

Relationships Between Different Leadership Practices and Organizational, Teaming, Leader, and Employee Outcomes

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Purposes of the Research Synthesis (Meta-Analysis)

- Identify which ***types of leadership practices*** are related to what types of organizational, teaming/workgroup, leader, and employee/staff (follower) outcomes
- Determine if particular types of leadership practices are ***differentially related to the study outcomes***
- Unpack the nature of the relationships between the leadership practices and study outcomes to ***inform adoption of particular types of leadership practices*** to have outcomes of interest
- Determine if the relationships between the leadership practices and study outcomes are the ***same or different as a function of other factors*** (e.g., type of program or organization)

Types of Leadership Practices Constituting the Focus of Investigation

- Practices used by leaders to equip and influence followers' understanding and commitment to an organization's mission and goals causing followers to expend time and effort in a coordinated manner to achieve organizational goals and objectives (Winston & Patterson, 2006)
- Leadership practices that actively influence followers and groups of followers roles and responsibilities in order to achieve organizational goals and objectives (Bass, 1990)
- “The ability of an individual to influence, motivate, and enable others to contribute towards the effectiveness and success of the organizations of which they are members” (House et al., 2004, p. 15)

Bass, B. M. (1990). *Handbook of leadership: Theory, research and managerial applications*. (3rd ed.). New York: The Free Press.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture leadership and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: SAGE Publications.

Winston, B. E., & Patterson, K. (2006). An integrative definition of leadership. *International Journal of Leadership Studies*, 1(2), 6-66.

Types of Leadership Included in the Meta-Analysis

Primary Types of Leadership

Authentic Leadership

Distributed Leadership

Shared Leadership

Transactional Leadership

Transformational Leadership

Secondary Types of Leadership

Charismatic Leadership

Collective Leadership

Collaborative Leadership

Participatory Leadership

Examples of Leadership Scales and Instruments in the Studies

- Multifactor Leadership Questionnaire
- Transformational Leadership Questionnaire
- Authentic Leadership Questionnaire
- Distributed Leadership Inventory
- Charismatic Leadership Scale
- Leadership Practices Inventory

Examples of “Loosely Described” Leadership Constructs (Subscales)

- Idealized Influence Behavior
- Internalized Moral Perspective
- Self-Awareness
- Developing People
- Encouraging the Heart
- Supportive Distribution

Leadership Practices Constituting the Focus of Investigation

Leader-Centered Practices

Organizational Visioning

Motivational Communication

Modeling Desired Behavior

Capacity-Building Practices

Relationship-Building Practices

Confidence-Building Practices

Coaching Practices

Shared Responsibility Practices

Encouraging Employee Input & Feedback

Soliciting Creative Employee Solutions

Shared Decision-Making

Behavioral Practices

Performance Expectations

Performance Rewards

Key Characteristics of *Leader-Centered Practices*

Organizational Visioning

Leaders clearly describe the vision of the organization; the values and beliefs that are the foundations for the vision; actively engages employees in discussions and activities promoting employee commitment to foundational beliefs, values, sense of purpose, and desired performance; and “depicts a future that is credible, realistic, attractive, inspiring, and better than the status quo” (O'Connell, Hickerson, & Pillutla, 2010, p.105).

Motivational Communication

Leaders talk positively about the organization and employees; how employee strengths and assets make important contributions to organizational practices and goals; and how “expression of positive and encouraging messages about the organization build [employee] motivation and confidence” (Rafferty & Griffin, 2004, p. 332).

Modeling Desired Behavior

Leaders lead by example in a manner where modeling desired behavior serves as exemplars to clearly communicate what he or she expects from employees to “increase the levels of those behavior among followers” (Brown & White, 2009, p. 126) where a leader’s behavior and actions are consistent with his or her belief appraisals (Emiliani, 2003).

Brown, J. A. E., & White, B. J. (2009). Modeling desired behaviors: Do leaders need new technology? *Leadership & Organization Development Journal*, 30(2), 126-138.

Emiliani, M. L. (2003). Linking leaders’ beliefs to their behaviors and competencies. *Management Decision*, 41 (9), 893-910.

O'Connell, D., Hickerson, K., & Pillutla, A. (2010). Organizational visioning: An integrative review. *Group & Organization Management*, 36(1), 103–125

Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The Leadership Quarterly*, 15, 329–354.

Key Characteristics of *Shared-Responsibility Practices*

Encouraging Employee Input and Feedback

Leaders solicit employee input and feedback to improve organization practices and to encourage frequent and ongoing employee engagement as a means to strengthen leader-employee and employee-employee actions consistent with organizational visioning and goals (Lewis, 2014)

Soliciting Creative Employee Solutions

Leaders seek creative, alternative, and innovative ways of improving organizational and employee practices that challenges deeply held beliefs and ways of achieving organizational goals (King Duvall, 1999)

Shared Decision-Making

Leaders engage employees in shared leadership characterized by collaboration and participatory decision-making with a focus on methods and strategies for achieving organizational goals. Shared decision-making is a particular type of confidence-building practice that influences employee and team commitment to organizational goals (Barnett & Weidenfeller, 2016).

Barnett, R. C., & Weidenfeller, N. K. (2016). Shared leadership and team performance. *Advances in Developing Human Resources*, 18(3), 334-351.

King Duvall, C. (1999). Developing individual freedom to act: Empowerment in the knowledge organization. *Participation & Empowerment*, 7(8), 204-209.

Lewis, L. (2014). Change management. In V. D. Miller & M. E. Gordon (Eds.), *Meeting the challenge of human resource management: A communication perspective* (pp. 134-144). New York: Routledge.

