiencing different projects and social interactions. Central leaders tend to have more access to these knowledge and skills located in other teams through stronger bonds with other leaders because individuals engage in more social exchange even beyond job requirements when they build trust and expectation with each other (Blau, 1964; Coleman, 1988). It is also possible that team members simply cannot see the vertical ties. Therefore, a leader's social relationships with peer leaders may be more beneficial to their teams than those with superiors.

It is also possible that even when leaders are well connected to superiors, their influence over the control of organizational support may be quite limited due to the rigid hierarchy of decision making. Decision on the use of top-level resources and information may be strictly restricted to top positions and not readily available to team leaders, even if they are socially close to top executives. The fact that a leader's centrality in the advice network with superiors had a marginal positive impact on TCOS whereas a leader's centrality in the friendship network with superiors had no impact at all also supports such interpretations. Leaders may have influence over actual organizational support to some degree when they are trusted as a reliable source of advice among superiors. However, when leaders are simply close friends with superiors, superiors do not allow them to have influence over important strategic decisions. That is, executives do not appear to mix business with pleasure. Therefore, a leader's centrality in the friendship network with superiors may not translate into benefits for their teams as much as a leader's centrality in their networks with peer leaders.

In terms of the networks with peer leaders, however, findings suggest that the content of networks (advice vs. friendship) was less crucial for the relationship between a leader's centrality in the networks with peer leaders and TCOS. The network ties were found to be strongly correlated to each other as well. That is, a leader's centrality in the advice network had a similar

effect on TCOS as a leader's centrality in the friendship network. This result is consistent with Balkundi and Harrison (2006), which reveals the types of social ties within a team (instrumental vs. expressive) had roughly the same impact on team performance. Similarly, Adler and Kwon (2002) explained friendship ties also can be used as advice ties. However, this contradicts the differential impact of a leader's centrality in the networks with superiors depending on the content of the network. Such contradictions may result from differential utilization of social ties of leaders as compared to superiors. Unlike their relationship networks with superiors, team leaders may establish more trust and reciprocal norms through friendship ties with their peers. Thus, friendship ties also serve as an important conduit of information and resources as advice ties in networks of peer leaders.

In summary, the present study makes a significant contribution to the literature on social capital and teams by examining the effect of a leader's external ties on team-level perception of organizational support. As noted earlier, research on social capital, especially a leader's social capital, is proliferating but the research on a leader's external social ties with out-group members is scarce. To my knowledge, only a few studies (i.e., Bono & Anderson, 2005; Mehra et al., 2006; Venkataramani et al., 2010) examined the effect of a leader's external ties as a foundation for a leader's social capital. Only Mehra et al. (2006) found its association with a team-level outcome (i.e., team performance). In this regard, the present study makes a contribution by testing the positive impact of a leader's external social ties (both advice and friendship ties) on members' collective perceptions of TCOS at the team-level. The present study is the first to empirically establish that a leader's social capital indeed brings about more perceived organizational support for his or her own team. The different results depending on the types of social networks (peers versus superiors) that leaders build also reveals a leader's social ties do

not function equally; rather a leader's ties with peer leaders are more beneficial to team-level perceptions among team members. Depending on the types of social connection, the content of social ties (advice versus friendship) had similar impacts on team-level perceptions. Also, this study corroborated the argument that perception of organizational support is more than an individual interpretation; it is a product of social interaction among team members who experience the same cues of leadership (Zagenczyk et al., 2010).

Social Network Approaches to Leadership

The findings also provide important implications for leadership theory and research. Results reveal the important role of a leader's social capital in encouraging team members' positive attitudes toward their team and the organization. The traditional literature of leadership recognizes the importance of the social roles that a leader can and should assume. The behavioral approach and the situational approach to leadership both highlight the importance of social interactions between a leader and subordinates (Blake & Mouton, 1982; Phillips, 1995). In particular, the leadership research under the situational approach tacitly took the social network approach in identifying situational factors that affect leadership effectiveness. This work suggested that a leader's relative position, distance to the central authority, and relational constraints should be considered in discussing appropriate leadership styles for certain situations.

The power perspective on leadership is also of particular relevance. Taking the power approach, charismatic and transformational leadership studies have incorporated the social network perspective and argued that a leader's networks with subordinates strengthen desirable leadership behaviors and vice versa (Balkundi et al., 2011; Bono & Anderson, 2005). Most of all, LMX is basically established on an underlying social network of role relationships. It focuses on a leader's social relationships with subordinates and asserts that the quality of those relationships determines subordinates' attitudes and performance. LMX does not only include a dyadic linkage between a leader and a subordinate but also a vertical linkage with his or her own boss (Cashman et al., 1976; Graen & Uhl-Bien, 1995). Integrating LMX and the social network perspective, recent studies have begun to investigate the effect of a leader's social relationships across levels (e.g., Dionne, Sayama, Hao, & Bush, 2010; Sparrowe & Liden, 1997, 2005; Thomas, Martin, Epitropaki, Guillaume, & Lee, 2013; Venkataramani et al., 2010).

Consistent with the growing interest in taking the social network approach to leadership, the present study provides theoretical implications as to a leader's role from the social network perspective. Previous research on leadership has largely focused on the leader's managerial roles within a team such as appraising subordinates' behaviors, providing a direction for the team, monitoring the use of team resources, and caring about subordinates' needs. This study, however, extended the scope of leadership by questioning the assumption that leaders are able to provide their teams with necessary support when needed. LMX theory posits that subordinates who have high quality relationships with their leader are granted access to privileged resources, emotional support, and opportunity for career advancement, which are key benefits employees can garner from the leader's social capital. However, LMX does not consider differential social capital that leaders obtain from their social ties. LMX simply assumes the leader is provided valuable resources by virtue of positional discretion. Unlike LMX, the present study argues that leaders need to make substantial efforts to gain necessary organizational support and leaders' positions in the networks with peer leaders and superiors partially determines a leader's ability to obtain required resources.

Findings demonstrate that leaders differ in terms of centralities in their social networks in the organization (i.e., social capital) and such variance explains organizational support varying across teams. Findings inform us that, to be a good leader, leaders are now required to recognize their new roles as a bridge between out-group members and team members and as a gatekeeper and generator of organizational support for their teams. It also provides important implications to the relationship-based approach to leadership because some researchers have warned the social burden that entails from a leader's networking behaviors can reduce attention to team members (Adler & Kwon, 2002). Highlighting this concern, results show that socially well-connected leaders were actually less committed to their teams. However, the present findings also demonstrate that the benefits of a leader's social capital override the potential perils, at least in eliciting team members' positive attitudes toward their team.

Distinct Role of Perceived Leader's Power

In social capital research, power has been the most-cited benefit of social capital (Adler & Kwon, 2002). However, in most empirical studies, social capital researchers have equated power and social capital with an individual's centrality in the network. Previous research has relied on centrality to measure the degree of social capital (Hanneman & Riddle, 2005) and power has been essentially equated with social capital and centrality. This tendency has prevented researchers from focusing on the distinct role of power in social capital research. However, a leader's power affects team members' perceptions in its own right (Geissner & Schubert, 2007). Also, unlike social capital, power exists as a part of subordinate's perceptions rather than within social relationships. Therefore, in addition to the leader's social capital, the

current study examined whether the perceived power of leader affected team members' perceptions of organizational support, separate from centrality. The logic underlying the assumption is that team members' perceived organizational support, which is an indicator of their team's status in the organization, should be greater as they perceive their leader to be more powerful. Venkataramani et al. (2010) examined a similar concept, called perceived leader status, and measured the extent to which employees believe the organization supports the leader's decisions. Extending and elaborating on the work by Venkataramani et al. (2010), this study operationalized the perceived power of leader as a broader concept that involves multiple aspects of supervisory and managerial dimensions (e.g., providing rewards in a timely manner, helping members get promoted, making members feel important, and sharing technical knowledge) and measured a leader's power as team members' perceptions because individuals are powerful when they are believed to be so (Pfeffer, 1977). Findings suggest that the perceived power of leader was strongly associated with team members' perceptions of organizational support. In other words, team members believed their team was more valued and supported when they perceived their leader as powerful in the organization. The association was strong regardless of the type of power being considered. This result shows that a leader's power in the eyes of team members is as important as a leader's social capital in enhancing team members' positive attitudes toward their team.

Examining a leader's perceived power is also important from leadership perspective. Giessner and Schubert (2007) argued that effective leadership requires power but not all leaders are perceived as powerful by subordinates. Recent research on leadership tends to highlight a leader's humane and moral characteristics mainly as a friendly supporter of subordinates instead of a supervisor who can exploit subordinates by utilizing his or her power. For example, transformational leadership emphasizes leadership that encourages subordinates' motivation, morale, and commitment by influencing their attitudes (Bass, 1985). Supportive leadership focuses on providing emotional support to subordinates (House, 1981) and ethnical leadership focuses on the leadership that sets an ethical example, treats people fairly, and actively manages morality (Brown, Treviño, & Harrison, 2005).

These trends in the leadership literature tend to overlook the role of perceived power in eliciting desirable attitudes and behaviors. Although some leaders may prioritize maintaining their power by sacrificing teams' goals or interests (Maner & Mead, 2010), the positive relationship between perceived leader's power and TCOS found in this study implies that leaders need to construct an image as a powerful leader to induce positive team outcomes. From an LMX perspective, a leader who is seen powerful is also a more attractive partner to subordinates because powerful leaders are more able to provide valuable resources and support (Dienesch & Liden, 1986). Cogliser and Schriesheim (2000) empirically found a leader's perceived power in terms of expert, referent, legitimate, and reward power was positively related to LMX quality rated by subordinates.

In summary, the present study extends the literature of social capital and leadership by examining the distinct role of perceived power of leader. Beyond simply assuming power as a product of social connections to higher ranking superiors, this study argues that a leader's power perceived by team members affects team members' shared perception on its own. Also, the study helps researchers draw attention back to the importance of power in leadership by confirming its positive association with team members' positive attitudes toward their team. Introduction of Leader's Team Commitment

The present study assumed a leader's team commitment would moderate the relationship between a leader's social capital and TCOS and the relationship between perceived power of leader and TCOS. However, contrary to expectations, the study did not find support for the moderating effect of a leader's team commitment. Although there was no support for the moderating effect of a leader's commitment to the team, it is noteworthy that this study is the first to examine the concept of leader's team commitment. It has been noted that individual intention to utilize social ties is as important as having the ties available (Adler & Kwon, 2002; Carpenter et al., 2012). Carpenter et al. (2012) stated that researchers have focused only on the existence of social ties and implicitly taken the actor's willingness to use the ties as given.

Motivation to utilize the social capital is particularly important in the discussion on a leader's social capital because not all leaders help their teams achieve goals and care about team members (Maner & Mead, 2010). When a leader's self-interest matches team members' interests, there is no reason to believe that a leader will not utilize the social capital for the sake of his or her team. When they do not match, however, leaders may be tempted to either utilize their social capital in self-serving ways or just save it for later personal use. Therefore, leaders should be motivated either by normative commitment or by affective attachment to use their social capital for the good of their teams. Venkataramani et al. (2010) similarly recognized the importance of a leader's ability or willingness in transforming the benefits of social connections into effective leadership.

Leader team commitment was found to be positively related to TCOS but its negative association with a leader's social capital is quite interesting and worthy of additional discussion.

As opposed to intuition, a leader's team commitment was negatively related to all types of leader's centrality (see Table 5). In other words, leaders who hold central positions in their networks with peer leaders and superiors are less likely to be committed to their teams. There are several possible interpretations. One interpretation is that the negative association is because leaders become less satisfied with and committed to their teams as they believe they are important assets and frequently sought for by superiors and coworkers in the company. That is, a leader's higher self-esteem may cause lower satisfaction with and commitment to the status quo. The leaders with higher centrality may believe they deserve higher positions or have higher expectation toward their team members. It is also possible that pouring time and energy into the building and cultivation of network relationships leaves less time and energy for commitment to the team.

Furthermore, it was also found that a leader's team commitment was positively related to team cohesion. This finding parallels the research of LMX. As team leaders are committed to their teams, they should be more likely to build good relationships with team members and care about their needs. And this leads members to have positive attitudes toward their teams and eventually enhances team cohesion as a whole.

In short, a leader's team commitment may not moderate the effect of a leader's social capital and the effect of perceived leader's power but it is important to consider a leader's motivation and willingness to utilize his or her social capital in the research on leader social capital. Given its potential as an important predictor of a leader's behaviors and attitudes toward team members, a leader's team commitment deserves further investigation in the future research.

Team Climate for Organizational Support, Team Efficacy, and Team Cohesion

The present study examined team efficacy and team cohesion as outcomes of team climate for organizational support. Team efficacy represents team members' positive beliefs in their team's capability to perform tasks successfully whereas team cohesion represents member emotional attachment to their team. These two attitudes have been found to be significant predictors of team performance, respectively (Gully et al., 1995, 2002; Stajkovic et al., 2009). Despite a large number of studies that have examined the antecedents of team efficacy and team cohesion at the team level, little attention has been paid to the relationship between team members' perceived organizational support and team efficacy and the relationship between team members' perceived organizational support and team cohesion. This is partially due to insufficient attention paid to the concept of team-level perceived organizational support. At the individual level, perceived organizational support has received substantial attention and has been found to associate with a variety of positive attitudes such as organizational commitment, affect, job involvement, and desire to remain (Rhodes & Eisenberger, 2002). Similar to individuals, teams also develop collective beliefs that their efforts and commitment will be recognized and rewarded in a form of organizational support. Thus, when team members believe their team is sufficiently supported by the organization, they are likely to have greater confidence in their team's ability and, as a result, feel more attached to their team.

