

LEADING EFFECTIVE TEAMS THROUGH SERVANT LEADERSHIP: AN EXPANDED REGRESSION MODEL OF ESSENTIAL SERVANT LEADERSHIP THEMES

Irving, Justin A.
Bethel University
j-irving@bethel.edu

Longbotham, Gail J.
Regent University
gaillon@regent.edu

ABSTRACT

In a previous regression model put forward by Irving and Longbotham (in press-a), six essential servant leadership themes were identified as having a significant impact on the effectiveness of teams. These six themes are: (a) Providing Accountability, (b) Supporting and Resourcing, (c) Engaging in Honest Self-Evaluation, (d) Fostering Collaboration, (e) Communicating with Clarity, and (f) Valuing and Appreciating. In this expanded analysis, data from two separate studies (N=931) are pulled together for the purpose of reevaluating Irving and Longbotham's model. This paper presents a multiple regression model that is able to explain 43% of the variance in the effectiveness of teams and has a significance level of .000. The regression model presented in this paper confirms each of the six previously identified themes and adds three additional servant leadership themes: (a) Modeling Expected Behavior, (b) Accepting Follower Individuality, and (c) Understanding Relational Skills.

INTRODUCTION

Teams and the leadership of teams continue to be of interest to researchers and practitioners alike as evidenced by the International Leadership Association which, in 2006, devoted a special issue of its journal, *The Leadership Quarterly*, to "Leadership in Team-Based Organizations." In this special issue, Day, Gronn, and Salas (2006) argue that "Team leadership as a discipline appears to be on the cusp of some truly significant breakthroughs" (p. 211) and then highlight significant trends in the team leadership literature: (a) greater emphasis on the role of time in team processes, (b) the importance of outputs serving as inputs in subsequent input-mediator-output-input team episodes, (c) how collective identity formation in teams may enhance team processes and outcomes, and most significantly (d) recognition of the importance of collective forms of leadership in the team-based context. Day, Gronn, and Salas further note that recent work on collective forms of leadership has been complemented by work that has emphasized connective and distributed leadership, social network forces for leadership, and aggregates of leadership capacity. By all apparent observations, the focus on teams in recent decades is not simply an organizational phase in some sectors but is rather a phenomenon that continues to grow.

Because of the ongoing interest in and practice of teams, it will be increasingly important in the years to come for researchers and practitioners alike to gain more informed insights into what factors contribute to the overall effectiveness of teams. It is this very point that motivated the

research reported here, namely, an investigation of which leadership factors contributed most significantly to team effectiveness. In this study the researchers examined the effect of leadership, particularly servant leadership, on team effectiveness by observing which items in the Organizational Leadership Assessment (OLA) had the most significant impact on team effectiveness. Because the OLA as a single measure of servant leadership was the single greatest predictor of team effectiveness in a previous analysis (Irving & Longbotham, in press-b), the authors concluded that a closer examination of the OLA was in order. In an initial investigation, Irving & Longbotham (in press-a) discovered six statistically significant, essential servant leadership themes impacting team effectiveness. In the present study the authors build on the initial investigation by combining the data from two separate studies (N=931) in order that Irving and Longbotham's (in press-a) initial findings may be evaluated with a larger data set, and in order that additional themes may be identified for understanding the practice of effective teamwork through servant leadership. Toward this end, the authors now review the literature surrounding teams and servant leadership, present an overview of the methods and results of the study, and then discuss the findings and implications of this study with particular focus on the new themes identified in the analysis.

LITERATURE REVIEW: TEAM EFFECTIVENESS

Team effectiveness has been in evidence since the construction of the planet's oldest monoliths in Malta c. 4000 B.C., the Great Pyramids of Egypt c. 2500 B.C., and Stonehenge c. 2000 B.C. Unfortunately there is no one documentation of the factors contributing to the effectiveness of teams until the beginning of the 20th century when Elton Mayo in the Hawthorne studies at Western Electric first "uncovered the importance of teams" (Parker, 1990, p. 16). Mayo pointed to the importance of the work environment in the development of effective teams. In the 1930's, Kurt Lewin's work focused on group dynamics as the means of developing effective teams. McGregor (1960) in his *The Human Side of Enterprise* further narrowed the focus to that of individual employees by seeing them as more than just "cog[s] in the system." It was the work of Blake and Mouton (1964), though, that focused specifically on the importance of the leader in building an effective team.