Key Characteristics of *Capacity-Building Practices*

Relationship-Building Practices

Leaders engage in behavior that is sensitive and responsive to employees' values, needs, and individual differences in order to build trusting relationships and open communication between a leader and employees where "high-quality relationships are considered mature partnerships based on respect, trust, and mutual obligation for one another" (Uhl-Bien, 2003, p. 134).

Confidence-Building Practices

Leaders provide employees opportunities to participate in organizational processes that instill pride and builds employee confidence where leader provided confidence-building experiences (Kanter & Fox, 2016) are one practice for strengthening employee beliefs and improving job performance (Axelrod, 2017).

Coaching Practices

Leaders provide employees supportive guidance and feedback on organizational and individual practices in ways that build on existing employee strengths and promote improvements in employee performance (Ely et al., 2010).

Axelrod, R. H. (2017). Leadership and self-confidence. In J. Marques & S. Dhiman (Eds.), *Leadership today*. Cham, Switzerland: Springer.

Ely, K., Boyce, L. A., Nelson, J. K., Zaccaro, S. J., Hernez-Broome, G., & Whyman, W. (2010). Evaluating leadership coaching: A review and integrated framework. *The Leadership Quarterly*, 21(4), 585-599.

Uhl-Bien, M. (2003). Relationship development as a key ingredient for leadership development. In S. E. Murphy & R. E. Riggio (Eds.), *The future of leadership development* (pp. 129-148). Mahwah, NJ: Lawrence Erlbaum.

Key Characteristics of *Behavioral Practices*

Performance Expectations

Leaders clearly articulate behavior expectations in terms of both organizational and individual employee practices and insists on high levels of performance in order to achieve organizational goals that clearly communicate high but reasonable performance expectations that “increases employees’ understanding and confidence in their work” (Moynihan, Wright, & Pandey, 2012, p. 319).

Performance Rewards

Leaders provide positive feedback in response to collective and individual accomplishments where “contingent rewards provide rewards for effort and recognizes good performance” (Odumeru & Ogbonna, 2013, p. 359).

Moynihan, D. P., Wright, B. E., & Pandey, S. K. (2012). Working within constraints: Can transformational leaders alter the experience of red tape? *International Public Management Journal*, 15(3), 315-336.

Odumeru, J. A., & Ogbonna, I. G. (2013). Transformational vs. translational leadership theories: Evidence in the literature. *International Review of Management and Business Research*, 2013, 355-361.

Leadership Study Outcome Measures

NonEmployee Outcomes

Organizational Engagement

Team/Workgroup Effectiveness

Leader Entrustment

Employee-Related Outcomes

Personal Belief Appraisals

Psychological Health

Job Satisfaction

Job Performance

Criteria for Inclusion in the Meta-Analysis

- Leadership measures were completed by employees or staff who made judgments of the leadership practices of individuals in immediate leadership or management roles
- The relationships (correlations) were reported between the specific types of leadership practices constituting the focus of investigation and one or more organizational, teaming/workgroup, leader, or employee outcome measures

Measure of the Relationships Between the Leadership Practices and the Study Outcomes

- Weighted average correlations between the leadership practices and study outcomes (studies with larger sample sizes contribute more to the average weighted correlations)
- *MedCalc* (Schoonjans, 2017) was used to run diagnostics, identify (and exclude) outlier correlation coefficients, and compute the average correlations between the leadership practices and study outcomes (there were only 5 outliers deleted)
- *Comprehensive Meta Analysis* (Borenstein, Hedges, Higgins, & Rothstein, 2018) was used to test for between leadership practices and between outcome measure differences in the sizes of effect
- Random effects models were used because of the heterogeneity of the studies in the meta-analysis

Schoonjans, F. (2017). *MedCalc manual: Easy-to-use statistical software*. Ostend, Belgium: MedCalc Software.

Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2018). *Comprehensive meta analysis (Version 3.0)*. Englewood, NJ: Biostat.

Standards for Conducting the Meta-Analysis

- American Psychological Association ***Meta-Analysis Reporting Standards*** (Appelbaum, Cooper, Kline, Mayo-Wilson, Nezu, & Rao, 2018) were used to both conduct the research synthesis and include the requested information in the meta-analysis reports
- The meta-analysis includes a primary report (journal article) that includes the main results and moderator results and a secondary report (supplemental report) that includes detailed tables and figures of all follow-up, post-hoc, and confirmatory analyses

Appelbaum, M., Cooper, H., Kline, R. B., Mayo-Wilson, E., Nezu, A. M., & Rao, S. M. (2018). Journal article reporting standards for quantitative research in psychology: The APA publications and communications board task force report. *American Psychologist*, 73(1), 3-25.

Overview of the Studies in the Meta-Analysis

- 112 studies of leadership practices-outcome measure relationships
- The studies included 39,433 participants
- Approximately half of the participants were male and half were female
- Studies were conducted in 31 different countries
- Studies were conducted in for-profit and not-for-profit organizations, programs, businesses, etc.

Distribution of Studies by World Regions

World Region	Number	Percent
North America	51	45.5
Europe	20	17.9
Asia	14	12.5
Middle East	13	11.6
Australasia	10	8.9
Sub-Saharan Africa	4	3.6

Types of Organizations in the Leadership Studies

- Government (e.g., state and local agencies, government departments)
- Education (e.g., universities, high schools, middle schools, elementary schools)
- Healthcare (e.g., hospitals, nursing care programs, mental health programs)
- Not-For-Profit (e.g., organizations, churches, community organizations)
- For-Profit (product-oriented businesses)
- For-Profit (service-oriented businesses)

Distribution of the Education-Related Organizations

Early Childhood Intervention.....	1
Elementary School.....	2
Middle School.....	1
Elementary/Middle School.....	2
High School.....	3
K-12.....	3
Universities.....	5