Supporting this assumption, the present study found that TCOS was positively associated with team efficacy and team cohesion at the team level, respectively. This finding not only extends the research of perceived organizational support but also enables understanding of how team members' appreciation of organizational support translates into positive attitudes. Considering the positive relationship between a leader's social capital and TCOS, this finding also highlights the important role of leaders in developing team efficacy and team cohesion. In particular, it has been argued that a leader is responsible for developing team efficacy for team effectiveness (Kozlowski & Bell, 2003). A variety of leader behaviors have been shown to be relevant to increasing team efficacy or team cohesion, including transformational leadership behaviors (Hargis, Watt, & Piotrowski, 2011; Jung & Sosik, 2002), group-focused (Hargis, Watt, & Piotrowski, 2011; Jung & Sosik, 2002), leader's impression management behaviors (Rozell & Gundersen, 2003), leader's conflict management behaviors (Gelfand, Leslie, Keller, & de Dreu, 20120). Additionally, a leader's role efficacy plays an important role in leadership dynamics (Taggar &Seijts, 2003) However, there has been no attempt to investigate either direct or indirect effects of a leader's social capital on team efficacy or team cohesion. In this regard, the present study makes an important contribution to team theory and research by suggesting a leader's new role in enhancing team efficacy and team cohesion. Organizational support obtained by the virtue of a leader's social capital can help members develop their confidence regarding their capabilities and emotional attachment to the team indirectly.

Potential Liability of Well-Connected Leaders

Consistent with previous theory and research, the current study basically assumed the positive role of leader' social capital in the team context and found support for its positive impact on team climate for organizational support. However, it is intriguing that leaders with strong social capital, as measured by centrality, felt less committed to their teams. This unexpected finding echoes Adler and Kwon's (2002) argument about the potential burdens resulting from a leader's excessive networking behaviors. They argued that maintaining social capital is costly

and strong solidarity might deter efforts to search for novel ideas or ways of getting things done. In addition to the risks of social capital discussed in the previous studies, the current study found that it is possible that a leader's social capital might lead the leader to believe he or she deserves higher positions or strategic teams. Additionally, consistent with Adler and Kwon (2002), building good social capital might leave less energy and attention directed to the team and their team members. The research on the liability of social capital, especially its impact on leader's behaviors and team member perceptions, is at a nascent stage. Thus, more investigation is clearly needed on this and related topics

Alternative Model

As a supplementary analysis, I tested a structural model with all hypothesized paths and failed to find support for the model as a whole. Instead, I found an alternative model that exhibited moderate fit to the data. In this model, the leader's social capital led team members to believe their team was well supported by the organization but, at the same time, reduced the leader's commitment to his or her team. As a consequence of TCOS, team members' confidence in their team's ability increased. This model portrays both positive and negative aspects of social capital. It is obvious that team members enjoy the benefits of the leader's social capital but the leader may not necessarily be a good leader if he or she does not maintain commitment to the team. If the leader only pays attention to building good relationships with out-group members for his or her own self-interest, then even if there are potential benefits for the team, team members may not be satisfied with their leader and, as a result, have poor relationships with their leader and feel less support exists for their team. Based on this result, it will be worthwhile to more

carefully examine the potential negative impact of the leader's social capital on the leader and team members.

Practical Implications

The support for the positive impact of a leader's social ties with peer leaders and superiors on team-level perceptions provides several practical implications. Interest in social capital has literally exploded in recent years. "Knowing who" has become as important as "knowing what" in the world of business. The influx of social networking services such as LinkedIn, Facebook, Twitter, and Google + has fueled people's aspiration to be connected and offered opportunities to build an extensive social network. In the era of networking, an organization particularly needs to help team leaders to build personal as well as work-related social networks with other team leaders, including leaders from different organizations.

To do so, organizations may fund social activities of leaders which help them get acquainted with other leaders and maintain important social connections. It is also helpful for them to provide education specialized in building good relationships in the context of business. As a group's network preference and climate for perceived importance of networking affect individuals' efforts for networking building (Hoegl, Parboteeah, & Munson, 2003), it is also important for organizations to establish an atmosphere favoring social networking, especially among team leaders. In addition to a leader's social capital, a leader's power perceived by team members was also found to play an important role in enhancing members' positive attitudes. Therefore, a leader's tactics to appropriately signal his or her social connections with other influential leaders to members may be beneficial to team effectiveness. Such strategic behaviors have been considered as canny from an ethical perspective but they may deserve new consideration as long as the power dynamics and impression management behaviors are founded in a genuine desire to improve the team and are not misleading to superiors or team members.

The findings of the present study regarding the positive effect of a leader's extensive social connections also provide implications for leader staffing. Researchers have begun to consider employees' social network as criteria for team staffing (Reagans et al., 2004). As compared to employees, a leader's social network, especially with out-group members, has received little attention in terms of leader selection. To select a leader who fits the focal team, organizations now need to additionally consider the leader's social capital. A leader's capability to establish extensive social networks is particularly important in certain job categories. For example, a leader of sales team is required to manage several relationships (Flaherty, Lam, Lee, Mulki, & Dixon, 2012) and his or her success as a leader depends on the ability to utilize social capital in attracting potential customers.

Because TCOS was positively related to team efficacy and team cohesion, it is also important for organizations to help team members develop positive perceptions of the organization beyond a leader's role. For example, organizations may increase TCOS of poor performing teams and induce positive job attitudes through pep emails or meetings with top management which signal the message that they care about the team members' well-being and appreciate their contribution as a team. Or, because the perception of fairness is related to individual POS, timely information regarding allocation and execution of organizational support for teams may help team members minimize doubt in the support management system and believe they are fairly treated by the organization, which in turn increases TCOS. Additionally, the important role of leader commitment to the team is an issue for organizations to explicitly consider. It is important to leaders to understand that maintaining commitment to their team is a critical aspect of leadership, even as they seek to build and maintain strong social networks with peers and superiors. Current findings suggest there may be a negative relationship between network centrality and leader's commitment to the team. If this finding holds up in future research then organizations should work to ameliorate the negative influence of social network development on leader's team commitment.

Limitations

The present study is limited in several ways. First, the present study relied on a crosssectional research design and, therefore, it cannot draw causal connections among variables. Although Balkundi and Harrison (2006) asserts that network structures temporally precede team performance based on meta-analytic findings, this study cannot test whether a leader's social capital and perceived leader power preceded TCOS, and whether TCOS preceded team efficacy and team cohesion in this sample.

Second, the sample I used in this study was collected from Korean companies. Korean companies are known to have a different work culture compared to Western companies. For example, Korean companies had greater power distance and collectivism than Western companies (Christie, Kwon, Stoeberl, & Baumhart, 2003). Given the cultural differences at work, a leader's social networks may function differently in determining team members' perceptions in Western companies. Therefore, the findings are limited in generalizing to Western work organizations.

Third, this study collected responses from three different sources (i.e., executives, leaders, and team members) to measure the variables examined in the study. This method minimized the possibility of common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) but some relationships (e.g., leader's perceived power and TCOS; TCOS and team cohesion; TCOS and team-efficacy) might be prone to common method biases because they were measured by the same source. Fourth, although 84 teams are not a small sample for the team-level analysis, the limited sample size may have low power to detect hypothesized relationships, causing Type II error.

Directions for Future Research

There are several ways to extend this research in future studies. First, it would sense in future team research to examine other mediating processes through which a leader's social capital affects team performance. The present study examined potential mediators such as team climate for organizational support, team efficacy, and team cohesion but it didn't test full mediation with team performance. By confirming the mediating process between a leader's social capital and team performance, we may advocate the importance of a leader's social capital more easily in the context of teams.

Second, this study only focused on a leader's external ties because they serve as a conduit of valuable resources located outside teams but it would be beneficial to include a leader's internal ties with team members so we can examine whether the benefits of a leader's social capital distribute differentially among team members depending on the quality of the internal ties and whether such differential distribution affects team members' perceptions. Mehar et al. (2006) and Venkataramani et al. (2010) are good examples of research integrating both type of ties.

Third, the dispersion of power perceptions among team members could be an important predictor of LMX. Although LMX was not incorporated in this study, the results imply that team members may not perceive their leader's power equally and such dispersion should affect how much they are willing to make efforts to establish good relationships with their leader for either personal or work-related reason. In fact, because LMX is a within unit theory, it is likely that dispersion of leader relationships with team members exists.

Fourth, although the moderating effect of a leader's team commitment received no support in this study, it could be an important predictor of other outcomes across levels. For example, a leader's team commitment might be positively associated with LMX quality, citizenship behaviors, and job involvement at the individual level. At the team level, a leader's team commitment might determine leadership styles and create desirable team climates.

Fifth, instead of a leader's team commitment, leadership behaviors might moderate the relationship between a leader's social capital and TCOS. In particular, transformational leadership behaviors might moderate the relationship such that transformational leaders are more willing to utilize their social capital to induce positive team-level attitudes. LMX is also a potential moderator for the relationship between leader's social capital and individually perceived organizational support for the team. As team members maintain good relationships with their leader, it is more likely that leaders will share information regarding their social capital and have motivation to utilize their social capital in a way to support team members.

Sixth, in addition to the leader's behaviors, contextual factors might act as boundary constraints in leaders' cultivation of social capital. As found in Table 4-2, centrality distributed unequally at the company level as well. In other words, leaders from a certain company engaged in more interaction with other leaders from different companies. Therefore, it is possible the type of company or team affects the leader's ability to build social capital with other leaders. If so, it would be another good research opportunity to take contextual factors such as the type of company or team into account in examine the effect of leader's social capital.

Seventh, this study employed in-degree centrality to measure leader's social capital especially in the context of power. However, it is also possible that other network indicators capture the leader's power-centered social capital even better than in-degree centrality. For example, betweenness also can be a good indicator of leader's social capital as it represents the individual's power or influence over others through brokerage. It would also be meaningful to compare different types of centrality indicators and examine which indicator is most effective under certain circumstance.

Lastly, some unexpected findings offer opportunities for future research. Interestingly, a leader's age turned out to be negatively associated with TCOS when all types of leader's social capital and power were entered (see Tables 7, 9, and 10). Also, a negative relationship between team size and team efficacy found in Table 5 suggests that team members in large teams may tend to have lower belief in their capability to perform as a team. My interpretation is that the team members of a large team have lower confidence in their capabilities as a team because it is more difficult for them to accurately estimate general capabilities of all team members. Because the team process of large teams is more complex and lagging, team members may have less confidence in their team's capability. However, this finding contrasts with Hirschfeld and

Bernerth (2008)'s finding that team mental efficacy and team physical efficacy were greater in large teams. Future research may find an answer for the differing results.

CONCLUSION

Because teams are increasingly important as a unit of interest in management (Gerard, 1995), research on team leader roles have shown them to be more complex and diverse than initially thought. Of a leader's required competencies, a leader's social capital is gaining particular attention along with the development of the social network perspective in management. These trends are strengthening with the surging interest in the use of networking. Leaders are embedded in multiple networks with superiors, peer leaders, and subordinates in the organization and they utilize the social ties to perform tasks and build reputations. Their social ties with superiors and peer leaders are of particular importance because they serve as a conduit of valuable resources and information located outside teams. As leaders occupy central positions in both advice and friendship networks with superiors and peer leaders, team members' perception of organizational support for their team will become increasingly positive. When team members find their leader powerful in terms of managing rewards and promotions, encouraging a sense of endorsement, and providing technical knowledge, team members also feel more supported by the organization. Team members' positive attitudes toward the organizational support for their team in turn helps them promote positive collective attitudes toward their own team.

In the 21st century, leaders are more than managers who simply perform managerial responsibilities. They serve as brokers who bridge top management and team members,

gatekeepers who control the flow of necessary resources to perform team tasks, supporters who satisfy team members' needs, directors who provide vision, and symbols that represent the team's status in the organization. Findings from this study contribute to future theoretical efforts to investigate a leader's roles from multiple perspectives and offer new directions for effective leadership.

REFERENCES

- Adler, P. S., & Kwon, S. 2002. Social capital: Prospects for a new concept. Academy of Management Review, 27: 17-40.
- Ambrose, M. L. & Schminke, M. 2003. Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal Applied Psychology*, 88(2): 295-305.
- Aselage, J. & Eisenberger, R. 2003. Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior*, 24(5): 491-509.
- Ashforth, B. E. & Mael, F. 1989. Social identity theory and the organization. *Academy of Management Review*, 14(1): 20-39.
- Astley, W. G. & Sachdeva, P. S. 1984. Structural sources of intraorganizational power: A theoretical synthesis. *Academy of Management Review*, 9(1): 104-113.
- Balkundi, P., Barsness, Z., & Michael, J. H. 2009. Unlocking the influence of leadership network structures on team conflict and viability. *Small Group Research*, 40(3): 301-322.
- Balkundi, P. & Harrison, D. A. 2006. Ties, leaders, and time in teams: Strong inference about network structure's effects on team viability and performance. *Academy of Management Journal*, 49(1): 49-68.
- Balkundi, P. & Kilduff, M. 2006. The ties that lead: A social network approach to leadership. *Leadership Quarterly*, 17(4): 419-439.
- Balkundi, P., Kilduff, M., & Harrison, D. A. 2011. Centrality and charisma: Comparing how leader networks and attributions affect team performance. *Journal of Applied Psychology*, 96(6): 1209-1222.
- Bandura, A. 1997. Self-efficacy: The exercise of control. New York: Freeman and Company.
- Baron, R. A. & Markman, G. D. 2000. Beyond social capital: How social skills can enhance entrepreneurs' success. *Academy of Management Executive*, 14(1): 106-116.
- Bartko, J. J. 1976. On various intraclass correlation reliability coefficients. *Psychological Bulletin*, 83(5): 762-765.
- Bashshur, M. R., Hernández, A., & González-Romá, V. 2011. When managers and their teams disagree: A longitudinal look at the consequences of differences in perceptions of organizational support. *Journal of Applied Psychology*, 96(3): 558-573.