In the 1980's and 1990's the number of teams exploded as teams became an integral part of organizational life in the United States. With this explosion came the need to understand how to foster effective teams. Most of the "how to" literature focused "on team-building, team dynamics, conflict resolution, decision-making, and other team technologies" (Hacker, 1999, p. 61). There were, however, other voices. W. E. Deming (1986) recognized the importance of *leadership* in the effectiveness of teams. This view was reiterated by Scholtes (1988) who viewed leadership's importance so strongly that he attributed *any* team failure to indifferent or uninvolved leadership (Longbotham, 2000).

The literature on teams identifies numerous factors that may contribute to team effectiveness. As key as some of these factors may be, it is the:

role of the leader [that] is the toughest, most-important role for the team's eventual success or failure It has been said that the role of the leader is "like giving a brain to the scarecrow, a heart to the tin man, and courage to the cowardly lion." Teams with good leaders can accomplish results even when it appears that the deck is stacked against them. (Furman, 1995, p. 25)

In addition to the contentions from Deming, Scholtes, and Furman that *leadership* of teams is important, Harrington's (1991) voice stated the importance of leadership in the strongest way when he claimed that the focus on team-building, team dynamics, conflict resolution, and other *team* technologies was on "the wrong part of the business" (p. x).

A recent Amazon.com search of popular press materials yielded 128 books on team effectiveness, indicating that considerable interest continues in an easy “how to” have an effective team. A search for team effectiveness in academic literature, however, yielded few empirical studies. Most of articles propose conceptual models or have a very narrow focus, but the trend is changing. There is an increasing focus on empirical research with respect to teams. Natalie, Sora & Kayalipurapu (2004) identified mission, vision, and leadership as common themes in a qualitative study of 60 leaders of teams. Brenegan (2003) contended that knowing one’s team was a crucial factor in effective team leadership. Kuo (2004) studied transactional, transformational, and paternalistic leadership and found all three to be highly correlated with team effectiveness. This investigation in its exploration of the impact of servant leadership on team effectiveness supports and augments previous findings linking leadership and team effectiveness.

LITERATURE REVIEW: SERVANT LEADERSHIP

Through his initial work on servant leadership, Greenleaf (1977) provided a foundation for the contemporary study and emerging discipline of servant leadership. The key to Greenleaf’s conceptualization of servant leadership is his understanding of what characterizes the servant leader, namely being a servant first. In response to the question, “Who is the servant-leader?” Greenleaf (1977) provided his now frequently quoted response:

The servant-leader *is* servant first.... It begins with the natural feeling that one wants to serve, to serve *first*. Then conscious choice brings one to aspire to lead. That person is sharply different from one who is *leader* first.... The difference manifests itself in the care taken by the servant-first to make sure that other people’s highest priority needs are being served. The best test, and difficult to administer, is this: Do those served grow as persons? Do they, *while being served*, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? *And*, what is the effect on the least privileged in society; will they benefit, or, at least, not be further deprived (p. 27)?

While persons in the “leader-first” model may utilize service at times for the purpose of realizing the visions and goals of the leader and/or the organization, the “servant-first” model is focused on making “sure that other people’s highest priority needs are being served” (p. 27), and as such is a follower-oriented theory of leadership (Laub, 1999; Stone, Russell, & Patterson, 2004; Matteson & Irving, 2005, 2006).

Building on this servant-first notion of leadership, Laub (1999), Stone, Russell, and Patterson (2004), and Matteson and Irving (2005, 2006) all argue the focus of the servant leader is on that which is best for their followers. On this point, Laub (2005) writes, “servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader” (p. 160). Stone, Russell, and Patterson identify this point as a key to understanding what differentiates servant leadership from transformational leadership. They argue that while transformational leadership tends to be focused on an organizational vision—what is best for the organization—servant leadership is focused foremost on that which is best for the followers. Matteson and Irving (2005) take this a step further by contrasting the focus, motivation, context, and outcomes of transformational, servant, and self-sacrificial approaches to leadership.