Overall Findings from the Meta-Analysis

- 77 leadership practices-outcome measure relationships (11 practices x 7 outcomes)
- 72 leadership practices-outcome measure relationships (94%) included 3 or more effect sizes
- 69 of the 72 leadership practices-outcome measure relationships (96%) were statistically significant
- The 7 types of outcomes were differentially related to all 11 leadership practices
- The strength of the relationships between the leadership practices were larger for non-employee outcome measures compared to employee outcome measures

Example of Leadership Practices-Outcome Measure Relationships for *Motivational Communication*

Outcome Measures	<i>k</i>	N	Weighted Average <i>r</i>	95% CI	Z-test	<i>p</i>-value
Leader Entrustment	31	9638	.66	.59, .72	13.64	.000
Organizational Engagement	18	8590	.41	.24, .55	4.48	.00
Team Effectiveness	10	1867	.37	.26, .47	6.31	.000
Employee Job Satisfaction	19	10,167	.35	.21, .47	4.70	.000
Employee Psychological Health	12	3308	.33	.18, .46	4.14	.000
Employee Belief Appraisals	8	3833	.26	.17, .35	5.30	.000
Employee Job Performance	7	1752	.25	.18, .32	6.77	.000

NOTES. *k* = Number of studies and number of effect sizes. CI = Confidence interval.

Example of Leadership Practices-Outcome Measure Relationships for *Soliciting Creative Employee Solutions*

Outcome Measures	<i>k</i>	N	Weighted Average <i>r</i>	95% CI	Z-test	<i>p</i>-value
Leader Entrustment	44	15,701	.61	.56, .65	18.24	.000
Team Effectiveness	17	3918	.38	.29, .46	7.14	.000
Organizational Engagement	36	17,326	.32	.27, .36	12.82	.000
Employee Job Satisfaction	31	16,425	.32	.22, .40	6.45	.000
Employee Psychological Health	16	4506	.31	.23, .39	6.92	.000
Employee Belief Appraisals	18	6962	.30	.23, .36	8.33	.000
Employee Job Performance	13	4813	.21	.14, .28	5.87	.000

NOTES. *k* = Number of studies and number of effect sizes. CI = Confidence interval.

Example of Leadership Practices-Outcome Measure Relationships for *Coaching Practices*

Outcome Measures	<i>k</i>	N	Weighted Average <i>r</i>	95% CI	Z-test	<i>p</i>-value
Leader Entrustment	31	9638	.66	.58, .72	12.80	.000
Organizational Engagement	19	8306	.35	.29, .41	10.02	.000
Employee Psychological Health	12	3308	.38	.28, .46	7.27	.000
Employee Job Satisfaction	20	10,055	.36	.22, .48	4.76	.000
Team Effectiveness	10	1794	.35	.26, .43	7.75	.000
Employee Job Performance	7	1752	.26	.17, .34	5.69	.000
Employee Belief Appraisals	7	2151	.21	.07, .34	2.89	.004

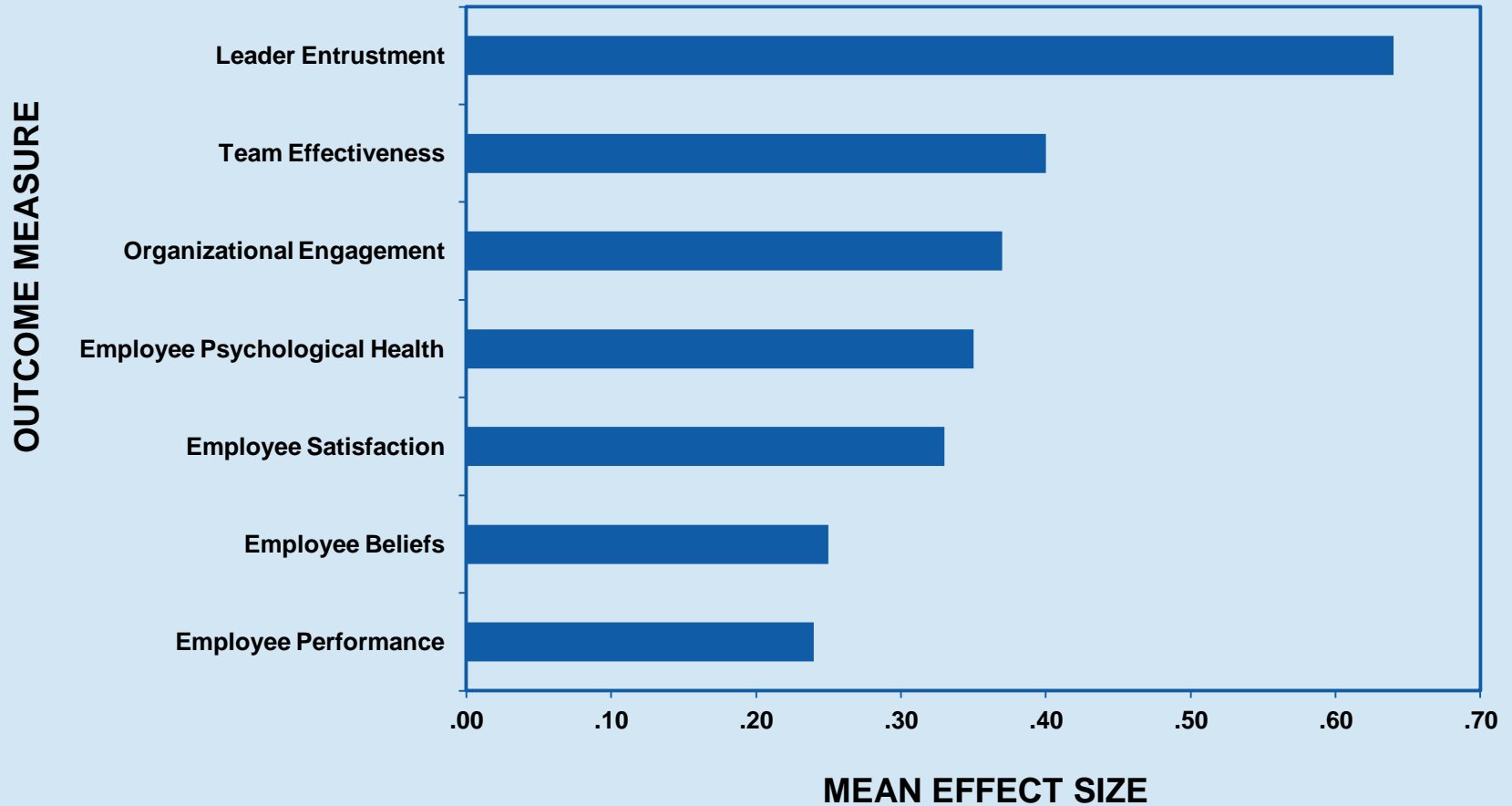
NOTES. *k* = Number of studies and number of effect sizes. CI = Confidence interval.