- Bass, B. M. 1985. *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. 2003. Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal Applied Psychology*, 88(6): 989-1004.
- Becker, G. 1964. Human capital. New York: National Bureau of Economic Research.
- Becker, T. E. 1992. Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35(1): 232-244.
- Bedeian, A. G. & Hunt, J. G. 2006. Academic amnesia and vestigial assumptions of our forefathers. *Leadership Quarterly*, 17(2): 190-205.
- Belliveau, M. A., O'Reilly III, C. A. & Wade, J. B. 1996. Social capital at the top: Effects of social similarity and status on CEO compensation. *Academy of Management Journal*, 39(6): 1568-1593.
- Bishop, J. W. & Scott, K. D. 1997. Employee commitment and work team productivity. *HR Magzine*, 11:107-111.
- Bishop, J. W., Scott, K. D., & Burroughs, S. M. 2000. Support, commitment, and employee outcomes in a team environment. *Journal of Management*, 26(6): 1113-1132.
- Bishop, J. W., Scott, K. D., Goldsby, M. G., & Cropanzano, R. 2005. A construct validity study of commitment and perceived support variables: A multifoci approach across different team environments. *Group & Organization Management*, 30(2): 153-180.
- Bizumic, B., Reynolds, K. J., Turner, J. C., Bromhead, D., & Subasic, E. 2009. The role of the group in individual functioning: School identification and the psychological well-being of staff and students. *Applied Psychology: An International Review*, 58(1): 171-192.
- Blake, R. R. & Mouton, J. S. 1982. A comparative analysis of situationalism and 9,9 management by principle. *Organizational Dynamics*, 10(4): 20-43.
- Bliese, P. D. 2000. Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. Kozlowski (Eds.), *Multi-level theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 349–381). San Francisco, CA: Jossey-Bass.
- Boies, K. & Howell, J. M. 2006. Leader-member exchange in teams: An examination of the interaction between relationship differentiation and mean LMX in explaining team-level outcomes. *Leadership Quarterly*, 17(3): 246-257.

- Bono, J. E., & Anderson, M. H. 2005. The advice and influence networks of transformational leaders. *Journal of Applied Psychology*, 90: 1306–1314.
- Borgatti, S. P. & Foster, P. C. 2003. The network paradigm in organizational research: A review and typology. *Journal of Management*, 29(6): 991-1013.
- Borgatti, S.P., Everett, M.G. and Freeman, L.C. 2002. *Ucinet for windows: Software for social network analysis*. Harvard, MA: Analytic Technologies.
- Boyatzis, R. E. 1982. *The competent manager*. New York: Wiley.
- Boyd, N. G. & Taylor, R. R. 1998. A developmental approach to the examination of friendship in leader-follower relationships. *Leadership Quarterly*, 9(1): 1-25.
- Bourdieu, P. 1983. The field of cultural production, or: The economic world reversed. *Poetics*, 12(4-5): 311-356.
- Bourdieu P. 1985. The forms of capital. J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York: Greenwood.
- Brass, D. J. 1984. Being in the right place: A structural analysis of individual influence in an organization. *Administrative Science Quarterly*, 29: 518–539.
- Brass, D. J., & Krackhardt, D. 1999. The social capital of 21st century leaders. In J. G. Hunt & R. L. Phillips (Eds.), *Out-of-the-box leadership* (pp. 179–194). Stamford, CT: JAI Press.
- Brass, D. J., & Burkhardt, M. E. 1993. Potential power and power use: An investigation of structure and behavior. *Academy of Management Journal*, 36: 441-470.
- Burns, J. M. 1978. *Leadership.* New York: Harper & Row.
- Burt, R. S. 1992. *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. 2007. Secondhand brokerage: Evidence on the importance of local structure for managers, bankers, and analysts. *Academy of Management Journal*, 50(1): 119-148.
- Bono, J. E. & Anderson, M. H. 2005. The advice and influence networks of transformational leaders. *Journal of Applied Psychology*, 90(6): 1306-1314.
- Brown, M. E. & Gioia, D. A. 2002. Making things click distributive leadership in an online division of an offline organization. *Leadership Quarterly*, 13(4): 397-419.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. 2005. Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior & Human Decision Processes*, 97(2): 117-134.

- Cannon-Bowers, J. A. & Salas, E. 2001. Reflection on shared cognition. *Journal of Organizational Behavior*, 22(2): 195-202.
- Campion, M. A., Medsker, G. J., & Higgs, A. C. 1993. Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, 46(4): 823-850.
- Carless, S. A. & De Paula, C. 2000. The measurement of cohesion in work teams. *Small Group Research*, 31(1): 71-88.
- Carmeli, A., Tishler, A., & Edmondson, A. C. 2012. CEO relational leadership and strategic decision quality in top management teams: The role of team trust and learning from failure. *Strategic Organization*, 10(1): 31-54.
- Carpenter, M. A., Li, M. & Jiang, H. 2012. Social network research in organizational contexts: A systematic review of methodological issues and choices. *Journal of Management*, 38(4): 1328-1361.
- Carron, A. V., Brawley, L. R., & Widmeyer, W. N. 1998. The measurement of cohesiveness in sport groups. In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 213-226). Morgantown, WV: Fitness Information Technology.
- Carron, A. V., Colman, M. M., Wheeler, J., & Stevens, D. 2002. Cohesion and performance in sport: A meta-analysis. *Journal of Sport and Exercise Psychology*, 24: 168–188.
- Carron, A. V., Prapavessis, H., & Grove, J. R. 1994. Group effects and self-handicapping. *Journal of Sport & Exercise Psychology*, 16: 246-258.
- Carron, A. V., Widmeyer, W., & Brawley, L. 1985. The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport Psychology*, 7: 244–266.
- Carson, P. P., Carson, K. D., & Roe, C. W. 1993. Social power bases: A meta-analytic examination of interrelationships and outcomes. *Journal of Applied Social Psychology*, 23(14): 1150-1169.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. 2007. Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5): 1217-1234.
- Cashman, J., Dansereau, F., Graen, G., & Haga, W. J. 1976. Organizational understructure and leadership: A longitudinal investigation of the managerial role-making process.
 Organizational Behavior & Human Performance, 15(2): 278-296.
- Chen, Z., Eisenberger, R., Johnson, K. M., Sucharski, I. L., & Aselage, J. 2009. Perceived organizational support and extra-role performance: Which leads to which? *Journal of Social Psychology*, 149(1): 119-124.
- Chiocchio, F. & Essiembre, H. 2009. Cohesion and performance: A meta-analytic review of disparities between project teams, production teams, and service teams. *Small Group Research*, 40(4): 382-420.
- Christie, P. M. J., Kwon, I. Stoeberl, P. A., & Baumhart, R. 2003. A cross-cultural comparison of ethical attitudes of business managers: India, Korea and the United States. *Journal of Business Ethics*, 46(3): 263-287.
- Cogliser, C. C. & Schriesheim, C. A. 2000. Exploring work unit context and leader-member exchange: A multi-level perspective. *Journal of Organizational Behavior*, 21(5): 487-511.
- Coleman, J. 1988. Social capital in the creation of human capital. *The American Journal of Sociology*, 94: S95-S120.
- Colquitt, J. A., Noe, R. A., & Jackson, C. L. 2002. Justice in teams: Antecedents and consequences of procedural justice climate. *Personnel Psychology*, 55(1): 83-109.
- Conger, J. A., & Kanungo, R. N. 1987. Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12: 637–647.
- Coyle-Shapiro, S. A-M. & Conway, N. 2005. Exchange relationships: Examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*, 90(4): 774-781.
- Crocker, J., & Luhtanen, R. K. 1990. Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology*, 58: 60–67.
- Dansereau, F., Graen, G., & Haga, W. J. 1975. A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior & Human Performance*, 13(1): 46-78.
- DeGroot, T., Kiker, D. S., & Cross, T. C. 2000. A meta-analysis to review organizational outcomes related to charismatic leadership. *Canadian Journal of Administrative Sciences*, 17: 356–371.
- DeRue, D. S. & Morgeson, F. P. 2007. Stability and change in person-team and person-role fit over time: The effects of growth satisfaction, performance, and general self-efficacy. *Journal of Applied Psychology*, 92(5): 1242-1253.
- Dienesch, R. M., Liden, R. C. 1986. Leader-member exchange model of leadership: a critique and further development. *Academy of Management Review*, 11: 618-634.

- Dionne, S. D., Sayama, H., Hao, C. & Bush, B. J. 2010. The role of leadership in shared mental model convergence and team performance improvement: An agent-based computational model. *Leadership Quarterly*, 21(6): 1035-1049.
- Dithurbide, L., Sullivan, P., & Chow, G. 2009. Examining the influence of team-referent causal attributions and team performance on collective efficacy: A multilevel analysis. *Small Group Research*, 40(5): 491-507.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. 1992. Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111(1): 3-22.
- Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2): 350-383.
- Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D. 1986. Perceived Organizational Support. *Journal of Applied Psychology*, 71(3): 500-507.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. 2001. Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1): 42-51.
- Evans, M. G. 1970. The effects of supervisory behavior on the path-goal relationship. *Organizational Behavior & Human Performance*, 5(3): 277-298.
- Feltz, D. L. & Lirgg, C. D. 1998. Perceived team and player efficacy in hockey. *Journal of Applied Psychology*, 83(4): 557-564.
- Fernandez, R. M. & Weinberg, N. 1997. Sifting and sorting: Personal contacts and hiring in a retail bank. *American Sociological Review*, 62(6): 883-902.
- Festinger, L. 1950. Informal social communication. *Psychological Review*, 57: 271–282.
- Fiedler, F. E. 1967. A theory of leadership effectiveness. New York: McGraw-Hill.
- Fiedler, F. E. 1978. The contingency model and the dynamics of the leadership process. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 59-112). New York: Academic Press.
- Fiedler, F. E. & Garcia, J. E. 1987. *New approaches to effective leadership: Cognitive resources and organizational performance*. New York: Wiley.
- Flaherty, K., Lam, S. K., Lee, N., Mulki, J. P. & Dixon, A. L., 2012. Social network theory and the sales manager role: Engineering the right relationship flows. *Journal of Personal Selling & Sales Management*, 32(1): 29-40.
- Ford, L. R. & Seers, A. 2006. Relational leadership and team climates: Pitting differentiation versus agreement. *Leadership Quarterly*, 17(3): 258-270.

- French, J. & Raven, B. H. 1959. The bases of social power: Studies in social power. Ann Arbor, MI: Institute for Social Research.
- Friedkin, N. E. 1993. Structural bases of interpersonal influence in groups: A longitudinal case study. *American Sociological Review*, 58(6): 861-872.
- Galvin, B. M., Balkundi, P., & Waldman, D. A. 2010. Spreading the word: The role of surrogates in charismatic leadership processes. *Academy of Management Review*, 35: 477–494.
- Gelfand, M. J., Keller, K., Leslie, L. M., & de Dreu, C. 2012. Conflict cultures in organizations: How leaders shape conflict culture and their organizational-level consequences. *Journal of Applied Psychology*, 97(6): 1131-1147.
- Gerard, R. J. 1995. Teaming up: Making the transition to self-directed, team-based organizations. *Academy of Management Executive*, 9: 91–93.
- Gerstner, C. R. & Day, D. V. 1997. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6): 827-844.
- Gibson, C. B. 1999. Do they do what they believe they can? Group efficacy and group effectiveness across tasks and cultures. *Academy of Management Journal*, 42(2): 138-152.
- Giessner, S. R. & Schubert, T. W. 2007. High in the hierarchy: How vertical location and judgments of leaders' power are interrelated. *Organizational Behavior and Human Decision Processes*, 104: 30-44.
- Gladstein, D. L. 1984. Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 29(4): 499-517.
- Goodwin, V. L., Bowler, W. M., & Whittington, J. L. 2009. A social network perspective on LMX relationships: Accounting for the instrumental value of leader and follower networks. *Journal of Management*, 35(4): 954-980.
- Goncalo, J. A., Polman, E., & Maslach, C. 2010. Can confidence come too soon? Collective efficacy, conflict and group performance over time. *Organizational Behavior & Human Decision Processes*, 113(1): 13-24.
- González-Romá, V., Fortes-Ferreira, L., & Peiró, J. M. 2009. Team climate, climate strength and team performance. A longitudinal study. *Journal of Occupational & Organizational Psychology*, 82(3): 511-536.
- Gouldner, A. W. 1960. The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2): 161-178.

- Graen, G. B. & Cashman, J. F. 1975. A role-making model of leadership in formal organizations:
 A development approach. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 143-166). Kent, OH: Kent State University Press.
- Graen, G. B., & Uhl-Bien, M. 1995. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory over the last 25 years: Applying a multi-level multi-domain approach. *Leadership Quarterly*, 6: 219–247.
- Granovetter, M. S. 1973. The strength of weak ties. *American Journal of Sociology*, 78: 1360-1380.
- Granovetter, M. S. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3): 481-510.
- Granovetter, M. S. 1995. *Getting a Job: A Study of Contacts and Careers*. Chicago: University of Chicago Press.
- Gully, S. M., Devine, D. J., & Whitney, D. J. 1995. A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence. *Small Group Research*, 26: 497–520.
- Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beaubien, J. M. 2002. A meta-analysis of teamefficacy, potency, and performance: Interdependence and level of analysis as moderators of observed relationships. *Journal of Applied Psychology*, 87(5): 819-832.
- Gupta, V. K., Huang, R, & Yayla, A. A. 2011. Social capital, collective transformational leadership, and performance: A resource-based view of self-managed teams. *Journal of Managerial Issues*, 23(1): 31-45.
- Guzzo, R. A., & Dickson, M. W. 1996. Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, 47: 307–338.
- Guzzo, R., Yost, P., Campbell, T., & Shea, G. 1993. Potency in groups: Articulating a construct. *British Journal of Social Psychology*, 32: 87-106.
- Hackman, J. R. 1987. The design of work teams. In Jay Lorsch (Ed.), *Handbook of* organizational behavior (pp. 315-342). Englewood Cliffs, NJ: Prentice-Hall.
- Hall, C. 1998. Organizational support for team-based organizations: Employee collaboration through organizational structures. Unpublished doctoral dissertation, University of North Texas, Denton.
- Hanifan L. J. 1920. *The community center*. Boston: Silver Burdette.