From the early 1990s through 2003 the work surrounding servant leadership focused on identifying themes to help to operationalize the concept of servant leadership. Graham (1991) stressed the inspirational and moral dimensions. Buchen (1998) argued self-identity, capacity for reciprocity, relationship building, and preoccupation with the future were essential themes. Spears (1998) emphasized the dimensions of listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment, and community building. Farling et al. (1999) argued for the importance of vision, influence credibility, trust, and service. Laub (1999) put forward valuing people, developing people, building community, displaying authenticity,

providing leadership, and sharing leadership. Russell (2001) argued for vision, credibility, trust, service, modeling, pioneering, appreciating others, and empowerment. Patterson (2003) presented the dimensions of agapáo love, humility, altruism, vision, trust, empowerment, and service as the essential dimensions of servant leadership.

While these operational themes have been helpful for the study of servant leadership, recent developments of empirical measures for servant leadership have provided a platform for quantitative studies of servant leadership. Of the instruments that have been developed to date—measures such as Laub (1999), Sendjaya (2003), Page and Wong (2000a, 2000b), Dennis (2004), Dennis and Bocarnea (2005), Barbuto and Wheeler (2006)—Laub's (1999) Organizational Leadership Assessment (OLA) has been the predominate instrument for measuring servant leadership at the organizational level. This is evidenced by works such as Drury (2004), Hebert (2004), Irving (2004, 2005), Irving & Longbotham (in press-b), Laub (1999, 2003), and Ledbetter (2003). Thus, the OLA is the instrument used to measure servant leadership in this study.

STATEMENT OF THE PROBLEM

Because the discipline of team leadership continues to grow and because the practice of teams continues to emerge as a standard in organizational practice, it becomes increasingly important for leaders to understand what practices are uniquely suited for effective leadership among teams. While it may be assumed that leadership that works well in one organizational level, such as the dyadic or macro-organizational, will likewise be effective in teams, it is vital that those at the crossroads of leadership scholarship and practice address the important questions facing leaders of team-based organizations. While the question may be framed broadly as, "What form of leadership will be most effective in our emerging world of team-based and networked systems?" it is of particular interest to the authors to examine the effect of servant leadership on team effectiveness by means of investigating which of the individual items in the Organizational Leadership Assessment will have the greatest impact on team effectiveness. In light of this, the primary research question driving this study is, "Which servant leadership themes will have the greatest impact team effectiveness and to what degree?" Based upon this question and the associated results, the authors propose a ten-item and nine-theme model for understanding significant predictors of team effectiveness.

SAMPLE CHARACTERISTICS & METHOD

The research sample for this study is drawn from two studies which both utilized the Organizational Leadership Assessment and the Team Effectiveness Questionnaire (TEQ), yielding a combined number of sample participants of 931. While these participants were drawn from 18 organizations (11 churches, 5 nonprofits, and 2 businesses), the majority of participants were from the nonprofit sector ($n = 751$; 80.66%). The remaining participants were from the church sector ($n = 165$; 17.72%) and the business sector ($n = 15$; 1.62%). The participants in this study participated on a team within their particular organizational context.

For the purpose of this study, the operational definition of "team" was adopted from Larson and LaFasto's (1989) work. In distinguishing teams from groups, Larson and LaFasto note that a team has (a) two or more people, (b) a specific performance objective or recognizable goal to be attained, and (c) a coordination of activity among the members of the team that is requisite for the attainment of the team goal or objective. While some groups may share the first two characteristics of this definition, it is the coordination of activity that is a distinguishing mark of teams. In this study, team leaders and team participants share all three.

INSTRUMENTATION

Participants in this study completed two instruments: The OLA, which is a measure of servant

leadership at the organizational level and the TEQ, which provides a collective measure of team effectiveness. In this study the alpha coefficients for each of these scales are: (a) .97 for the OLA and (b) .82 for the TEQ.