Relationships Between the Leader-Centered, Shared Responsibility, Capacity-Building, and Behavioral Leadership Practices and the Study Outcomes

- Follow-up and post-hoc tests were used to determine which leadership practices ***stand out as most important*** in terms of their relationships with the study outcomes
- These analyses are the foundations for ***implications for practice*** in terms of which leadership practices are most likely to have the “biggest bang for the buck”

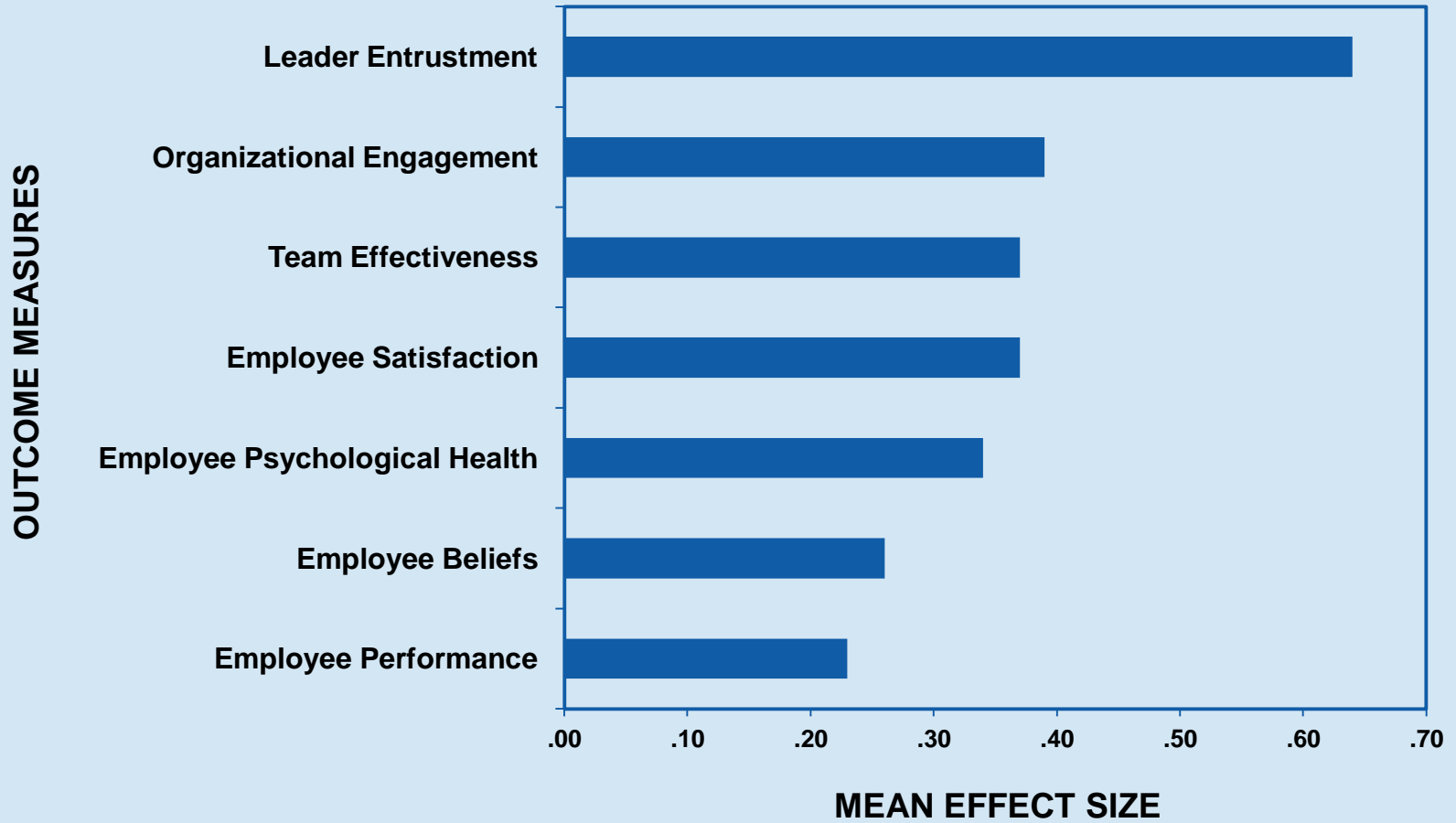
EFFECTS OF CAPACITY-BUILDING LEADERSHIP PRACTICES

(Relationship-Building, Confidence-Building, Coaching Practices)