- Hanneman, R. A. & Riddle, M. 2005. *Introduction to social network methods.* Riverside, CA: University of California, Riverside.
- Hansen, M. T. 1999. The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44(1): 82-111.
- Hargis, M. B., Watt, J. D., Piotrowski, C. 2011. Developing leaders: Examining the role of transactional and transformational leadership across contexts business. *Organization Development Journal*, 29(3): 51-66.
- Haunschild, P. R., Henderson, A. D., & Davis-Blake, A. 1999. CEO demographics and acquisitions: Network effects of educational and functional background. In R. T. A. J. Leenders & S. M. Gabbay (Eds.), *Corporate social capital & liability* (pp. 266-283), Boston, MA: Kluwer.
- Hersey, P. & Blanchard, K. H. 1969. Life cycle theory of leadership. *Training & Development Journal*, 23(5): 26-33.
- Hersey, P. & Blanchard, K. H. 1988. *Management of organizational behavior* (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Hinkin, T. R. & Schriesheim, C. A. 1989. Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology*, 74(4): 561-567.
- Hinkin, T. R. & Schriesheim, C. A. 1994. An examination of subordinate-perceived relationships between leader reward and punishment behavior and leader bases of power. *Human Relations*, 47(7): 779–800.
- Hirschfeld, R. R. & Bernerth, J. B. 2008. Mental efficacy and physical efficacy at the team level: Inputs and outcomes among newly formed action teams. *Journal of Applied Psychology*, 93(6): 1429-1437.
- Hoegl, M., Parboteeah, K. P., & Munson, C. L. 2003. Team-level antecedents of individuals' knowledge networks. *Decision Sciences*, 34(4): 741-770.
- Hogg, M. 1992. The social psychology of group cohesiveness: Form attraction to social identity. New York: John Wiley.
- Hogg, M. A. & Abrams, D. 1988. Social identifications: A social psychology of intergroup relations and group processes. London & New York: Routledge.
- Hogg, M. A. & Terry, D. J. 2000. Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, 25(1): 121-140.

- Hollenbeck, J. R., Moon, H., Ellis, A. P.J., West, B. J., Ilgen, D. R., Sheppard, L., Porter, C. O.L.H., & Wagner III, J. A. 2002. Structural contingency theory and individual differences: Examination of external and internal person-team fit. *Journal of Applied Psychology*, 87(3): 599-606.
- Hoppe, B. & Reinelt, C. 2010. Social network analysis and the evaluation of leadership networks. *Leadership Quarterly*, 21(4): 600-619.
- House, R. J. 1971. A path-goal theory of leader effectiveness. *Administrative Science Quarterly*, 16: 321-339.
- House, R. J. 1977. A 1976 theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge* (pp. 189-273). Carbondale, IL: Southern Illinois University Press.
- House, R. J. & Aditya, R. N. 1997. The social scientific study of leadership: Quo vadis? *Journal of Management*, 23(3): 409-473.
- Howell, J. M., & Frost, P. J. 1989. A laboratory study of charismatic leadership. Organizational Behavior and Human Decision Processes, 43: 243–269.
- Howell, J. M., & Shamir, B. 2005. The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30: 96–112.
- Huselid, M. A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3): 635-672.
- Ibarra, H. 1993. Personal networks of women and minorities in management: A conceptual framework. *Academy of Management Review*, 38(4): 56-87.
- Ibarra, H. & Andrews, S. B. 1993. Power, social influence, and sense making: Effects of network centrality and proximity on employee perceptions. *Administrative Science Quarterly*, 38(2): 277-303.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. 2007. Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 92(1): 269-277.
- James, L. R. 1982. Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology*, 67: 219-229.
- James, L. R., Demaree, R. G., & Wolf, G. 1984. Estimating within-group interrater reliability with and without response bias, *Journal of Applied Psychology*, 69: 307-314.

- Janssen, O. & Huang, X. 2008. Us and me: Team identification and individual differentiation as complementary drivers of team members' citizenship and creative behaviors. *Journal of Management*, 34(1): 69-88.
- Judge, T. A. & Piccolo, R. F. 2004. Transformational and transactional leadership: A metaanalytic test of their relative validity. *Journal of Applied Psychology*, 89(5): 755-768.
- Jung, D. I. & Sosik, J. J. 2002. Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective-efficacy on perceived group performance. *Small Group Research*, 33(3): 313-336.
- Jung, D. I. & Sosik, J. J. 2003. Group potency and collective efficacy. Group & Organization Management, 28(3): 366-391.
- Kacmar, K. M., Witt, L. A., Zivnuska, S., & Gully, S. 2003. The impact of leader-member exchange on communication type, frequency, and performance ratings. *Journal of Applied Psychology*, 88: 764-772.
- Kanter, R. M. 1979. Power Failure in Management Circuits. *Harvard Business Review*, 57(4): 65–75.
- Katz, D., & Kahn, R.L. 1966. The social psychology of organizations. New York: Wiley.
- Kennedy, F. A., Loughry, M. L., Klammer, T. P., & Beyerlein, M. M. 2009. Effects of organizational support on potency in work teams. *Small Group Research*, 40(1): 72-93.
- Kerr, S. & Jermier, J. M. 1978. Substitutes for leadership: Their meaning and measurement. *Organizational Behavior & Human Performance*, 22(3): 375-403.
- Kilduff, M., & Krackhardt, D. 1994. Bringing the individual back in: A structural analysis of the internal market for reputation in organizations. *Academy of Management Journal*, 37(1): 87–108.
- Kilduff, M. & Tsai, W. 2003. *Social networks and organizations*. Thousand Oaks, California: Sage.
- Klein, K. J., & Kozlowski, S. W. J. 2000. Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions. San Francisco, CA: Joeesy-Bass.Kline & MacLeod, 1997
- Kozlowski, S. W. J., & Bell, B. S. 2003. Work groups and teams in organizations. In W. C. Borman, D. R. Ilgen, & R. Klimoski (Eds.). *Handbook of psychology: Industrial and* organizational psychology (Vol. 12, pp. 333–375). New York: Wiley.

- Kozlowski, S. W. J. & Chao, G. T. 2012. The dynamics of emergence: Cognition and cohesion in work teams. *Managerial and Decision Economics*, 33: p. 335–354.
- Krackhardt, D. 1990. Assessing the political landscape: Structure, cognition, and power in organizations. *Administrative Science Quarterly*, 35: 342-369.
- Krackhardt, D., & Hanson, J. R. 1993. Informal networks: The company behind the chart. *Harvard Business Review*, 71: 104-111.
- Kristof, A. L. 1996. Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49(1): 1-49.
- Le Blanc, P. M. & González-Romá, V. 2012. A team level investigation of the relationship between Leader–Member Exchange (LMX) differentiation, and commitment and performance. *Leadership Quarterly*, 23(3): 534-544.
- Lee, C., Tinsley, C. H., & Bobko, P. 2002. An investigation of the antecedents and consequences of group-level confidence. *Journal of Applied Social Psychology*, 32(8): 1628-1652.
- Leenders, R. T. A. J. & Gabbay, S. M. 1999. *Corporate social capital and liability*. MA: Kluwer Academics Publishers.
- Liao, L. 2008. Knowledge-sharing in R&D departments: A social power and social exchange theory perspective. *International Journal of Human Resource Management*, 19(10): 1881-1895.
- Liao, H. & Chuang, A. 2007. Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92(4): 1006-1019.
- Liao, H., Toya, K., Lepak, D. P., & Hong, Y. 2009. Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology*, 94(2): 371-391.
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. 2006. Leader–member exchange, differentiation, and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior*, 27: 1–24.
- Lin, N., Cook, K. S., & Burt, R. S. 2001. *Social capital: Theory and research*. Chicago, IL: Aldine de Gruyter.
- Lin, N., Ensel, W. M., & Vaughn, J. C. 1981. Social resources and strength of ties: Structural factors in occupational status attainment. *American Sociological Review*, 46(4): 393-405.

- Lincoln, J. R., & Miller, J. 1979. Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly*, 24: 181-199.
- Lindsley, D. H., Brass, D. J., & Thomas, J. B. 1995. Efficacy-performance spirals: A multilevel perspective. Academy of Management Review, 20(3): 645-678.
- Lord, R. G., Binning, J. F., Rush, M. C., & Thomas, J. C. 1978. The effect of performance cues and leader behavior on questionnaire ratings of leadership behavior. *Organizational Behavior & Human Performance*, 21(1): 27-39.
- Lord, R. G., De Vader, C. & Alliger, G. M. 1986. A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71(3): 402-410.
- Lord, R. G., Foti, R. J., & De Vader, C. L. 1984. A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior & Human Performance*, 34(3): 343-378.
- Lord, R. G. & Maher, K. J. 1991. *Leadership and information processing*. Boston: Routledge.
- Mach, M., Dolan, S., & Tzafrir, S. 2010. The differential effect of team members' trust on team performance: The mediation role of team cohesion. *Journal of Occupational and Organizational Psychology*, 83: 771–794.
- Maner, J. K. & Mead, N. L. 2010. The essential tension between leadership and power: When leaders sacrifice group goals for the sake of self-interest. *Journal of Personality and Social Psychology*, 99(3): 482–497.
- Marks, M. A. 1999. A test of the impact of collective efficacy in routine and novel performance environments. *Human Performance*, 12(3-4): 295-309.
- Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. 2001. A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26: 356-376.
- Mathieu, J. E., Maynard, M. T., Rapp, T., & Gilson, L. 2008. Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, 34: 410-476.
- McCall, M. W. & Segrist, C. A. 1980. *In pursuit of the manager's job: Building on Mintzberg*. N. C.: Center for Creative Leadership.
- McClelland, D. C. 1975. Power: The inner experience. Oxford, England: Irvington

- McKay, P. F., Avery, D. R., & Morris, M. A. 2009. A tale of two climates: Diversity climate from subordinates' and managers' perspectives and their role in store unit sales performance. *Personnel Psychology*, 62(4): 767-791.
- Mehra, A., Kilduff, M., & Brass, D. J. 2001. The social networks of high and low self-monitors: Implications for workplace performance. *Administrative Science Quarterly*, 46: 121–146.
- Mehra, A., Dixon, A. L., Brass, D. J., & Robertson, B. 2006. The social network ties of group leaders: Implications for group performance and leader reputation. *Organization Science*, 17: 64–79.
- Meyer, J. P. & Allen, N. J. 1997. *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.
- Moorman, R. H., Blakely, G. L., & Niehoff, B. P. 1998. Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, 41(3): 351-357.
- Mowday, R. T., Porter, L. W., & Steers, R. M. 1982. *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Mullen, B. & Copper, C. 1994. The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115(2): 210 -227.
- Mullen, B., Anthony, T., Salas, E., & Driskell, J. E. 1994. Group cohesiveness and quality of decision making: An integration of tests of the groupthink hypothesis. *Small Group Research*, 25(2): 189-204.
- Nahapiet, J., & Ghoshal, S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23: 242-266.
- Ostroff, C., Shin, Y., & Kinicki, A. J. 2005. Multiple perspective of congruence: Relationships between value congruence and employee attitudes. *Journal of Organizational Behavior*, 26: 591–623.
- Park, W. 2000. A comprehensive empirical investigation of the relationships among variables of the groupthink model. *Journal of Organizational Behavior*, 21: 873-887.
- Paskevich, D. M., Brawley, L. R., Dorsch, K. D., & Widmeyer, W. N. 1999. Relationship between collective efficacy and team cohesion: Conceptual and measurement issues. *Group Dynamics: Theory, Research, and Practice*, 3: 210-222.
- Paskevich, D., Estabrooks, P., Brawley, L., & Carron, A. 2001. Group cohesion in sport and exercise. In R. Singer, H. Hausenblas, & C. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 472-494). New York: John Wiley.

- Patterson, M., Warr, P., & West, M. 2004. Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational & Organizational Psychology*, 77(2): 193-216.
- Pastor, J. C., Meindl, J. R., & Mayo, M. C. 2002. A network effects model of charisma attributions. *Academy of Management Journal*, 45: 410–420.
- Pearce, C. L. & Herbik, P. A. 2004. Citizenship behavior at the team level of analysis: The effects of team leadership, team commitment, perceived team support, and team size. *Journal of Social Psychology*, 144(3): 293-310.
- Pfeffer, J. 1977. Toward an examination of stratification in organizations. *Administrative Science Quarterly*, 22(4): 553-567.
- Pfeffer, J. 1981. *Power in organizations*. Marshfield, MA: Pittman.
- Pfeffer, J. 1992. Understanding power in organizations. *California Management Review*, 34(2): 29-50.
- Phillips, J. M. 1995. Leadership since 1975: Advancement or inertia? *Journal of Leadership Studies*, 2(1): 58-80.
- Pil, F. K. & Leana, C. 2009. Applying organizational research to public school reform: The effects of teach human and social capital on student performance. *Academy of Management Journal*, 52(6): 1101-1124.
- Podolny, J. M. & Baron, J. N. 1997. Resources and relationships: Social networks and mobility in the workplace. *American Sociological Review*, 62(5): 673-693.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. 1990. Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1(2): 107-142.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5): 879-903.
- Polanyi, K., Arensberg, C., & Pearson, H. 1957. *Trade and markets in the early empires*. New York: Free Press.
- Porter, L.W., Steers, R. M., Mowday, R. T., & Boulian, P. V. 1974. Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5): 603-609

- Portes, A. 1998. Social capital: Its origins and applications in modern sociology. *Annual Review* of Sociology, 24:1–24.
- Portes, A., & Sensenbrenner, J. 1993. Embeddedness and immigration: Notes on the social determinants of economic action. *American Journal of Sociology*, 98(6): 1320–1350.
- Prussia, G. E., & Kinicki, A. J. 1996. A motivational investigation of group effectiveness using social-cognitive theory. *Journal of Applied Psychology*, 81: 187-198.
- Putnam, R. D. 1995. Bowling alone: America's declining social capital. *Journal of Democracy*, 6: 65-78.
- Raven, B. H. 1993. The Bases of Power: Origins and Recent Developments. *Journal of Social Issues*, 49(4): 227–251.
- Ragins, B. R. & Sundstrom, E. 1990. Gender and perceived power in manager-subordinate relations. *Journal of Occupational and Organizational Psychology*, 63(4): 273-287.
- Reagans, R. E., Zuckerman, E. W., & McEvily, B. 2004. How to make the team: Social networks vs. demography as criteria for designing effective projects in a contract R&D firm. *Administrative Science Quarterly*, 49: 101–133.
- Rhoades, L. & Eisenberger, R. 2002. Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4): 698-714.
- Riggs, M. L. & Knight, A. J. 1994. The impact of perceived group success-failure on motivational beliefs and attitudes: A causal model. *Journal of Applied Psychology*, 81: 187-198.
- Riketta, M. 2002. Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior*, 23(3): 257-266.
- Robbins, S. P. 2005. *Organizational behavior* (11th Ed.). Upper Saddle River, NJ: Pearson Education.
- Rovio, E., Eskola, J., Kozub, S. A., Duda, J. L., & Lintunen, T. 2009. Can high group cohesion be harmful? A case study of a junior ice-hockey team. *Small Group Research*, 40(4): 421-435.
- Rousseau, D. 1985. Issues of level in organizational research: Multilevel and cross level perspectives. In L. L. Cummings & B. M. Staw (Eds.). *Research in organizational behavior* (Vol.7, pp.1-37). Greenwich, CT: JAI Press.