RESULTS

The goal in current investigation, as in the original data analysis, was to develop a model for team effectiveness using individual items of the OLA to see which aspects of servant leadership at the organizational level most influenced team effectiveness and to see if including additional data yielded the same results. The original six-item model was developed using all-possible regressions for one to ten independent variables. Increasing the number of variables in the model from six variables to seven variables had a negligible contribution to R-squared (only .0027). Since R-squared will always increase with the addition of variables, the decision was made to stop at six. The criterion used to determine the best of the six-factor models was lowest mean-squared error (MSE) or the “tightest” fit as illustrated in Table 1. The chosen model is listed first.

Table 1
Model Summaries

Model Size	R-Squared	Root MSE	Variables in Model
6	0.3867	0.3518	OLA 14, 30, 43, 47, 49, 55
6	0.3862	0.3520	OLA 7, 14, 30, 47, 49, 55
6	0.3856	0.3521	OLA 14, 30, 38, 47, 49, 55
6	0.3847	0.3524	OLA 14, 30, 47, 49, 55, 59

Variables in Best Model
OLA_14, OLA_30, OLA_43, OLA_47, OLA_49, OLA_55

In order to see which additional OLA items contribute to team effectiveness, the best six-item model was expanded to include four additional OLA items. The best ten-item model included the variables in the six-item model plus OLA 37, OLA 16, OLA 19, and OLA 21. All ten of the OLA items in the best ten-item model have statistically significant coefficients as illustrated in Table 2.

Table 2
Regression Coefficients

Variable	Coefficient	Standard Error	T-value (H ₀ : β=0)	Significance	Decision
Intercept	1.41	0.10	14.92	0.00	Reject H ₀
OLA_14	0.10	0.01	8.17	0.00	Reject H ₀
OLA_30	0.08	0.02	4.77	0.00	Reject H ₀
OLA_43	0.04	0.02	2.23	0.03	Reject H ₀
OLA_47	0.06	0.02	2.93	0.00	Reject H ₀
OLA_49	0.07	0.01	5.00	0.00	Reject H ₀
OLA_55	0.13	0.02	8.79	0.00	Reject H ₀
OLA_37	-0.06	0.02	-3.02	0.00	Reject H ₀
OLA_16	0.06	0.02	3.55	0.00	Reject H ₀
OLA_19	-0.05	0.02	-2.21	0.03	Reject H ₀

OLA_21	0.06	0.02	2.39	0.02	Reject H ₀
--------	------	------	------	------	-----------------------

Table 3 shows the analysis of variance for the ten-item model. It displays the strength of the model as a whole and provides the probability ($p = .000$) that the relationship evidenced by the data occurred “by chance” if there were no relationship between team effectiveness and the independent variables.

Table 3
Analysis of Variance for Ten-Factor Multiple Regression

Source	DF	R ²	Sum of Squares	Mean Square	F-Ratio	Significance
Intercept	1		9527.09	9527.09		
Model	10	0.43	75.50	7.55	65.14	0.000
Residual	882	0.54	102.22	0.12		

DISCUSSION: SIX THEMES CONFIRMED

In the regression model presented above, the six servant leadership themes identified by Irving and Longbotham (in press-a) were also found to be significant factors contributing to the effectiveness of teams in this analysis. These six themes are: (a) Providing Accountability, (b) Supporting and Resourcing, (c) Engaging in Honest Self-Evaluation, (d) Fostering Collaboration, (e) Communicating with Clarity, and (f) Valuing and Appreciating. While a detailed treatment of these themes may be found in Irving and Longbotham’s treatment, brief discussion around each of these items will be provided succinctly below.

First, in the present regression model the importance of *Providing Accountability* is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, it may be argued that leadership that “[holds people] accountable for reaching work goals” (OLA_14) is a significant predictor of team effectiveness. In light of this, leaders who wish to provide effective team leadership will attend to clarifying goals and holding people accountable to these mutually understood and agreed upon goals.

Second, in the present regression model the importance of leaders *Supporting and Resourcing* team members for the accomplishment of their goals is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, the authors argue that leadership which “provid[es] the support and resources needed to help workers meet their goals” (OLA_30) is a significant predictor of team effectiveness. In light of this, leaders who wish to effectively lead teams will provide the support and resources necessary for team members to effectively work together toward the accomplishment of shared goals within the team context

Third, in the present regression model the importance of leaders *Engaging in Honest Self-Evaluation* is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, the authors argue that leadership that is “honestly evaluate[ing] themselves before seeking to evaluate others” (OLA_43) is a significant predictor of team effectiveness. In light of this, leaders who would like to see their teams emerge as effective teams

over time will engage in the challenging and introspective work of self-evaluation as they set an authentic model for being an effective team member.