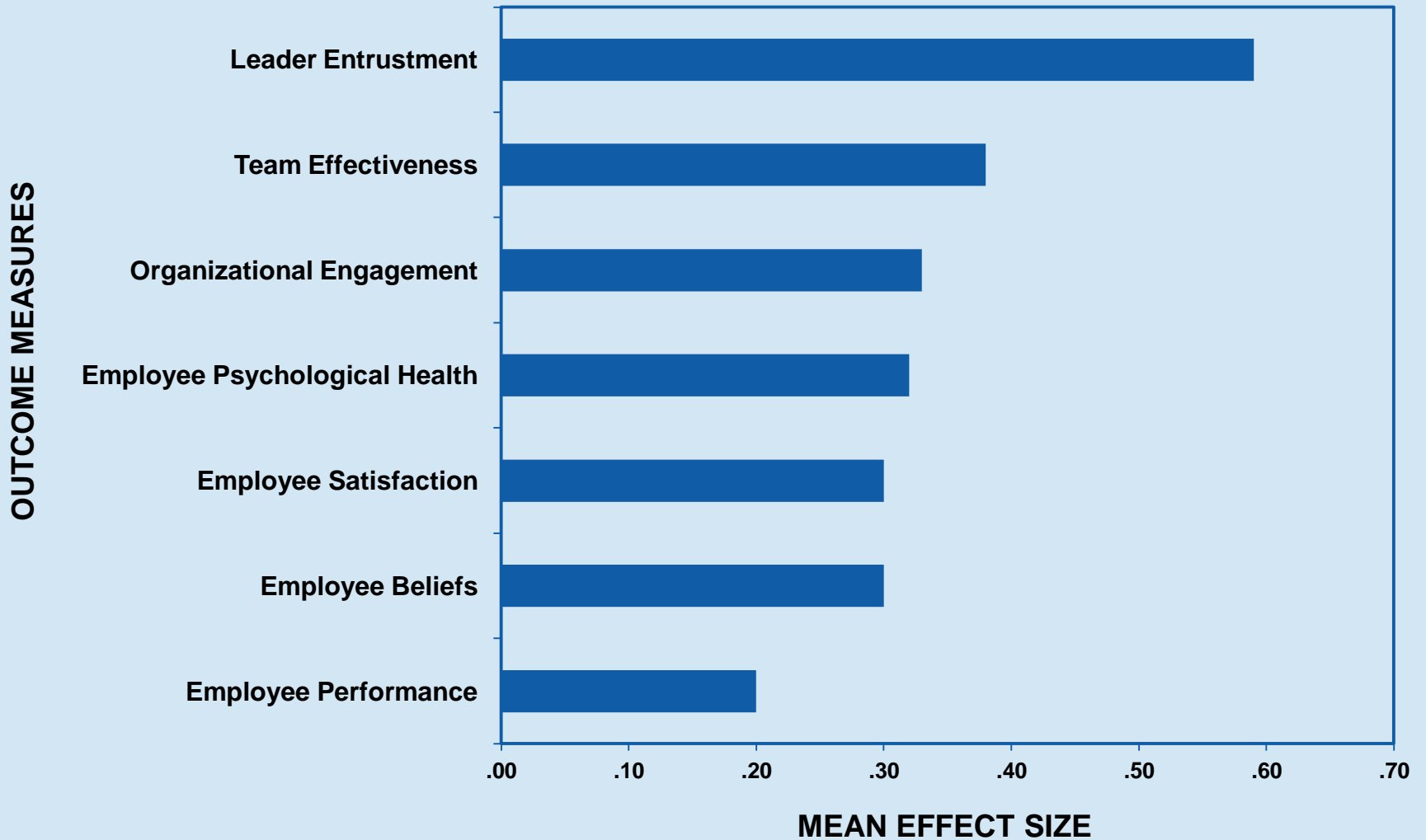
EFFECTS OF LEADER-CENTERED PRACTICES

(Organizational Visioning, Motivational Communication, Modeling Desired Behavior)



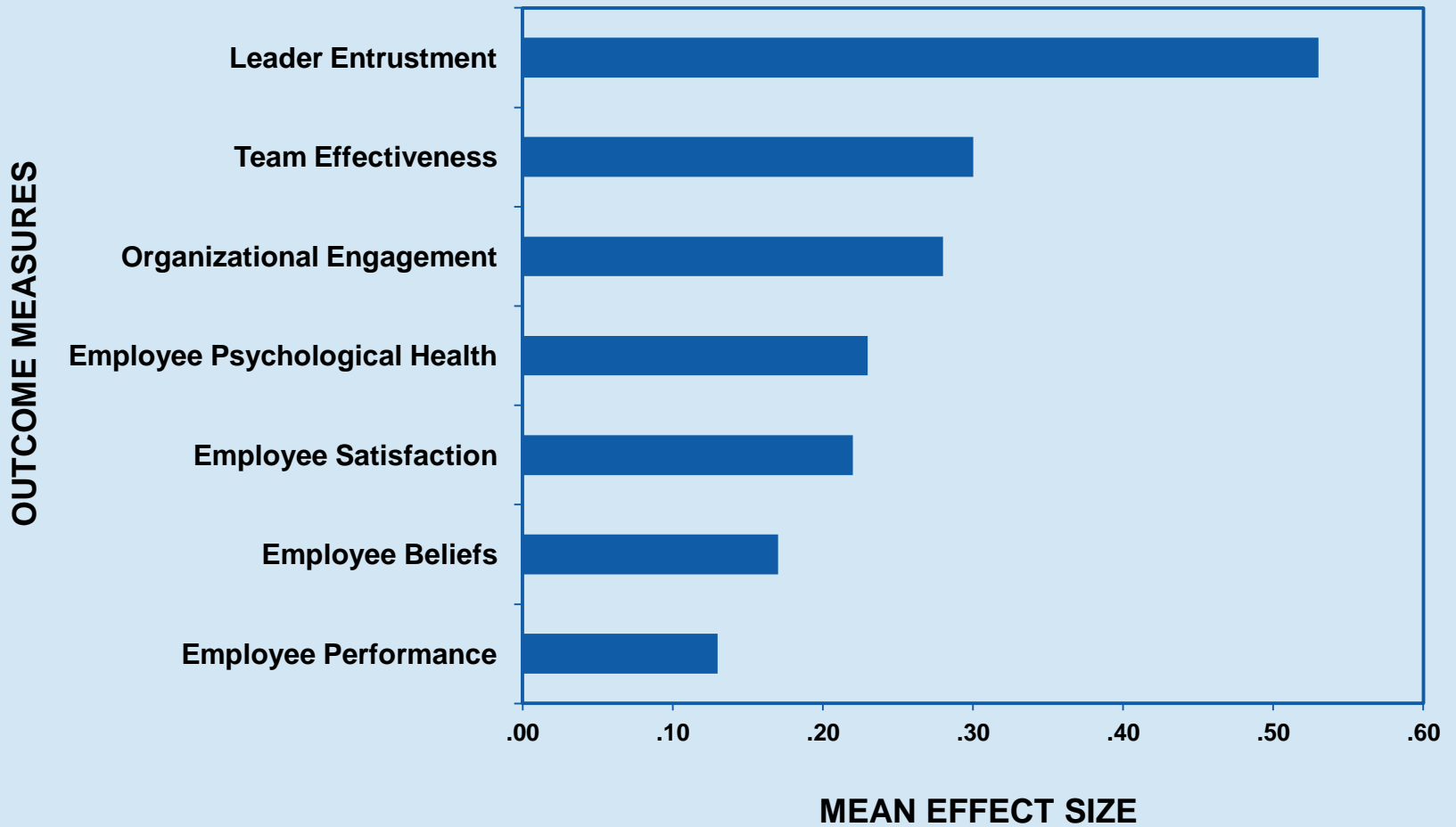
EFFECTS OF SHARED RESPONSIBILITY PRACTICES