- Rozell, E. J. & Gundersen, D. E. 2003. The effects of leader impression management on group perceptions of cohesion, consensus, and communication. *Small Group Research*, 34(2): 197-222.
- Salancik, G. R. & Pfeffer, J. 1977. Who gets power-And how to hold on to it. *Organizational Dynamics*, 5(3): 3-21.
- Scandura, T. A. 1999. Rethinking leader-member exchange: An organizational justice perspective. *Leadership Quarterly*, 10(1): 25-40.
- Schneider, B., Ehrhart, M. G., Mayer, D. M., Saltz, J. L., & Niles-Jolly, K. 2005. Understanding organization-customer links in service settings. *Academy of Management Journal*, 48(6): 1017-1032.
- Shanock, L. R. & Eisenberger, R. 2006. When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied Psychology*, 91(3): 689–695.
- Shea, G. P. & Guzzo, R. A. 1987. Group effectiveness: What really matters? Sloan Management Review, 28(3): 25-31.
- Shields, D., Bredemeier, B., Gardner, D., & Boston, A. 1995. Leadership, cohesion, and team norms regarding cheating and aggression. *Sociology of Sport Journal*, 12: 324-336.
- Shore, L. M. & Tetrick, L. E. 1991. A construct validity study of the survey of perceived organizational support. *Journal of Applied Psychology*, 76(5): 637-643.
- Somech, A., Desivilya, H. S., & Lidogoster, H. 2009. Team conflict management and team effectiveness: The effects of task interdependence and team identification. *Journal of Organizational Behavior*, 30(3): 359-378.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. 2001. Social networks and the performance of individual and groups. *Academy of Management Journal*, 44: 316-325.
- Sparrowe, R. T., & Liden, R. C. 2005. Two routes to influence: Integrating leader-member exchange and network perspectives. *Administrative Science Quarterly*, 50: 505–535.
- Stajkovic, A. D., Lee, D., & Nyberg, A. J. 2009. Collective efficacy, group potency, and group performance: Meta-analyses of their relationships, and test of a mediation model. *Journal* of Applied Psychology, 94(3): 814-828.
- Standifird, S. S. 2006. Using guanxi to establish corporate reputation in China. *Corporate Reputation Review*, 9(3): 171-178.

- Stewart, M. M. & Johnson, O. E. 2009. Leader-member exchange as a moderator of the relationship between work group diversity and team performance. *Group & Organization Management*, 34(5): 507-535.
- Stogdill, R. 1972. Group productivity, drive, and cohesiveness. Organizational Behavior and *Human Performance*, 8: 26-43.
- Taggar, S. & Seijts, G. H. 2003. Leader and staff role-efficacy as antecedents of collectiveefficacy and team performance. *Human Performance*, 16(2): 131-156.
- Tajfel, H. 1978. Interindividual behavior and intergroup behavior. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 27–60). London: Academic Press.
- Tajfel, H. & Turner, J. C. 1979. An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tasa, K., & Whyte, G. 2005. Collective efficacy and vigilant problem solving in group decision making: A non-linear model. *Organizational Behavior and Human Decision Processes*, 96: 119-129.
- Tekleab, A. G., Quigley, N. R., Tesluk, P. E. 2009. A longitudinal study of team conflict, conflict management, cohesion, and team effectiveness. *Group & Organization Management*, 34(2), 170-205.
- Tett, R. P. & Meyer, J. P. 1993. Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2): 259-293.
- Thomas, G., Martin, R., Epitropaki, O., Guillaume, Y., & Lee, A. 2013. Social cognition in leader-follower relationships: Applying insights from relationship science to understanding relationship-based approaches to leadership. *Journal of Organizational Behavior*, 34: S63-S81
- Tsai, W., & Ghoshal, S. 1998. Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41: 464-476.
- Uhl-Bien, M. 2006. Relational Leadership Theory: Exploring the social processes of leadership and organizing. *Leadership Quarterly*, 17(6): 654-676.
- Van der Vegt, G. S. & Bunderson, J. S. 2005. Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48(3): 532-547.

- Van der Vegt, G. S., Van de Vliert, E., & Oosterhof, A. 2003. Informational dissimilarity and organizational citizenship behavior: The role of intrateam interdependence and team identification. *Academy of Management Journal*, 46(6): 715-727.
- Vancouver, J. B., Thompson, C. M., Tischner, C., & Putka, D. J. 2002. Two studies examining the negative effect of self-efficacy, personal goals, and performance. *Journal of Applied Psychology*, 87: 506-516.
- Venkataramani, V., Green, S. G., & Schleicher, D. J. 2010. Well-connected leaders: The impact of leaders' social network ties on LMX and Members' work attitudes. *Journal of Applied Psychology*, 95(6): 1071-1084.
- Vroom, V. H., & Yetton, P. W. 1973. *Leadership and decision making*. Pittsburgh: University of Pittsburgh Press.
- Ward, E. A. 2001. Social power bases of managers: Emergence of a new factor. *Journal of Social Psychology*, 141(1): 144-147.
- Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leadermember exchange: A social exchange perspective. *Academy of Management Journal*, 40(1): 82-111.
- Weber, M. 1947. *The theory of social and economic organization* (A. M. Henderson & T. Parsons, Trans.). Glencoe, IL: Free Press.
- Woolcock, M. & Narayan, D. 2000. Social capital: Implications for development theory, research, and policy. *World Bank Research Observer*, 15(2): 225-249.
- Wright, T. A. & Bonett, D. G. 2002. The moderating effects of employee tenure on the relation between organizational commitment and job performance: A meta-analysis. *Journal of Applied Psychology*, 87(6): 1183-1190.
- Whyte, G. 1998. Recasting Janis's groupthink model: The key role of collective efficacy in decision fiascoes. *Organizational Behavior and Human Decision Processes*, 73: 185– 209.
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. 2010. Consequences of differentiated leadership in groups. Academy of Management Journal, 53(1): 90-106.
- Yukl, G. A. 1989. *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G. A. 2002. Leadership in organizations. (5th ed). Upper Saddle River, NJ: Prentice Hall.
- Yukl, G. A. & Taber, T. 1983. The effective use of managerial power. *Personnel*, 60(2): 37-44.

- Zaccaro, S. J., & Lowe, C. A. 1986. Cohesiveness and performance on an additive task: Evidence for multidimensionality. *Journal of Social Psychology*, 128: 547–558.
- Zagenczyk, T., Gibney, R., Few, W., & Scott, K. 2011. Psychological contracts and organizational identification: The mediating effect of perceived organizational support. *Journal of Labor Research*, 32(3): 254-281.
- Zhang, Z., Waldman, D. A., & Wang, Z. 2012. A multilevel investigation of leader-member exchange, informal leader emergence, and individual and team performance. *Personnel Psychology*, 65(1): 49-78.
- Zohar, D., & Tenne-Gazit, O. 2008. Transformational leadership and group interaction as climate antecedents: A social network analysis. *Journal of Applied Psychology*, 93: 744–757.
- Zohar, D. & Luria, G. 2005. A multilevel model of safety climate: Cross-level relationships between organization and group-level climates. *Journal of Applied Psychology*, 90(4): 616-628.

TABLE 1Composition of Survey

| Respondents | Executives | Team leaders | Team members |
|--------------|--------------------|--------------------|-----------------|
| Survey items | Advice network | Advice network | Power of leader |
| | Friendship network | Friendship network | TCOS |
| | | Team commitment | Team efficacy |
| | | | Team cohesion |

TABLE 2Confirmatory Factor Analysis Results

| | X^2 | df | CFI | SRMR | RMSEA | $\Delta X^2, \Delta df$ |
|--------------------------------------|---------|-----|-----|------|-------|-------------------------|
| Perceived Power of Leader | | | | | | |
| 3 factor model | 686.72 | 51 | .94 | .08 | .16 | |
| 1 factor model | 2034.90 | 54 | .81 | .12 | .28 | 1348.18 (3) |
| TCOS | | | | | | |
| 7 factor model plus 2nd order factor | 921.68 | 268 | .97 | .08 | .07 | |
| 1 factor model | 5132.26 | 275 | .80 | .12 | .19 | 4210.58 (7) |

a. N = 469. CFI= comparative fit index; SRMR= standardized root mean square residual; RMSEA= root-mean-square error of approximation; TCOS =Team climate for organizational support.

b. All X^2 and ΔX^2 are significant at the 0.01 level. ΔX^2 means the difference of X^2 relative to the model listed in the first row.

TABLE 3-1 Factor Loadings for Perceived Power of Leader Items

| | Factor Loading |
|---|----------------|
| Reward Power | |
| I feel my manager can increase my salary. | 1.23 |
| I feel my manager can influence my getting a pay raise. | 1.94 |
| I feel my manager can provide me with special benefits. | .74 |
| I feel my manager can influence my getting a promotion. | 1.41 |
| Reference Power | |
| I feel my manager can make me feel valued. | 3.11 |
| I feel my manager can make me feel like he/she approves of me. | 2.58 |
| I feel my manager can make me feel personally accepted. | 4.05 |
| I feel my manager can make me feel important. | 3.28 |
| Expert Power | |
| I feel my manager can give me good technical suggestions. | 2.91 |
| I feel my manager can share with me his/her considerable experience and training. | 2.59 |
| I feel my manager can provide me with sound job-related advice. | 3.92 |
| I feel my manager can provide me with needed technical knowledge. | 1.97 |

TABLE 3-2 Factor Loadings for TCOS Items

| | Factor I | Loading |
|---|-----------------------|-----------------------|
| | 1 st Order | 2 nd Order |
| Group Design | | .48 |
| My work group has the skills it needs to perform work well. | 1.00 | |
| My team understands its purpose. | 1.15 | |
| My team's membership is appropriate for its mission or purpose. | 1.18 | |
| My team has the authority it needs to perform its work. | 1.02 | |
| Integration System | | .41 |
| My company uses multifunctional (cross-disciplinary) teams to integrate work. | 1.00 | |
| My team has meetings with suppliers or customers to share information. | 1.21 | |
| My team presents its recommendations to managers. | 1.90 | |
| Information System | | .45 |
| My team can easily get information on business-unit goals, strategies, and priorities. | 1.00 | |
| My team can easily get information about customers (internal or external). | 1.61 | |
| My team can easily get information about our suppliers (internal or external). | 1.34 | |
| Management Support | | 1.08 |
| My company's managers/supervisors are open to multiple perspectives (such as different points of view). | 1.00 | |
| My company's managers/supervisors help provide my team with the resources we need to perform work. | .98 | |
| My managers/supervisors follow through with team recommendations in a timely manner. | .95 | |

Note. TCOS = Team climate for organizational support

TABLE 3-2Factor Loadings for TCOS Items (Cont'd)

| | Factor 1 | Loading |
|--|-----------------------|-----------------------|
| | 1 st Order | 2 nd Order |
| Performance Measurement | | .61 |
| My team has regularly planned performance reviews. | 1.00 | |
| My team uses specific performance measurements to track team goals. | 1.24 | |
| My direct supervisor uses specific measurements for our team. | 1.29 | |
| My team's performance measures are appropriate to our team's purpose. | 1.09 | |
| Teamwork Training Systems | | 1.02 |
| My team can easily get training on communication skills. | 1.00 | |
| My team can easily get training on decision-making skills. | .99 | |
| My team can easily get training on group-meeting skills. | .94 | |
| My team gets training when we need it. | .80 | |
| Rewards and Recognition System | | .87 |
| After we get more responsibilities, our team gets rewarded, or is recognized in a timely manner. | 1.00 | |
| After achieving goals, my team is paid, or is recognized, in a timely manner. | 1.02 | |
| My team gets more pay, or is recognized, for additional effort. | 1.06 | |
| My team is paid more, or is recognized, for improving work procedures. | 1.07 | |

Note. TCOS = Team climate for organizational support.