Fourth, in the present regression model the importance of leaders *Fostering Collaboration* is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, the authors argue that leadership which “encourage[s] workers to work together rather than competing against each other” (OLA_47) is a significant predictor of team effectiveness. While this is counterintuitive for some sectors accustomed to fostering competitive work environments, leaders who wish to see teams perform with greater effectiveness will encourage collaboration among those working together in the team context.

Fifth, in the present regression model the importance of leaders *Communicating with Clarity* is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, the authors argue that leadership which “communicate[s] clear plans and goals for the organization” (OLA_49) is a significant predictor of team effectiveness. In light of the emphasis on goals in several of the previous themes it should not be a surprise that clarity of communication around organizational plans and goals would also be a significant leadership behavior for those leading in team-based organizations. Because of this, leaders desiring to see effectiveness increase in their teams will attend to the vital dimension of clear communication with their team members.

Sixth, in the present regression model the importance of leaders *Valuing and Appreciating* team members is confirmed as a significant factor contributing to the effectiveness of teams. Based on the associated OLA item, the authors argue that leadership that makes their employees “feel appreciated by [their] supervisor for what [they] contribute” (OLA_55) is a significant predictor of team effectiveness. In light of this, leaders who wish to provide and model effective team leadership will recognize and communicate appreciation for the contributions of individual team members. Such actions will help to communicate an authentic valuing of individuals for the part they play in the overall team effort.

The six essential servant leadership themes identified above—(a) Providing Accountability, (b) Supporting and Resourcing, (c) Engaging in Honest Self-Evaluation, (d) Fostering Collaboration, (e) Communicating with Clarity, and (f) Valuing and Appreciating—have been confirmed in the present study as important leadership practices for those engaged in the leadership in organizations that utilize team-based structures.

DISCUSSION: THREE ADDITIONAL THEMES

In addition to the six previously identified themes (Irving & Longbotham, in press-a), the regression model included in this study identifies four additional items that group into three discrete servant leadership themes. These themes are (a) Modeling Expected Behavior, (b) Accepting Follower Individuality, and (c) Understanding Relational Skills. These three themes provide complementary, yet distinct, servant leadership practices that contribute to the overall effectiveness of teams. Each of these themes is explored below.

MODELING EXPECTED BEHAVIOR

In the present regression model, the seventh theme is the importance of leaders *Modeling Expected Behavior* in the effective accomplishment of team goals. Based on the associated OLA item, it may be argued that leadership that “practice[s] the same behavior they expect from others,” (OLA_37) is a significant predictor of team effectiveness. Built upon Bandura’s mediational theory of modeling, the positive role of reinforcement and modeling has been observed at a psychosocial level for some time (Robins & Wexley, 1975). Confirming the value

of modeling, Page and Wong (2000b) argue that “excellent leaders in high-involvement and high-impact teams model for others by setting a personal example in meeting high standards.” (p. 7), and De Pree (1992) argues that “clearly expressed and consistently demonstrated values,” (p. 126) are often the most important factors in facilitating the sacred relationship between leaders and followers. Russell (2001), who along with Page and Wong explicitly addresses the importance of modeling in servant leadership, argues that modeling is an important means for establishing corporate values since effective leaders often instill values as much or more through deeds as through the words they speak. In light of the importance of leader actions, and in light of the findings of the present analysis, leaders who wish to provide team members with appropriate motivation in the effective obtainment of team goals will be willing to engage in a regular practice of modeling expected behavior, understanding that the oft cited adage “actions speak louder than words” is all too true in the organizational context.

ACCEPTING FOLLOWER INDIVIDUALITY

In the present regression model, the eighth theme is the importance of leaders *Accepting Follower Individuality*. Based on the associated OLA items, it may be argued that leadership that, “allow[s] for individuality of style and expression,” (OLA_16), and leadership that, “accept[s] people as they are,” (OLA_19) is a significant predictor of team effectiveness. While the theme of Accepting Follower Individuality is highly complementary with the sixth theme presented—Valuing and Appreciating—the focus of each of these themes led the authors to identify unique themes. While Valuing and Appreciating is largely focus behaviorally, that is the valuing and appreciating of the behavioral work contributions of team members, the theme of Accepting Follower Individuality is focused at the ontological level of member identity and personality. Rather than team members only being appreciated for what they *do* for the organization and/or team, the present theme emphasizes that servant leaders accept followers for who they *are* as individuals. In effective teams, both of these features of servant leadership—appreciating at the behavioral level and accepting at the ontological level—become essential factors contributing to the overall effectiveness of teams.

UNDERSTANDING RELATIONAL SKILLS

In the present regression model, the ninth and final theme is the importance of leaders *Understanding Relational Skills*. Based on the associated OLA item, it may be argued that leadership that understands how to practice and foster an environment in which people, “know how to get along with people,” (OLA_21) is a significant predictor of team effectiveness. Whether at a dyadic, team, organizational, or societal level, it is not difficult to see why the understanding and use of effective relational skills is important. In a team-based organization, the importance of effective relational skills becomes even more essential, since individual team leaders and members must regularly work with a variety of individuals both within and outside of the team. Understanding and practicing effective relational skills as a leader is a theme that is consistent with the construct of emotional intelligence. For instance, Goleman’s (1998) summary of the emotional intelligence research highlights five essential components of emotional intelligence: (a) self-awareness, (b) self-regulation, (c) motivation, (d) empathy, and (e) social skills. Goleman refers to the first three of these components as personal competencies and the last two as social competencies—categories parallel to Gardner’s (1985) intrapersonal and interpersonal intelligences. For leaders wishing to engage in the effective leadership of their teams as servant leaders, understand ones personal capacities, particularly around social and relational skills, becomes an essential responsibility knowledge set as they seek to foster an environment in which people relate well with each other and know how to get along.

SUMMARY

Day, Gronn, and Salas (2006) argue that, “The discipline of team leadership appears poised for major advances, both in terms of science and practice” (p. 211). The authors of the present study agree with this observation, and are grateful for the strides being made about both levels of research and practice. The present study has sought to contribute to the discipline of team leadership by specifically engaging the question of “Which servant leadership themes will have the greatest impact team effectiveness and to what degree?” Building on the work of Irving and Longbotham (in press-a), a ten-item and nine-theme model has been identified through a regression analysis. The present model confirms the initial six themes put forward in the Irving and Longbotham model—(a) Providing Accountability, (b) Supporting and Resourcing, (c) Engaging in Honest Self-Evaluation, (d) Fostering Collaboration, (e) Communicating with Clarity, and (f) Valuing and Appreciating—but identifies three additional servant leadership themes that are statistically significant factors contributing to the effectiveness of teams. These additional themes are: (a) Modeling Expected Behavior, (b) Accepting Follower Individuality, and (c) Understanding Relational Skills. The combined model—which explain 43% of the variance in the effectiveness of teams and has a significance level of .000—provides a clear set of behavioral guidelines for those wishing to increase the effectiveness of their teams from a leadership perspective. The authors hope these findings will assist researchers and practitioners alike as both sets of individuals engage the study and practice of teams more fully in the years to come.

REFERENCES

- Barbuto, John E., and Wheeler, Daniel W. (2006). Scale development and construct clarification of servant leadership. *Group and Organization Management*, Volume 31, Number 3, 300-326.
- Blake, R. R. and J. S. Mouton (1964). *The Managerial Grid*. Houston: Gulf Publishing.
- Box, G. P. E. and N. R. Draper (1987). *Empirical Model-Building and Response Surfaces*. New York: John Wiley & Sons.
- Brenegan, Lynne (2003, December). “Ten Tips for Team Success.” *CA Magazine*, Volume 136, Number 10, 49-50.
- Buchen, I. H. (1998). “Servant leadership: A model for future faculty and future institutions.” *Journal of Leadership Studies*, Volume 5, Number 1, 125-134.
- Day, David V., Peter Gronn, and Eduardo Salas. (2006). “Leadership in Team-Based Organizations: On the Threshold of a New Era.” *The Leadership Quarterly*, Volume 17, Number 3, 211-216.
- Deming, W. Edwards (1986). *Out of the Crisis*. Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Dennis, Robert S. (2004). “Development of the servant leadership assessment instrument.” *Dissertation Abstracts International*, Volume 65, Number 5, 1857. (UMI No. 3133544).
- Dennis, Robert S., and Mihai Bocarnea. (2005). “Development of the Servant Leadership Assessment Instrument.” *Leadership & Organizational Development Journal*, Volume 26, Number 8, 600-615.