(Employee Input & Feedback, Creative Solutions, Shared Decision-Making)

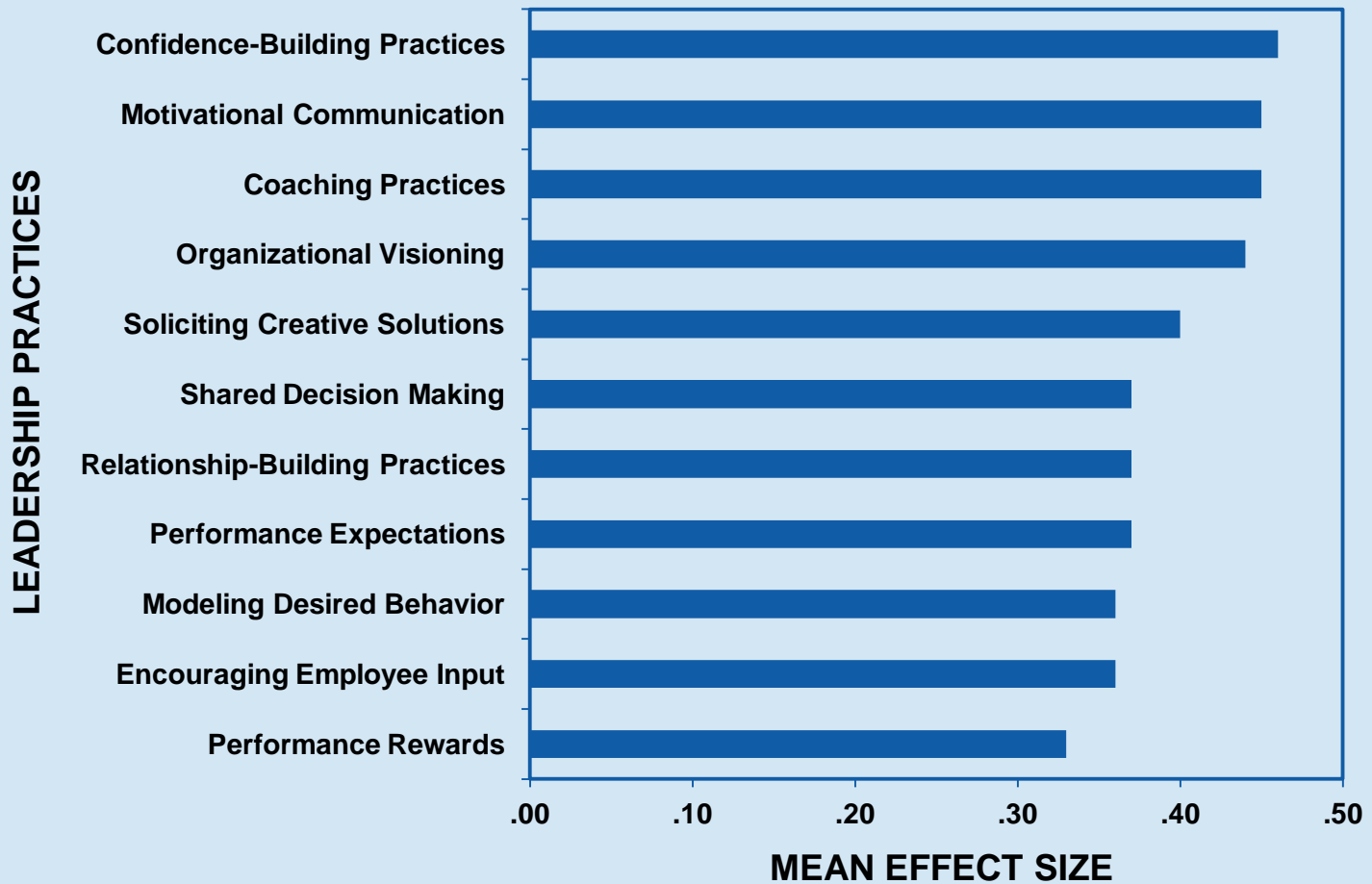


EFFECTS OF LEADERSHIP BEHAVIORAL PRACTICES

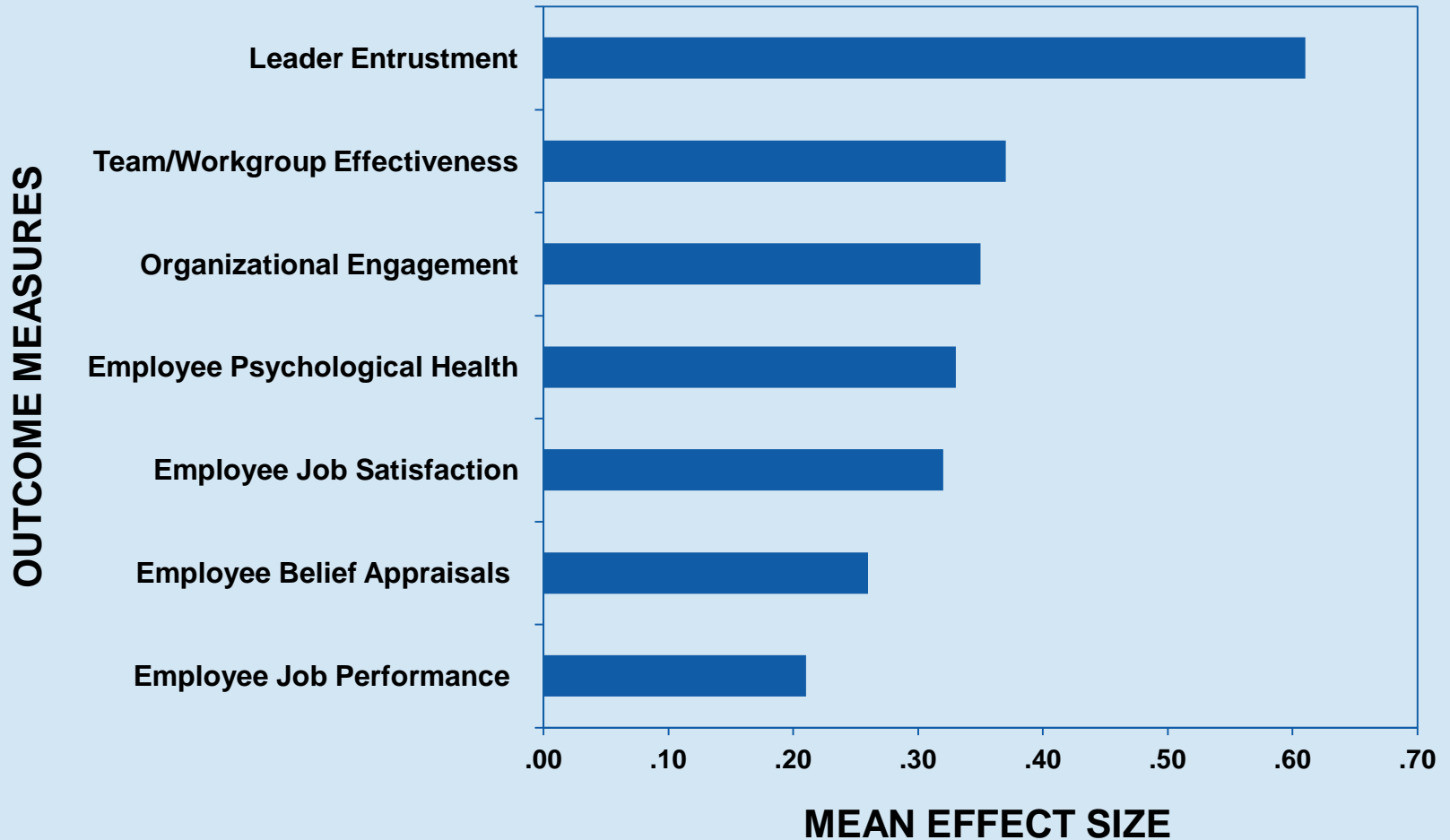
(Performance Expectations & Performance Rewards)



Relationships Between the Leadership Practices and the Combined Study Outcomes



Relationships Between the Combined Leadership Practices Measures and Study Outcomes



Unpacking the Leadership Practices-Outcome Measure Relationships

(Are the strength of the relationships between the leadership practices and study outcomes the same or different?)

- Evaluated by between outcome measure comparisons for each leadership practice. All 11 sets of analysis were significant at the $p = .0000$ level
- Follow-up tests of employee-related outcomes vs. nonemployee outcomes. 10 of the 11 analyses produced between outcome measure significant differences favoring the non-employee outcomes

Average Weighted Correlations for the Employee and NonEmployee Outcome Measures

Leadership Practices	Employee Outcomes ^a		NonEmployee Outcomes ^b		Q _{Between}	df	p-value
	Average r	95% CI	Average r	95% CI			
Organizational Visioning	.34	.23, .44	.54	.42, .65	6.36	1	.012
Motivational Communication	.32	.24, .39	.55	.47, .62	18.72	1	.000
Modeling Desired Behavior	.28	.23, .32	.42	.36, .48	13.89	1	.000
Encouraging Employee Input/Feedback	.26	.20, .32	.44	.38, .50	17.34	1	.000
Soliciting Creative Solutions	.30	.25, .34	.47	.42, .51	27.30	1	.000
Relationship-Building Practices	.27	.22, .32	.44	.37, .51	13.52	1	.000
Confidence-Building Practices	.30	.18, .41	.58	.48, .66	13.94	1	.000
Shared Decision Making	.29	.21, .37	.42	.32, .52	3.96	1	.047
Coaching Practices	.33	.25, .40	.53	.46, .59	15.01	1	.000
Performance Expectations	.23	.13, .33	.31	.24, .38	1.84	1	.174
Performance Rewards	.20	.12, .26	.43	.36, .49	23.78	1	.000

^aBelief appraisals, psychological health, job satisfaction, and job performance.

^bOrganizational engagement, team effectiveness, and leader entrustment.

Moderators of Leadership Practices-Outcome Measure Relationships

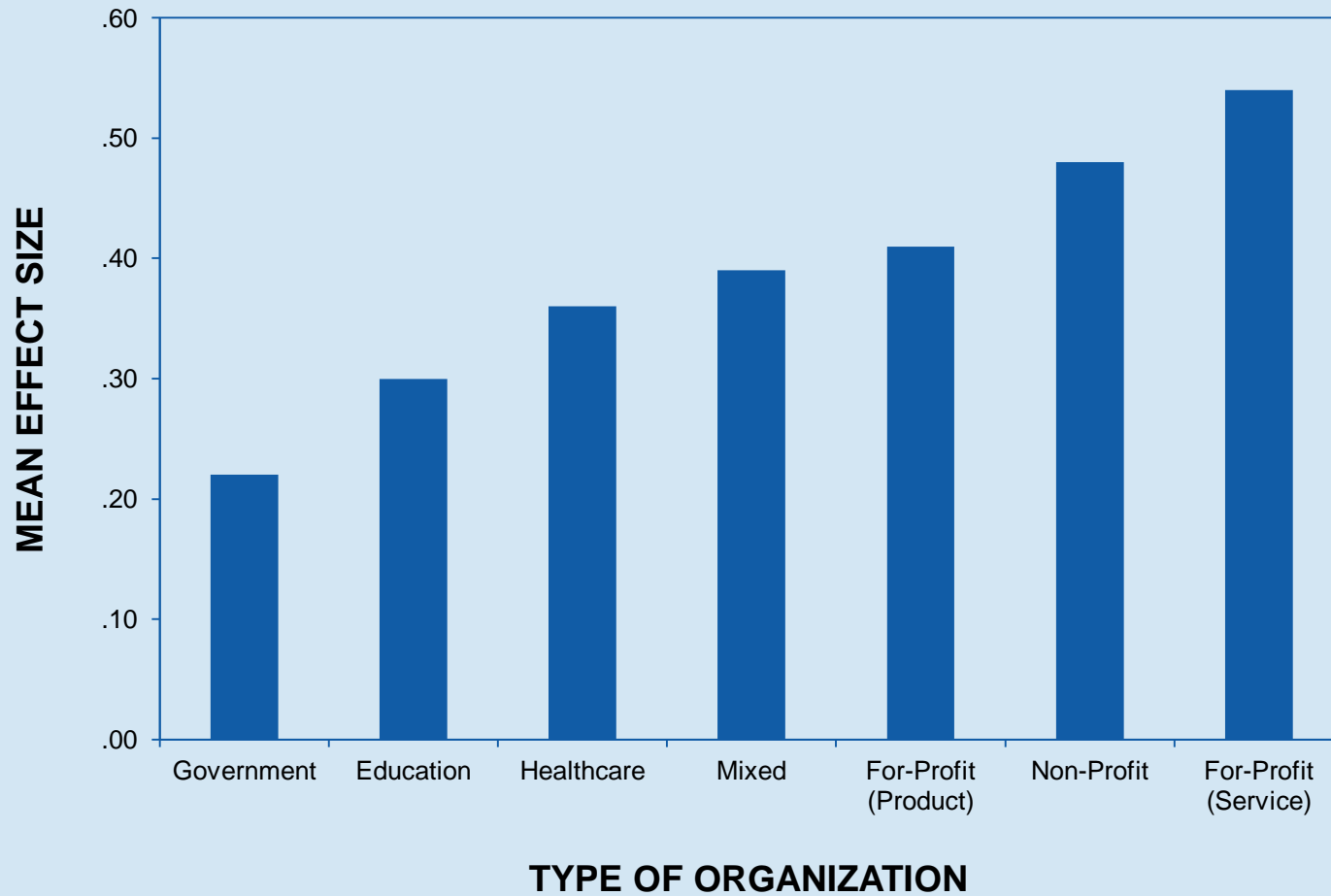
(Do the leadership practices-outcome measure relationships differ as a function of other explanatory factors?)

- Type of Organization..... 5
- Country Economic Status^a..... 4
- Country Democracy Index^b..... 2
- Study Sample Size..... 1
- Employee Position..... 1
- Year of Publication..... 0

^aUnited Nations. (2018). *World economic situation prospectus*. New York: Author.

^bThe Economist. (2017). *Democracy index 2017: Free speech under attack*. Author: Intelligence Unit.

Average Weighted Correlations for Different Types of Organizations



Implications for Practice (thus far)

- Adopting the BIG-5 leadership practices (employee confidence-building practices, motivational communication, coaching practices, organizational visioning, and soliciting employee creative solutions) is more likely to have the biggest payoffs.
- The use of these five leadership practices will more likely contribute to trust in leaders, improvements in team and workgroup effectiveness, and employee engagement in achieving organizational missions and goals.

Next Steps

- Identify which combinations of leadership practices are associated with which outcome measures. This will further inform the use of particular leadership practices to have specific outcomes or benefits.
- Prepare user-friendly nontechnical briefs of the results for informing use of evidence-based and evidence-informed leadership practices.
- Investigate the use of meta-analytic structural equation modeling for tracing the effects of leadership practices on nonemployee outcomes and nonemployee outcomes on employee outcomes.

PowerPoint available at:
www.puckett.org/presentations