TABLE 4-1 Whole Network Descriptive Statistics

| Network Variables In-degree Network Centralization (H) In-degree Network Centralization (V) Density (H) Density (V) Percentage of Reciprocated Ties (H) | Type of Network | | | | | |
|--|-----------------|------------|--|--|--|--|
| Network variables | Advice | Friendship | | | | |
| In-degree Network Centralization (H) | 29% | 29% | | | | |
| In-degree Network Centralization (V) | 33% | 30% | | | | |
| Density (H) | 16% | 15% | | | | |
| Density (V) | 35% | 33% | | | | |
| Percentage of Reciprocated Ties (H) | 35% | 33% | | | | |
| Percentage of Reciprocated Ties (V) | 56% | 50% | | | | |

Note. (H)= Horizontal ties with peer leaders, (V)= Vertical ties with superiors

| Company | А | В | С | D | Е | F | G | Н | Ι | J |
|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| А | 1.00 | .41 | .15 | .34 | .55 | .50 | .50 | .31 | .25 | .25 |
| В | .34 | .67 | .01 | .03 | .05 | .00 | .17 | .01 | .00 | .00 |
| С | .18 | .02 | .48 | .01 | .02 | .05 | .00 | .01 | .01 | .02 |
| D | .20 | .01 | .01 | .75 | .07 | .04 | .04 | .00 | .14 | .19 |
| E | .75 | .19 | .01 | .20 | .80 | .60 | .25 | .13 | .11 | .03 |
| F | .50 | .13 | .03 | .14 | .40 | .50 | .25 | .06 | .21 | .08 |
| G | .63 | .38 | .04 | .16 | .35 | .38 | .25 | .00 | .00 | .00 |
| Н | .34 | .04 | .00 | .04 | .08 | .13 | .03 | .61 | .02 | .06 |
| Ι | .11 | .05 | .03 | .21 | .20 | .21 | .07 | .02 | .57 | .21 |
| J | .29 | .00 | .00 | .32 | .00 | .00 | .00 | .04 | .19 | .37 |

TABLE 4-2Density of Within and Between Company Ties

a. Each number indicates the percentage of present ties over all possible ties of within and between companies.

b. Density of peer leaders' advice network was used as a sample.

| | | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|--------------------------|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| 1. | Advice In-degree (H) | 13.03 | 7.24 | | | | | | | |
| 2. | Friendship In-degree (H) | 12.86 | 6.95 | .97** | | | | | | |
| 3. | Advice In-degree (V) | 1.16 | 5.78 | .89** | .87** | | | | | |
| 4. | Friendship In-degree (V) | 9.56 | 5.55 | .85** | .84** | .95** | | | | |
| 5. | Reward Power | 4.61 | .67 | .19 | .16 | .11 | .10 | | | |
| 6. | Reference Power | 5.06 | .63 | .17 | .20 | .07 | .09 | .53** | | |
| 7. | Expert Power | 5.61 | .64 | .12 | .13 | .00 | .00 | .43** | .74** | |
| 8. | Leader's Team Commitment | 5.38 | .50 | 29** | 29** | 25* | 24* | .20 | .22* | .23* |
| 9. | TCOS | 4.69 | .51 | .23* | .21 | .11 | .10 | .53** | .62** | .61** |
| 10. | Team Efficacy | 5.31 | .56 | .10 | .10 | .02 | .03 | .30** | .51** | .44** |
| 11. | Team Cohesion | 4.82 | .68 | .05 | .03 | .04 | .06 | .27* | .43** | .27* |
| 12 | Leader Age | 47.35 | 4.04 | .20 | .16 | .18 | .20 | 01 | .07 | 06 |
| 13. | Leader Gender | .03 | .16 | 16 | 16 | 12 | 10 | .09 | 05 | 03 |
| 14. | Leader Job Tenure | 16.33 | 6.16 | .15 | .15 | .11 | .18 | .15 | .06 | .04 |
| 15. | Leader Team Tenure | 4.88 | 2.95 | .05 | .07 | 06 | 07 | 09 | .05 | .07 |
| 16. | Team Size | 5.81 | 2.36 | .14 | .06 | .19 | .21 | .02 | 21 | 22 |
| 17. | Prior Team Performance | 83.24 | 10.48 | .17 | .17 | .19 | .18 | .13 | 02 | 08 |

TABLE 5Descriptive Statistics and Correlations

a. N= 80. (H)= Horizontal ties with peer leader; (V)=Vertical ties with superiors; TCOS =Team climate for organizational support.. For gender, male was coded as 0 and female was coded as 1.

b. * p < .05, **p < .01

17 9 10 12 13 14 15 16 8 11 1. Advice In-degree (H) 2. Friendship In-degree (H) 3. Advice In-degree (V) 4. Friendship In-degree (V) 5. **Reward Power** 6. **Reference** Power 7. **Expert Power** 8. Leader's Team Commitment 9. .15 TCOS .62** .21 10. Team Efficacy .33** .53** .71** 11. Team Cohesion - .20 - .09 - .10 - .10 12. Leader Age - .07 - .29** .04 .06 - .08 13. Leader Gender .42** - .10 14. Leader Job Tenure .05 .04 - .13 .03 .37** - .05 - .11 - .04 - .16 - .18 .23* 15. Leader Team Tenure - .27* - .11 - .08 - .11 .16 .05 .09 - .02 16. Team Size .10 .06 - .09 - .04 .03 .08 .28* - .03 .14 17. Prior Team Performance

TABLE 5Descriptive Statistics and Correlations (Cont'd)

a. N= 80. (H)= Horizontal ties with peer leader; (V)=Vertical ties with superiors; TCOS =Team climate for organizational support. For gender, male was coded as 0 and female was coded as 1.

| Variable | Step | 1 | Step 2a | (AH) | Step 2b | (FH) | Step 2c | : (AV) | Step 2d | l (FV) |
|---------------------------|------|-----|---------|-------|-----------|------|-------------------|--------|---------|--------|
| variable | β | b | β | b | β | b | β | b | β | b |
| Control Variables | | | | | | | | | | |
| Leader Age | 19 | 02 | 22 | 03 | 20 | 02 | 21 | 03 | 21 | 03 |
| Leader Gender | 01 | 02 | .05 | .14 | .04 | .13 | .02 | .07 | .02 | .06 |
| Leader Job Tenure | .22 | .02 | .21 | .02 | .21 | .02 | .22 | .02 | .21 | .02 |
| Leader Team Tenure | .00 | .00 | .02 | .00 | .00 | .00 | .03 | .01 | .04 | .01 |
| Team Size | 16 | 03 | 19 | 04 | 16 | 03 | 19 | 04 | 20 | 04 |
| Team Performance | .02 | .00 | 04 | .00 | 03 | .00 | 02 | .00 | 01 | .00 |
| Leader's Social Capital | | | | | | | | | | |
| Advice In-degree (AH) | | | .34** | .02** | | | | | | |
| Friendship In-degree (FH) | | | | | .29* | .02* | | | | |
| Advice In-degree (AV) | | | | | | | .22† | .02† | | |
| Friendship In-degree (FV) | | | | | | | | | .20 | .02 |
| Adjusted R^2 | .00 | | .10 | | .07 | | .03 | | .02 | |
| F | 1.00 | | 2.24 | | 1.85 | | 1.34 | | 1.27 | |
| Change in R^2 | | | .10** | | $.08^{*}$ | | $.04^{\dagger}$ | | .03 | |
| Change in <i>F</i> | | | 9.02** | | 6.53* | | 3.21 [†] | | 2.73 | |

 TABLE 6

 Regression Analysis of the Relationship between Leader's Social Capital and TCOS

a. N= 77 after deleting outliers. (AH)= Horizontal advice ties with peer leader; (FH) = Horizontal friendship ties with peer leaders; (AV) = Vertical advice ties with superiors; (FV)= Vertical friendship ties with superiors; TCOS = Team climate for organizational support.

b. Each measure of leader's social capital was entered in Step 2 individually to test the main effect. Instead of making multiple TABLEs, for the sake of simplicity, I report the results of repeated regression analyses in Step 2a, Step 2b, Step 2c, and Step 2d, respectively.

c. $\ddagger p < .10, * p < .05, ** p < .01$

TABLE 7

Regression Analysis of the Relationship between Leader's Social Capital (with all measures in one block) and TCOS

| Variable | Step | 1 | Ste | o 2 |
|--|------|-----|------------|-----------|
| VariableControl VariablesLeader AgeLeader GenderLeader Job TenureLeader Team TenureTeam SizeTeam PerformanceLeader's Social CapitalAdvice In-degree (AH)Friendship In-degree (FH)Advice In-degree (FV)Adjusted R^2 | β | b | β | b |
| Control Variables | | | | |
| Leader Age | 19 | 02 | 23† | 03† |
| Leader Gender | 01 | 02 | .04 | .13 |
| Leader Job Tenure | .22 | .02 | .20 | .02 |
| Leader Team Tenure | .00 | .00 | .01 | .00 |
| Team Size | 16 | 03 | 22 | 04 |
| Team Performance | .02 | .00 | 01 | .00 |
| Leader's Social Capital | | | | |
| Advice In-degree (AH) | | | 1.25^{*} | $.08^{*}$ |
| Friendship In-degree (FH) | | | 59 | 04 |
| Advice In-degree (AV) | | | 41 | 03 |
| Friendship In-degree (FV) | | | .04 | .00 |
| Adjusted R^2 | .00 | | .12 | |
| F | 1.00 | | 2.24 | |
| Change in R^2 | | | .16* | |
| Change in <i>F</i> | | | 3.38^{*} | |

a. N= 77 after deleting outliers. (AH)= Horizontal advice ties with peer leader; (FH) = Horizontal friendship ties with peer leaders; (AV)=Vertical advice ties with superiors; (FV)= Vertical friendship ties with superiors; TCOS =Team climate for organizational support.

b. $\ddagger p < .10, * p < .05, **p < .01$

| Variable | Step | Step 1 | | Step 2a (RWP) | | REP) | Step 2c (| Step 2c (EXP) | | |
|---------------------------|------|--------|---------|---------------|---------|------------|--------------|---------------|--|--|
| variable | β | b | β | b | β | b | β | b | | |
| Control Variables | | | | | | | | | | |
| Leader Age | 19 | 02 | 20 | 02 | 28 | 03 | 15 | 02 | | |
| Leader Gender | 01 | 02 | 04 | 12 | 01 | 03 | .00 | .01 | | |
| Leader Job Tenure | .22 | .02 | .10 | .01 | .15 | .01 | .12 | .01 | | |
| Leader Team Tenure | .00 | .00 | .01 | .00 | 04 | 01 | 08 | 01 | | |
| Team Size | 16 | 03 | 12 | 03 | .08 | .02 | .01 | .00 | | |
| Team Performance | .02 | .00 | 01 | .00 | .01 | .00 | .07 | .00 | | |
| Perceived Power of Leader | | | | | | | | | | |
| Reward Power (RWP) | | | .46** | .34** | | | | | | |
| Reference Power (REP) | | | | | .61** | $.50^{**}$ | | | | |
| Expert Power (EXP) | | | | | | | .56** | .43** | | |
| Adjusted R^2 | .00 | | .20 | | .38 | | .35 | | | |
| F | 1.00 | | 3.64 | | 6.25 | | 5.30 | | | |
| Change in R^2 | | | .19** | | .30** | | .27** | | | |
| Change in <i>F</i> | | | 18.05** | | 34.88** | | 28.77^{**} | | | |

 TABLE 8

 Regression Analysis of the Relationship between Perceived Power of Leader and TCOS

a. N= 77 after deleting outliers. (RWP) = Reward power; (REP) = Reference power; (EXP) = Expert power; TCOS = Team climate for organizational support.

b. Each measure of perceived power of leader was entered in Step 2 individually to test the main effect. Instead of making multiple TABLEs, for the sake of simplicity, I report the results of repeated regression analyses in Step 2a, Step 2b, and Step 2c, respectively.

c. $\ddagger p < .10, * p < .05, ** p < .01$

TABLE 9

| Regression Analysis of the Relationship between Perceived Power of Leader (with an measures in one block) and TCO | Regression Ana | lvsis of the | Relationship | between | Perceived | Power of | Leader (| with all | measures | in one t | block) | and 7 | ICO |
|---|----------------|--------------|--------------|---------|-----------|----------|----------|----------|----------|----------|--------|-------|------------|
|---|----------------|--------------|--------------|---------|-----------|----------|----------|----------|----------|----------|--------|-------|------------|

| Variable | Step 1 | Step 2 | | |
|---------------------------|--------|--------|-----------|-----------|
| | β | b | β | b |
| Control Variables | | | | |
| Leader Age | 19 | 02 | 22* | 03* |
| Leader Gender | 01 | 02 | 02 | 06 |
| Leader Job Tenure | .22 | .02 | .09 | .01 |
| Leader Team Tenure | .00 | .00 | 05 | 01 |
| Team Size | 16 | 03 | .05 | .01 |
| Team Performance | .02 | .00 | .03 | .00 |
| Perceived Power of Leader | | | | |
| Reward Power (RWP) | | | .20† | .15† |
| Reference Power (REP) | | | .30* | .25* |
| Expert Power (EXP) | | | $.28^{*}$ | $.21^{*}$ |
| Adjusted R^2 | .00 | | .37 | |
| F | 1.00 | | 6.08 | |
| Change in R^2 | | | .37** | |
| Change in F | | | 15.06** | |

a. N=77 after deleting outliers. (RWP) = Reward power; (REP) = Reference power; (EXP) = Expert power; TCOS = Team climate for organizational support. b. $\ddagger p < .10, * p < .05, **p < .01$

| Variable | Step | p 1 | Step 2 | | |
|---------------------------|------|-----|------------|-----------|--|
| | β | b | β | b | |
| Control Variables | | | | | |
| Leader Age | 19 | 02 | 23† | 03† | |
| Leader Gender | 01 | 02 | .04 | .13 | |
| Leader Job Tenure | .22 | .02 | .20 | .02 | |
| Leader Team Tenure | .00 | .00 | .01 | .00 | |
| Team Size | 16 | 03 | 22 | 04 | |
| Team Performance | .02 | .00 | 01 | .00 | |
| Leader's Social Capital | | | | | |
| Advice In-degree (AH) | | | 1.25^{*} | $.08^{*}$ | |
| Friendship In-degree (FH) | | | 59 | 04 | |
| Advice In-degree (AV) | | | 41 | 03 | |
| Friendship In-degree (FV) | | | .04 | .00 | |
| Perceived Power of Leader | | | | | |
| Reward Power (RWP) | | | | | |
| Reference Power (REP) | | | | | |
| Expert Power (EXP) | | | | | |
| Adjusted R^2 | .00 | | .12 | | |
| F | 1.00 | | 2.24 | | |
| Change in R^2 | | | .16* | | |
| Change in <i>F</i> | | | 3.38^{*} | | |