- De Pree, M. (1992). *Leadership Jazz*. New York: Currency-Doubleday
- Drury, S. (2004). "Servant Leadership and Organizational Commitment: New Findings and Implications." *Proceedings of the 2004 Servant Leadership Research Roundtable*. Retrieved November 23, 2004, from http://www.regent.edu/acad/sls/publications/conference_proceedings/servant_leadership_roundtable/2004_proceedings.htm
- Farling, M., A. Stone, and B. E. Winston (1999). "Servant Leadership: Setting the Stage for Empirical Research." *Journal of Leadership Studies*, Volume 6, 49-72.
- Furman, F. M. (1995, May 22). "Why Do Some 'Teams' Fail?" *Air Conditioning, Heating & Refrigeration News*, Volume 195, Number 4, 25-26.
- Gardner, Howard. (1985). *Frames of Mind: The Theory of Multiple Intelligence*. New York: Basic Books.
- Goleman, Daniel. (1998). "What Makes A Leader?" *Harvard Business Review*, Volume 76, Number 6, 92-102.
- Graham, J. (1991). "Servant-Leadership in Organizations: Inspirational and Moral." *Leadership Quarterly*, Volume 2, Number 2, 105-119.
- Greenleaf, R. K. (1977). *Servant Leadership: A Journey into the Nature of Legitimate Power & Greatness* (25th Anniversary Ed.). New York: Paulist Press.
- Hacker, M. E. (1999, January). "Team Technology." *Quality Progress*, Volume 32, Number 1, 61-63.
- Harrington, H. J. (1991). *Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity, and Competitiveness*. New York: McGraw-Hill, Inc.
- Hebert, S. C. (2004). "The Relationship of Perceived Servant Leadership and Job Satisfaction from the Follower's Perspective." *Proceedings of the American Society of Business and Behavioral Sciences*, Volume 11, Number 1, 685-697.
- Irving, Justin. A. (2004). "Servant Leadership and the Effectiveness of Teams: Findings and Implications." *Proceedings of the 2004 Servant Leadership Research Roundtable*. Retrieved November 23, 2004, from http://www.regent.edu/acad/sls/publications/conference_proceedings/servant_leadership_roundtable/2004_proceedings.htm
- Irving, Justin. A. (2005). "Servant Leadership and the Effectiveness of Teams." *Dissertation Abstracts International*, Volume 66, Number 04A, 1421. (UMI No. 3173207).
- Irving, Justin. A., and Gail J. Longbotham. (in press-a). "Team Effectiveness and Six Essential Servant Leadership Themes: A Regression Model Based on Items in the Organizational Leadership Assessment." *International Journal of Leadership Studies*.

- Irving, Justin A., and Gail J. Longbotham. (in press-b). "Servant Leadership Predictors of Team Effectiveness: Findings and Implications." *Journal of Business and Behavioral Sciences*.
- Kuo, Chia-Chen (2004). "Research on Impacts of Team Leadership on Team Effectiveness." *Journal of American Academy of Business, Cambridge*, Volume 5, Number 1, 266-277, <http://proquest.umi.com/pqdweb?did=653886051&sid=3&Fmt=4&clientId=3927&RQT=309>
- Larson, C. E., and F. M. J. LaFasto (1989). *Team Work: What Must Go Right, What Can Go Wrong*. Newbury Park, CA: Sage.
- Laub, J. (1999). "Assessing the Servant Organization: Development of the Servant Organizational Leadership (SOLA) instrument." *Dissertation Abstracts International*, Volume 60, Number 02, 308.
- Laub, J. (2003). "From Paternalism to the Servant Organization: Expanding the Organizational Leadership Assessment (OLA) model." *Proceedings of the Servant Leadership Roundtable*. Retrieved July 15, 2004, from <http://www.regent.edu/acad/cls/2003ServantLeadershipRoundtable/>
- Laub, J. (2005). "From Paternalism to the Servant Organization: Expanding the Organizational Leadership Assessment (OLA) model." *The International Journal of Servant-Leadership*, Volume 1, Number 1, 155-186.
- Ledbetter, D. S. (2003). Law enforcement leaders and servant leadership: A reliability study of the Organizational Leadership Assessment. *Dissertation Abstracts International*, Volume 64, Number 11, 4200.
- Longbotham, Gail J. (2000). "The relationship of leadership, environment, and team factors to process improvement project team success: An ex post facto study." *Dissertation Abstracts International*, Volume 61, Number 11A, 4457. (UMI No. 9994180)
- Matteson, Jeffrey A., and Justin A. Irving (2005). "Servant versus Self-Sacrificial Leadership." *Proceedings of the 2005 Servant Leadership Research Roundtable*. Retrieved August 2, 2005, from http://www.regent.edu/acad/sls/publications/conference_proceedings/servant_leadership_roundtable/2005/pdf/matteson_servant.pdf
- Matteson, Jeffrey A., and Justin A. Irving (2006). "Servant Versus Self-Sacrificial Leadership: A Behavioral Comparison of Two Follower-Oriented Leadership Theories." *International Journal of Leadership Studies*, Volume 2, Number 1, 36-51.
- McGregor, D. M. (1960). *The Human Side of Enterprise*. New York: McGraw-Hill.
- Natale, Samuel M., Sebastian A. Sora, and Seshu B. Kavalipurapu (2004). "Leadership in Teams: Managerial Responses." *Team Performance Management*, Volume 10, Number 3, 45-52.
- Page, D., and T. P. Wong (2000a). "A conceptual framework for measuring servant-leadership." In Abjibolosoo, S. (Ed.), *The human factor in shaping the course of history and development*. Lanham, MD: University Press of America.

- Page, D., and T. P. Wong. (2000b). A conceptual framework for measuring servant-leadership. In S. Abjibolosoo (Ed.), *The human factor in shaping the course of history and development*. Lanham, MD: University Press of America. Retrieved April 27, 2005, from <http://www.twu.ca/leadership/ConceptualFrameworkforServantLeadership.pdf>
- Parker, G. M. (1990). *Team Players and Teamwork: The New Competitive Advantage*. Francisco: Jossey-Bass Publishers.
- Patterson, K. (2003). "Servant Leadership: A Theoretical Model." *Proceedings of the Servant Leadership Roundtable*. Retrieved July 15, 2004, from <http://www.regent.edu/acad/cls/2003ServantLeadershipRoundtable/>
- Robins, George L., and Kenneth N. Wexley. (1975). "Modification through Modeling and Reinforcement in Leaderless Groups." *Journal of Psychology*, Volume 91, Number 1, 85-89.
- Russell, J. (2001). "Exploring the Values and Attributes of Servant Leaders." *Dissertation Abstracts International*, Volume 61, Number 12, 4856.
- Scholtes, P. R. (1988). *The Team Handbook*. Madison, WI: Joiner Associates, Inc.
- Sendjava, S. (2003). "Development and Validation of Servant Leadership Behavior Scale." *Proceedings of the Servant Leadership Roundtable*. Retrieved July 15, 2004, from <http://www.regent.edu/acad/cls/2003ServantLeadershipRoundtable/>
- Spears, L. C. (Ed.). (1998). *Insights on Leadership: Service, Stewardship, Spirit, and Servant-leadership*. New York: John Wiley & Sons, Inc.
- Stone, A. G., R. F. Russell, and K. Patterson (2004). "Transformational Versus Servant Leadership: A Difference in Leader Focus." *Leadership and Organization Development Journal*, Volume 25, Number 4, 349-361.

AUTHOR NOTE

As a paper that is building upon a previous study, the authors wish to acknowledge that portions of this paper have been drawn from a previous paper (Irving & Longbotham, in press-a) written by them and published by the *International Journal of Leadership Studies* (© Regent University).