 TABLE 10

 Regression Analysis of Leader's Social Capital, Perceived Power of Leader and TCOS

a. N= 77 after deleting outliers. (AH)= Horizontal advice ties with peer leader; (FH) = Horizontal friendship ties with peer leaders; (AV)=Vertical advice ties with superiors; (FV)= Vertical friendship ties with superiors; (RWP)= Reward power; (REP)= Reference power; (EXP)= Expert power; TCOS = Team climate for organizational support.

b. † p<.10, * p<.05, **p<.01

| X7 · 11 | Step 3 | | Step 4 | | |
|---------------------------|-----------|-----------|-----------|-----------|--|
| Variable | β | b | β | b | |
| Control Variables | | | | | |
| Leader Age | 22* | 03* | 25* | 03* | |
| Leader Gender | 02 | 06 | .01 | .03 | |
| Leader Job Tenure | .09 | .01 | .11 | .01 | |
| Leader Team Tenure | 05 | 01 | 04 | 01 | |
| Team Size | .05 | .01 | .01 | .00 | |
| Team Performance | .03 | .00 | .01 | .00 | |
| Leader's Social Capital | | | | | |
| Advice In-degree (AH) | | | .67 | .04 | |
| Friendship In-degree (FH) | | | 33 | 02 | |
| Advice In-degree (AV) | | | 05 | .00 | |
| Friendship In-degree (FV) | | | 13 | 01 | |
| Perceived Power of Leader | | | | | |
| Reward Power (RWP) | .20† | .15† | .15 | .11 | |
| Reference Power (REP) | .30* | .25* | $.31^{*}$ | $.25^{*}$ | |
| Expert Power (EXP) | $.28^{*}$ | $.21^{*}$ | .22 | .17 | |
| Adjusted R^2 | .37 | | .38 | | |
| F | 6.08 | | 4.67 | | |
| Change in R^2 | .37** | | .41** | | |
| Change in F | 15.06** | | 7.28** | | |

TABLE 10Regression Analysis of Leader's Social Capital, Perceived Power of Leader and TCOS (Cont'd)

a. N= 77 after deleting outliers. (AH)= Horizontal advice ties with peer leader; (FH) = Horizontal friendship ties with peer leaders; (AV)=Vertical advice ties with superiors; (FV)= Vertical friendship ties with superiors; (RWP)= Reward power; (REP)= Reference power; (EXP)= Expert power; TCOS =Team climate for organizational support.
 b. † p<.10, * p<.05, **p<.01

TABLE 11

Leader's Team Commitment as a Moderator of the Relationship between Leader's Social Capital and TCOS

| Variable | Step 3a (| Step 3a (AH) | | Step 3b (FH) | | Step 3c (AV) | | Step 3d(FV) | |
|---------------------------|-----------------|-----------------|-----------|-----------------|-----------------|-----------------|-----------|-----------------|--|
| | β | b | β | b | β | b | β | b | |
| Control Variables | | | | | | | | | |
| Leader Age | 21† | 02† | 18 | 02 | 20 | 02 | 20 | 02 | |
| Leader Gender | .06 | .19 | .06 | .18 | .03 | .08 | .03 | .08 | |
| Leader Job Tenure | $.22^{\dagger}$ | $.02^{\dagger}$ | .21† | $.02^{\dagger}$ | $.24^{\dagger}$ | $.02^{\dagger}$ | .24† | $.02^{\dagger}$ | |
| Leader Team Tenure | .06 | .01 | .03 | .01 | .07 | .01 | .07 | .01 | |
| Team Size | 17 | 04 | 13 | 03 | 18 | 04 | 18 | 04 | |
| Team Performance | 10 | .00 | 09 | .00 | 07 | .00 | 07 | .00 | |
| Leader's Social Capital | | | | | | | | | |
| Advice In-degree (AH) | 1.61 | .10 | | | | | | | |
| Friendship In-degree (FH) | | | 1.50 | .10 | | | | | |
| Advice In-degree (AV) | | | | | 1.69 | .14 | | | |
| Friendship In-degree (FV) | | | | | | | 1.69 | .14 | |
| Leader's Team Commitment | $.50^{*}$ | $.48^{*}$ | $.49^{*}$ | .46* | $.49^{*}$ | $.46^{*}$ | $.49^{*}$ | $.46^{*}$ | |
| Two-way Interaction | | | | | | | | | |
| AH×TC | -1.13 | 01 | | | | | | | |
| FH×TC | | | -1.08 | 01 | | | | | |
| AV×TC | | | | | -1.37 | 02 | | | |
| FV×TC | | | | | | | -1.37 | 02 | |
| Adjusted R^2 | .19** | | .25* | | .19† | | .18 | | |
| F | 2.96** | | 2.46* | | 1.81* | | 1.70 | | |
| Change in R^2 | .01 | | .01 | | .02 | | .01 | | |
| Change in <i>F</i> | 1.13 | | .90 | | 1.34 | | 1.26 | | |

a. N= 77 after deleting outliers. (AH)= Horizontal advice ties with peer leader; (FH)= Horizontal friendship ties with peer leaders; (AV)=Vertical advice ties with superiors; (FV)= Vertical friendship ties with superiors; (TC)= Leader's team commitment; TCOS =Team climate for organizational support. † p< .10, * p < .05, **p < .01

b. Each measure of leader's social capital was entered in Step 2 and its interaction term in Step 3 individually. Instead of making multiple TABLEs, for the sake of simplicity, I report only Step 3 of repeated regression analyses in Step 3a, Step 3b, Step 3c, and Step 3d, respectively.

| Variable | Step 3a (H | RWP) | Step 3b (I | REP) | Step 3c (EXP) | |
|---------------------------|------------------|------|------------|------|---------------|-----|
| variable | β | b | β | b | β | b |
| Control Variables | | | | | | |
| Leader Age | 19 | 02 | 28* | 03* | 15 | 02 |
| Leader Gender | 04 | 12 | 01 | 03 | .00 | .01 |
| Leader Job Tenure | .10 | .01 | .15 | .01 | .12 | .01 |
| Leader Team Tenure | .01 | .00 | 04 | 01 | 10 | 02 |
| Team Size | 12 | 03 | .08 | .02 | .00 | .00 |
| Team Performance | 01 | .00 | .02 | .00 | .06 | .00 |
| Perceived Power of Leader | | | | | | |
| Reward Power (RWP) | .09 | .07 | | | | |
| Reference Power (REP) | | | .57 | .47 | | |
| Expert Power (EXP) | | | | | 79 | 61 |
| Leader's Team Commitment | 15 | 14 | 04 | 04 | -1.03 | 98 |
| Two-way Interaction | | | | | | |
| RWP×TC | .46 | .05 | | | | |
| REP×TC | | | .06 | .01 | | |
| EXP×TC | | | | | 1.94 | .19 |
| Adjusted R^2 | $.27^{\dagger}$ | | .38** | | .36** | |
| F | 2.85^{\dagger} | | 4.72** | | 4.20** | |
| Change in R^2 | .00 | | .00 | | .01 | |
| Change in <i>F</i> | .06 | | .00 | | 1.04 | |

Leader's Team Commitment as a Moderator of the Relationship between Perceived Power of Leader and TCOS

a. N= 77 after deleting outliers. (RWP)= Reward power; (REP)= Reference power; (EXP)= Expert power; (TC)= Leader's team commitment; TCOS = Team climate for organizational support.

b. Each measure of leader's team commitment was entered in Step 2 and its interaction term in Step 3 individually. Instead of making multiple TABLEs, for the sake of simplicity, I report only Step 3 of repeated regression analyses in Step 3a, Step 3b, and Step 3c, respectively.

c. † p<.10, * p<.05, **p<.01

TABLE 12

| | | Team Efficacy | | | | Team Cohesion | | | |
|--------------------|------|---------------|-------------|--------|-----|---------------|---------|-------------------|--|
| Variable | Step | Step 1 | | Step 2 | | Step 1 | | Step 2 | |
| | β | b | β | b | β | b | β | b | |
| Control Variables | | | | | | | | | |
| Leader Age | .02 | .00 | .13 | .02 | 02 | .00 | .08 | .01 | |
| Leader Gender | 06 | 20 | 06 | 19 | 11 | 44 | 10 | 43 | |
| Leader Job Tenure | 06 | 01 | 19† | 02† | 06 | 01 | 18 | 02 | |
| Leader Team Tenure | .00 | .00 | .00 | .00 | 19 | 04 | 19† | - $.04^{\dagger}$ | |
| Team Size | 31** | 07** | 22* | 05* | 09 | 03 | 01 | .00 | |
| Team Performance | 03 | .00 | 05 | .00 | 01 | .00 | 02 | .00 | |
| TCOS | | | $.60^{**}$ | .69** | | | .54** | $.76^{**}$ | |
| Adjusted R^2 | .03 | | .38** | | 01 | | .27** | | |
| F | 1.51 | | 7.88^{**} | | .81 | | 5.03** | | |
| Change in R^2 | | | .33** | | | | .27** | | |
| Change in <i>F</i> | | | 4 .94** | | | | 28.42** | | |

TABLE 13 Regression Analysis of Team Efficacy and Team Cohesion

a. N= 77 after deleting outliers. b. $\ddagger p < .10, * p < .05, **p < .01$

FIGURE 1

Research Model



FIGURE 2

Degree Centrality for Advice Network of Peer Leaders



Note. Shapes indicate the companies that leaders are affiliated with. Sizes denote each leader's in-degree centrality.

FIGURE 3





Note. Shapes indicate the companies that executives are affiliated with. Sizes denote each leader's in-degree centrality.
FIGURE 4

Degree Centrality for Friendship Network of Peer Leaders



Note. Shapes indicate the companies that leaders are affiliated with. Sizes denote each leader's in-degree centrality.

FIGURE 5

Degree Centrality for Friendship Network of Superiors



Note. Shapes indicate the companies that executives are affiliated with. Sizes denote each leader's in-degree centrality.

FIGURE 6

Supplementary Analysis: Structural Model



Note. Leader's social capital denotes leader's centrality in peers' advice network in this analysis. All paths are standardized.

APPENDIX A-1: Executive Survey (Korean Version)

PARTI. 인적 네트워크 관련 질문

저희 연구팀은 직장 내 관계에 대한 질문이 상당히 민감하거나 조심스럽게 느껴질 수 있다는 점을 충분히 이해하고 있습니다. 따라서 다시한번 귀하 개인의 응답 내용에 대해서 다른 구성원 (동료, 상사, 부하직원) 그 어느 누구의 접근도 불가능하다는 점을 분명히 약속 드립니다. 따라서 설문 참여에 따른 그 어떠한 불이익도 없을 것입니다.

자료에 대한 보안과 응답자의 보호를 위해 일단 귀하의 응답이 접수되면, 귀하를 식별 할 수 있는 정보는 임의로 부여된 다른 식별번호로 대체될 것 입니다. 특히 소셜 네트워크에 대한 응답은 수거 직후 다음의 예시처럼 하나의 점으로 전환되어 분석과정에서는 점들의 패턴만 사용됩니다. 예시에서 보시다시피 개인 정보는 파악될 수 없습니다.

예시) 소셜 네트워크 분석



응답을 시작하시려면,

1) 우선 다음 페이지에 나와 있는 'Advice', 'Friend' 질문을 확인해 주십시오.

2) 귀하가 아는 분에 한해, 우선 성함을 쓰시고, 다음 'Advice', 'Friend' 칸에 적합한 숫자를 적어주십시오.

3) 만약 칸이 남는 경우에는 그냥 빈칸으로 남겨두시면 됩니다.

<u>주의:</u> 특정 사람에 대해 'Advice' 칸과 'Friend' 칸 모두에 대해 응답해주셔도 상관없고, <u>둘 중 한 칸에 대해서만 응답하셔도 됩니다</u>.

판단 (점수부여) 기준

Advice 관련 질문

업무에 관련된 충고, 도움, 지원, 또는 정보를 얻기 위해 다음의 사람과 얼마나 자주 접촉하십니까? 다음의 기준에 따라 가장 적합한 숫자를 'Advice' 칸에 적어주십시오.

| 접촉 없음 | 1 년에 몇 번 | 6 개월에 몇 번 | 한 달에 몇 번 | 한 주에 몇 번 | 하루에 몇 번 |
|-------|----------|-----------|----------|----------|---------|
| 0 | 1 | 2 | 3 | 4 | 5 |

Friend 관련 질문

다음의 사람은 편하게 어울리거나, 업무 시간에 편하게 농담을 주고 받거나, 사적인 문제에 대해 털어놓을 수 있는 친구입니까? 다음의 기준에 따라 가장 적합한 숫자를 'Friend' 칸에 적어주십시오.

| 전혀 모르는 사이 | 안면만 있는 사이 | 몇 번 사적으로 만난 사이 | 편하게 지내는 친구 사이 | 친한 친구 사이 | 베스트 프렌드 |
|-----------|-----------|-------------------|------------------|----------|---------|
| 0 | 1 | 2 | 3 | 4 | 5 |

| | 이름 | Advice | Friend | | 이름 | Advice | Friend |
|-------|----|--------|--------|-------|----|--------|--------|
| 임원 1 | | | | 팀장 1 | | | |
| 임원 2 | | | | 팀장 2 | | | |
| 임원 3 | | | | 팀장 3 | | | |
| 임원 4 | | | | 팀장 4 | | | |
| 임원 5 | | | | 팀장 5 | | | |
| 임원 6 | | | | 팀장 6 | | | |
| 임원 7 | | | | 팀장 7 | | | |
| 임원 8 | | | | 팀장 8 | | | |
| 임원 9 | | | | 팀장 9 | | | |
| 임원 10 | | | | 팀장 10 | | | |
| 임원 11 | | | | 팀장 11 | | | |
| 임원 12 | | | | 팀장 12 | | | |
| 임원 13 | | | | 팀장 13 | | | |
| 임원 14 | | | | 팀장 14 | | | |
| 임원 15 | | | | 팀장 15 | | | |
| 임원 16 | | | | 팀장 16 | | | |
| 임원 17 | | | | 팀장 17 | | | |

APPENDIX A-2: Executive Survey (English Version)

PART I . Social network

Our research team fully understands questions regarding social networks can be very sensitive and difficult to answer. Therefore, we assure you that no one but researchers can get access to your responses. There will be no retaliatory actions due to your participation in this survey.

Once your response is collected by the researcher, your personal information will be recoded into special numbers for identification so no one but the researcher can identify your response. In particular, your response regarding social network will be transformed into dots as illustrated below and only patterns between dots will be analyzed. No personal information will be displayed in the analysis.

Example) Social network analysis



To begin,

- 1) First, read the questions regarding 'advice network' and 'friend network.'
- 2) Next, referring to the list attached, write names and numbers that appropriately describe the frequency of interaction.
- 3) If you cannot fill all rows in the attached table, just leave them blank. If you need more rows, you may use the other side.

Note: You may provide the number of interaction for both advice and friend relationships for a certain person or you may answer one of them. For example, you may contact a person only for work-related matters or you may be friends with other employees but don't exchange work-related information or advice with them. You may leave rows blank or write 0 for those you have no acquaintance with.

Questions

| Advice Network | | | | | | | | | | |
|--|-----------------------|----------------------------|---------------------------|------------|------------------------|--|--|--|--|--|
| How often you go to this person for professional advice, help, assistance, or information regarding work-related issues? | | | | | | | | | | |
| No interaction | A few times in a year | A few times in 6 months | A couple of times a month | Every week | Several times a day | | | | | |
| 0 | 1 | 2 | 3 | 4 | 5 | | | | | |

Friend Network

Are you friends with this person, including seeing them socially outside of work, joking around with them during the workday, and confiding in them about personal matters?

| No interaction | Acquaintance | Friend | Close friend | Very close friend | Best friend | |
|----------------|--------------|--------|--------------|----------------------|-------------|--|
| 0 | 1 | 2 | 3 | 4 | 5 | |

APPENDIX B-1: Leader Survey (Korean Version)

| | | 전혀 그렇지 않다 | 그렇지 않다 | 별로 그렇지 않다 | 중간 | 약간 그렇다 | 그렇다 | 매우 그렇다 |
|----|---|-----------------|-----------|-----------------|----|-----------|-----|-----------|
| 1. | 나는 인적 네트워크(기능적인 인간관계)를 형성하기 위해 직장에서 많은 시간과 노력을 쏟는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 나는 직장에서 영향력있는 사람과 사회적 관계를 맺는 일에 능하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 직장에서 중요한 사람들을 많이 알고 있으며 그들과 친분이 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 나는 인연(사적으로 친밀한 인간관계)을 만들기 위해 직장에서 많은 시간을 보낸다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 나는 업무 처리를 위해 직장에서 나의 인맥과 사회적 친분을 활용하는데 능하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 나는 꼭 처리해야 할 일이 있을 때 도움을 요청할 수 있도록 동료들과 넓은 인적 네트워크를 만들어 왔다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | 나는 이 팀에서 나의 남은 직장 생활을 보낼 수 있으면 매우 좋을 것이다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 나는 팀 외부 사람들과 나의 팀에 대해 이야기 하는 것을 좋아한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 나는 진심으로 팀의 문제가 나의 문제인 것처럼 느낀다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 나는 다른 팀에 대해서도 지금처럼 쉽게 애착을 느낄 수 있을 것 같다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 나는 팀 안에서 한 가족의 일원처럼 느끼지 <u>않는다.</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 나는 현재 팀에 감정적으로 애착을 느끼지 <u>않는다.</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | 이 팀은 개인적으로 커다란 의미가 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | 나는 현재 나의 팀에 강한 소속감을 느끼지 <u>않는다.</u> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX B-2: Leader Survey (English Version)

| | | Strongly disagree | Disagree | Disagree somewhat | Neutral | Agree somewhat | Agree | Strongly agree |
|----|--|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| 1. | I spend a lot of time and effort at work networking with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | I am good at building relationships with influential people at work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | At work, I know a lot of important people and am well connected. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | I spend a lot of time at work developing connections with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | I am good at using my connections and network to make things happen at work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | I have developed a large network of colleagues and associates at work whom I can call on for support when I really need to get things done. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | I would be very happy to spend the rest of my career with this team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | I enjoy discussing my team with people outside of it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | I really feel as if this team's problems are my own. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | I think that I could easily become as attached to another team I am to this one.(R) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | I do not feel like "part of the family" at my team (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | I do not feel "emotionally attached" to this team (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | This team has a great deal of personal meaning for me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | I do not feel a strong sense of belonging to my team. (R) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX C-1: Member Survey (Korean Version)

| | | 전혀 그렇지 않다 | 그렇지 않다 | 별로 그렇지 않다 | 중간 | 약간 그렇다 | 그렇다 | 매우 그렇다 |
|----|---|-----------------|-----------|-----------------|----|-----------|-----|-----------|
| 1. | 우리 팀은 평균이상의 능력을 가지고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 우리 팀은 비슷한 업무를 수행하는 다른 팀과 비교할 때 능력이 떨어진다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 우리 팀은 주어진 업무를 제대로 수행할 능력을 가지고 있지 못하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 우리 팀의 구성원들은 뛰어난 업무능력을 가지고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 우리 팀의 구성원들 중 일부는 능력이 부족하기 때문에 해고되어야 한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 우리 팀은 효과적으로 업무를 수행하고 있지 못하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | 우리 팀의 구성원들 중 일부는 자신의 업무를 잘 처리할 능력이 부족하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | 우리 팀원들은 성과실현을 위해 강하게 뭉친다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 우리 팀원들은 과업수행을 위해 강하게 몰입한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 우리 팀원들은 팀 성과를 이룩하기 위한 일관된 열의를 지니지 못하고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 우리 팀원들은 나에게 개인성과 증진에 필요한 기회를 충분히 주지 않고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 우리 팀원들은 같이 시간을 보내는 것을 좋아한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 우리 팀원들은 근무시간 외에 어울리는 것을 좋아하지 않는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | 우리 팀원들은 거의 어울리지 않는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | 우리 팀원들은 팀으로서 보다는 개인적으로 따로 나가 노는 것을 좋아한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | 전혀 그렇지 않다 | 그렇지 않다 | 별로 그렇지 않다 | 중간 | 약간 그렇다 | 그렇다 | 매우 그렇다 |
|-----|--|-----------------|-----------|-----------------|----|-----------|-----|-----------|
| 1. | 우리 팀은 업무 수행에 필요한 기술을 갖고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 우리 팀은 팀의 목적을 제대로 이해하고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 우리 팀의 팀원 자격은 팀의 임무나 목적에 적합하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 우리 팀은 업무를 수행하는데 필요한 권한을 갖고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 우리 회사는 업무의 통합을 위해 다기능팀 (예, 태스크 포스, TF 팀)을 사용한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 우리 팀은 정보를 공유하기 위해 공급업체나 고객과 회의를 한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | 우리 팀은 팀장에게 업무와 관련된 제안을 한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | 우리 팀은 사업 부서의 목표, 전략, 그리고 우선순위에 대한 정보를 쉽게 구할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | 우리 팀은 회사 외부에서나 내부에서 고객에 대한 정보를 쉽게 구할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | 우리 팀은 공급업체에 대한 정보를 회사 외부에서나 내부에서 쉽게 구할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | 우리 회사의 팀장과 임원들은 다양한 시각에 대해 열린 자세를 갖고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | 우리 회사의 팀장과 임원들은 우리 팀이 업무에 필요한 자원들을 지원해준다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | 우리 팀장은 팀의 제안에 대해 시기 적절하게 처리해준다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | 우리 팀은 정기적으로 성과 평가를 한다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | 우리 팀은 팀 목표 달성을 위해 구체적인 성과 측정 기준을 갖고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | 나의 직속 상사는 우리 팀에 대해 구체적인 성과 측정 기준을 갖고 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | 우리 팀의 성과 측정 기준은 팀 목적에 적합하다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | 의사소통 기술에 대한 교육이 필요한 팀원은 언제든 그 교육을 받을 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | 의사결정 기술에 대한 교육이 필요한 팀원은 언제든 그 교육을 받을 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | 단체회의 기술에 대한 교육이 필요한 팀원은 언제든 그 교육을 받을 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| 21. | 교육이 필요한 팀원은 언제든 교육을 받을 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|--|---|---|---|---|---|---|---|
| 22. | 우리 팀이 더 많은 업무를 맡고 나면, 시기적절하게 보상을 받거나 인정을 받는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | 우리 팀이 목표를 달성하면, 시기적절하게 보상을 받거나, 인정을 받는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | 우리 팀이 추가로 더 열심히 일하면 그 만큼 추가 보상을 받거나, 인정을 받는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. | 우리 팀의 업무 방식이 향상되면 그 만큼 추가 보상을 받거나, 인정을 받는다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | 전혀 그렇지 않다 | 그렇지 않다 | 별로 그렇지 않다 | 중간 | 약간 그렇다 | 그렇다 | 매우 그렇다 |
|-----|---|-----------------|-----------|-----------------|----|-----------|-----|-----------|
| 1. | 우리 팀장은 나의 연봉을 인상시켜 줄 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | 우리 팀장은 나의 급여를 인상하는데 영향력을 미칠 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | 우리 팀장은 내게 특별한 복리후생을 줄 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | 우리 팀장은 내가 승진하는데 영향력을 미칠 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | 우리 팀장은 내가 소중한 사람이라는 생각이 들게 할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | 우리 팀장은 내가 인정받고 있다는 생각이 들게 할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | 우리 팀장은 개인적으로 나를 인정하고 있다는 생각이 들게 할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | 우리 팀장은 내가 중요한 사람이라고 느끼도록 할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | 우리 팀장은 내게 전문지식에 관한 좋은 제안을 줄 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | 우리 팀장은 본인의 경험과 연수과정에 얻은 지식을 나와 공유할 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | 우리 팀장은 업무와 관련된 좋은 충고를 줄 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | 우리 팀장은 내가 필요한 전문적 지식을 줄 수 있다. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

APPENDIX C-2: Member Survey (English Version)

| - | | | | | | | | |
|----|---|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| | | Strongly disagree | Disagree | Disagree somewhat | Neutral | Agree somewhat | Agree | Strongly agree |
| 1. | The department I work with has above average ability. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | This department is poor compared to other departments doing similar work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | This department is not able to perform as well as it should. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | The members of this department have excellent job skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | Some members of this department should be fired due to lack of ability. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | This department is not very effective. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | Some members in this department cannot do their jobs well. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Our team is united in trying to reach its goals for performance. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | I'm unhappy with my team's level of commitment to the task (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | Our team members have conflicting aspirations for the team's performance (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | This team does not give me enough opportunities to improve my personal performance (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | Our team would like to spend time together outside of work hours. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | Members of our team do not stick together outside of work time (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | Our team members rarely party together (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | Members of our team would rather go out on their own than get together as a team (R). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | Strongly disagree | Disagree | Disagree somewhat | Neutral | Agree somewhat | Agree | Strongly agree |
|----|---|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| 1. | My work group has the skills it needs to perform work well. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | My team understands its purpose. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | My team's membership is appropriate for its mission or purpose. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| 4. | My team has the authority it needs to perform its work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|--|---|---|---|---|---|---|---|
| 5. | My company uses multifunctional (cross- disciplinary) teams to integrate work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | My team has meetings with suppliers or customers to share information. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | My team presents its recommendations to managers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | My team can easily get information on business-unit goals, strategies, and priorities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | My team can easily get information about customers (internal or external). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | My team can easily get information about our suppliers (internal or external). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | My company's managers/supervisors are open to multiple perspectives (such as different points of view). | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | My company's managers/supervisors help provide my team with the resources we need to perform work. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | My managers/supervisors follow through with team recommendations in a timely manner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | My team has regularly planned performance reviews. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | My team uses specific performance measurements to track team goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | My direct supervisor uses specific measurements for our team. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | My team's performance measures are appropriate to our team's purpose. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | My team can easily get training on communication skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | My team can easily get training on decision-making skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | My team can easily get training on group-meeting skills. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. | My team gets training when we need it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. | After we get more responsibilities, our team gets rewarded, or is recognized in a timely manner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. | After achieving goals, my team is paid, or is recognized, in a timely manner. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. | My team gets more pay, or is recognized, for additional effort. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. | My team is paid more, or is recognized, for improving work procedures. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | | Strongly disagree | Disagree | Disagree somewhat | Neutral | Agree somewhat | Agree | Strongly agree |
|-----|---|----------------------|----------|----------------------|---------|-------------------|-------|-------------------|
| 1. | I feel my manager can increase my salary. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | I feel my manager can influence my getting a pay raise. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | I feel my manager can provide me with special benefits. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | I feel my manager can influence my getting a promotion. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | I feel my manager can make me feel valued. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | I feel my manager can make me feel like he/she approves of me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | I feel my manager can make me feel personally accepted. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | I feel my manager can make me feel important. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | I feel my manager can give me good technical suggestions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | I feel my manager can share with me his/her considerable experience and training. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | I feel my manager can provide me with sound job-related advice. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | I feel my manager can provide me with needed technical knowledge. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |