Servant leadership in temporary organizations: what is the mediating role of team culture in high performing limited time teams?

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- ***What is the mediating role of team culture in high performing limited time teams?***

- Even when the activities aimed at delivering required outcomes are well-defined by managers in the organization, the leaders charged with execution ***must first guide the formation of norms and tempo*** for rapid, productive assembly

Motivation and background

- Team membership and temporary organizations are becoming central to working life, and this temporary organizing often occurs outside a single firm's boundaries.

- Prevalence of project and gig work in nearly every industry drives a need for new types of formal and informal contracts.

- Context in which performance or non-performance transpires is contingent on
    - degree of mutual trust,
    - team culture,
    - importance of the objective, and
    - leader behaviors over the course of the team's work together.

Significance

- An essential element of servant leadership is the high prioritization and deep emphasis on team member success.

- Several important studies theorize and investigate situational influences, individual characteristics, ethical leadership behaviors, and follower outcomes in the organizational behavior literature (Brown, 2006, 2005).

- Hackman (2012) explains that to achieve a full understanding of group behavior and performance, it is critical to consider both individual attributes and the context in which the group operates.

Research gap

- Temporary organizations are unique due to the presence of time boundaries around the planned work.

- The important distinction between limited-time organizations and perpetual organizations justifies focused theoretical analysis and empirical measurement.

- The challenge is to account for "cross-level influences" as part of the group's dynamics, rather than simply as potential moderators

Literature Review

- Christensen-Salem (2021) finds team social resources are antecedent to team serving culture, which is an antecedent to team service performance.

- Gillespie (2011) differentiates between reliance-based trust and disclosure-based trust.

- Hackman (2002) proposes three dimensions of team performance, 1) that the team is a real team and not merely a collection of co-actors, 2) together setting off in a compelling direction, and 3) following an enabling framework.

- Tihula (2009) explores team formation in small firms and categorize team purpose as one of five over-arching objectives: growing the firm, controlling the business, distributing liability, dealing with deficient performance, and pursuing efficiency.

Conceptual Framework
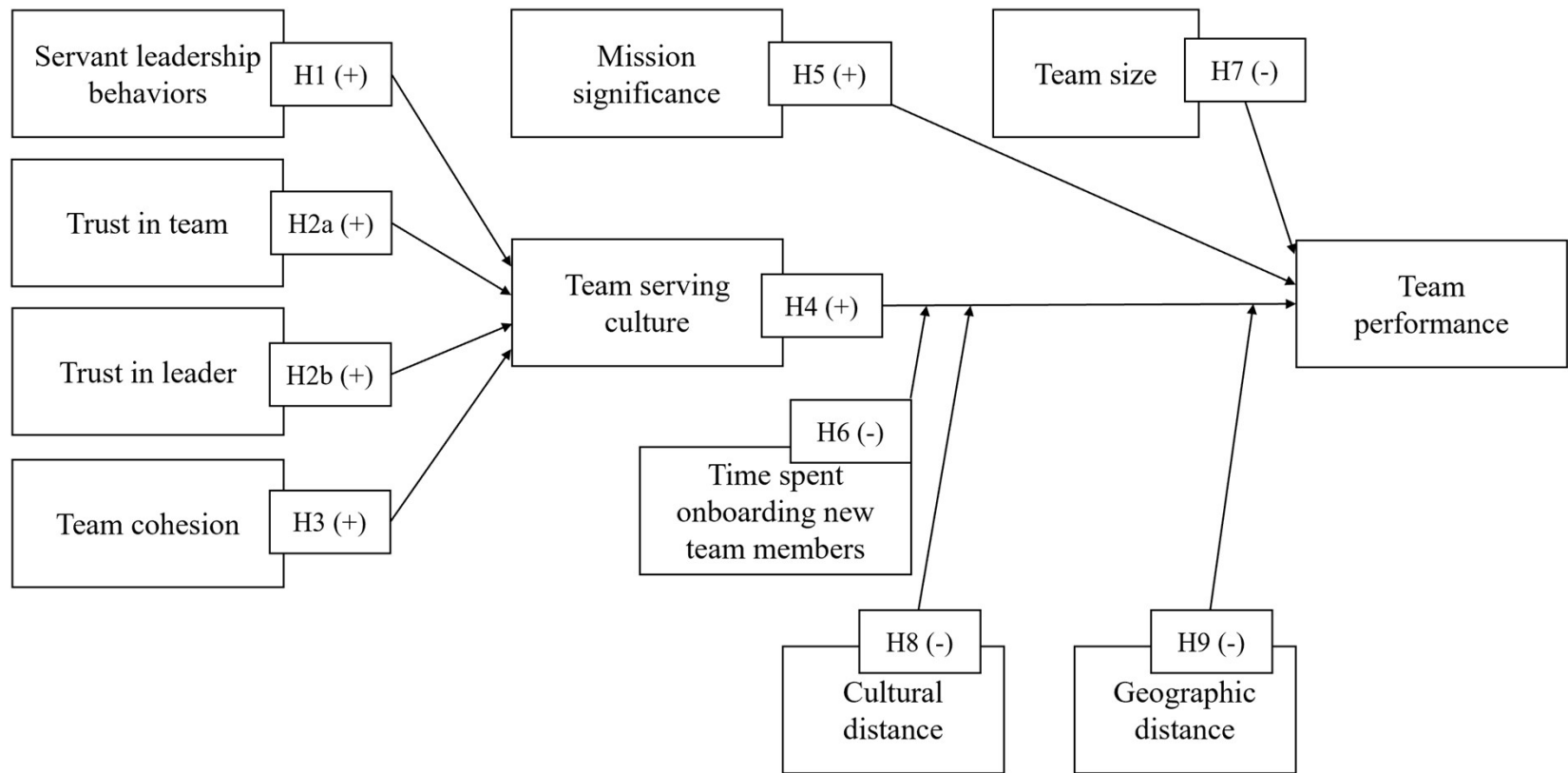
Hypotheses

- H1: Servant leadership behaviors positively affect team serving culture in limited-time high-performing teams.

- H2a: Trust in team positively affects team serving culture in limited-time high-performing teams. H2b: Trust in leader positively affects team serving culture in limited-time high-performing teams.

- H3: Team cohesion positively affects team serving culture in limited-time high-performing teams.

- H4: Team serving culture positively affects team performance in limited-time high-performing teams.

- H5: Mission significance positively affects team performance in limited-time high-performing teams.

Hypotheses

- H6: as the amount of time for the onboarding process increases, it will weaken the strength of the positive relationship between team serving culture and high performance.

- H7: As team size extends beyond eight team members per servant leader, performance will suffer in limited-time teams.

- H8: As cultural distance between team members and servant leader increases, it will weaken the strength of the positive relationship between team serving culture and high performance.

- H9: As geographic separation between team members and servant leader increases, it will weaken the strength of the positive relationship between team serving culture and high performance.

Theoretical Justification

- Christensen-Salem (2021) finds servant leadership behaviors to be particularly important for building strong bonds.

- High performance in teams with limited time to work together depend on an individual leader's behavior influences their team through building a context of team culture or "team-ness".

- The phenomenon of **team culture and team life** uniquely emerges in the context of the leader's behaviors.

- Pearce (2004) examines citizenship behavior within teams: leadership, commitment, perceived support, and team size to **draw a boundary around the maximum team size** among change management teams.

- Vaara et al. (2012) suggest that differences in organizational culture can lead to social conflict, which may explain why many studies have found a **negative relationship between cultural differences and post-acquisition performance**.

Measurement instrument scales

Construct	Role in this study	Item count and scale	Reference
Team performance	Dependent variable (DV)	Six items, scaled 1 (never) to 4 (often)	Cavanaugh (2021)
Servant leadership behaviors	Independent variable (IV)	Seven items, scaled 1 (strongly disagree) to 7 (strongly agree)	Liden (2014)
Team cohesion	IV	Eight items, scaled 1 (strongly disagree) to 5 (strongly agree)	Dobbins (1986)
Trust in leader	IV	Ten items, scaled 1 (not at all willing) to 7 (completely willing)	Gillespie (2011)
Trust in team	IV	Ten items, scaled 1 (not at all willing) to 7 (completely willing)	Gillespie (2011)
Team serving culture	IV, mediating the effect of servant leadership, cohesion, and trust on DV	Seven items, scaled 1 (strongly disagree) to 5 (strongly agree)	Liden (2014)
Mission significance	IV, with a direct effect on DV	One item, scaled 1 (very low significance) to 5 (very high significance)	Tihula (2009)
Time spent onboarding new team members	IV, with a moderating effect on DV	Number of weeks	Weick (2005)
Team size	IV, with a direct effect on DV	Number of team members	Pearce (2004)
Cultural distance	IV, with a moderating effect on DV	Calculated cultural distance (CD, see below) between team leader and team member	Kogut (1988)
Geographic distance	IV, with a moderating effect on DV	Number of time zones between team leader and team member	Nguyen (2008)

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Population description and sample size

- Solicit survey responses from 400 English-literate adults in the United States using the MTurk platform

- Have worked on a software project in the last two years

- Representative job titles: program managers, solution architects, business analysts, systems analysts, data engineers, software engineers, software developers, quality assurance engineers, software testers

Methodology and analysis approach

Methods

Three sequential rounds:
- 1&2: validating the measurement instrument in round 1 and round 2 (after making the appropriate edits to the measurement items based on the results from round 1) and
- 3: testing the full theoretical model and hypotheses

Analysis

- Data scrubbing, validation, attention questions, outlier detection

- Descriptive analysis, normality tests

- EFA reliability

- Aggregating items

- Hypothesis testing using a) hierarchical regression b) PLS

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Implications and applications

- On an ***organizational level***, the pressing need for soft skills and emotional intelligence in leadership will continue to accelerate as team members express a desire for a balanced, inclusive approach to getting things done.

- For the organizational ***research field***, we will
  - provide additional empirical evidence for the link between servant leadership and team performance
  - explore servant leadership in the context of limited-time and temporary organizations,
  - identify contextual variables that act as moderators on team performance in time-bound teams, and
  - validate measurements for knowing how well a particular leadership model works.

Research Questions

- What is the effect of team leadership on team performance?
- What is the mediating role of team culture in high performing limited time teams?

Study 1 Conceptual Framework
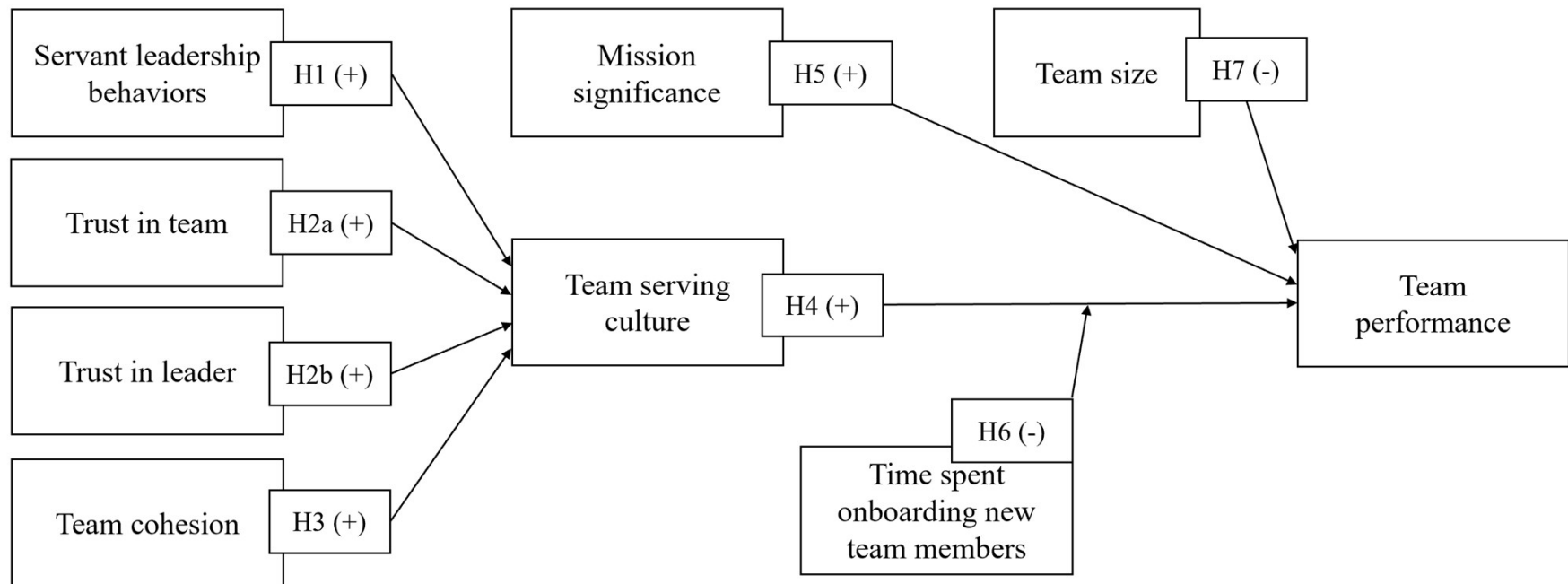
Blind pilot sample

- We retained complete responses from 217 adults in the United States based on survey completion time greater than three minutes.

- An initial exploratory factor analysis (EFA) revealed many items with cross loading among the six multi-item constructs we hypothesized, we therefore embarked on a stepwise EFA.

- We then performed reliability analysis using Cronbach's alpha to understand the internal consistency of our survey items, extracted six theorized factors, and report our factor loadings for the retained items.
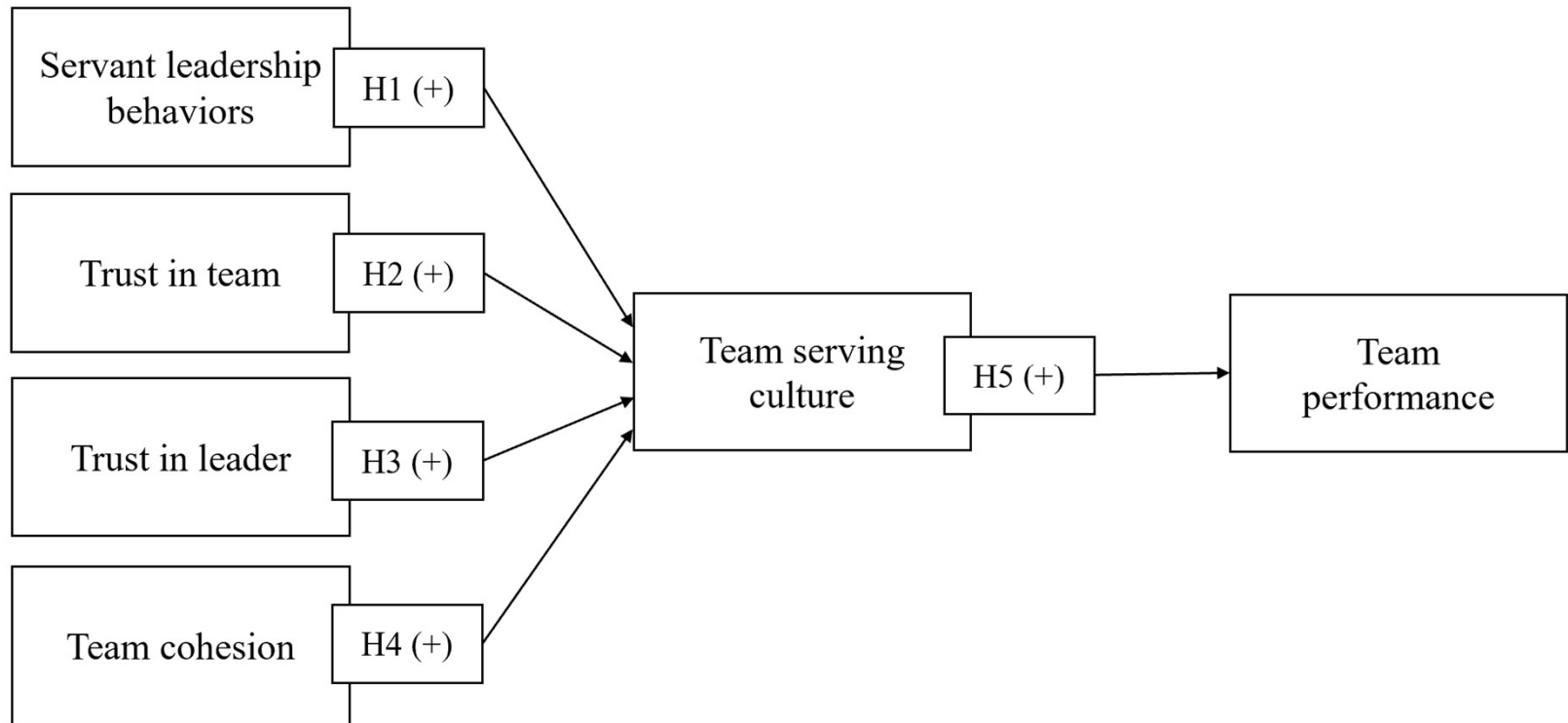
Study 1 sample

- Amazon MTurk, 80 survey questions, Qualtrics platform.

- We retain complete responses from 399 adult users in the United States.

- Respondents work primarily in information services, finance and insurance, health care, and manufacturing,

- More than 20% of respondents report they were responsible for forming the team, while in a separate question, 86% report they were a leader on the project they worked on.

- 61% spend more than half of the project collaborating virtually

- 5.5% spend no time in physical presence with their fellow team members.

- Five to seven years is the most common answer to two questions on years of total experience and years of industry experience.

- More than half of our subjects have one to four years of experience as a team leader.

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Study 1 results

Hypothesis		Beta	Sig.	Result
H1	Servant leadership behaviors -> Team serving culture	1.028	0.009**	Supported
H2a	Trust in team -> Team serving culture	0.204	0.353	Not supported
H2b	Trust in leader -> Team serving culture	-0.699	0.000**	Not supported
H3	Team cohesion -> Team serving culture	0.480	0.003**	Supported
H4	Team serving culture -> Team performance	0.282	0.005**	Supported
H5	Mission significance -> Team performance	0.705	0.000**	Supported
H6	Time spent onboarding new team members x Team serving culture -> Team performance	0.009	0.097	Not supported
H7	Team size (-) -> Team performance	0.000	0.760	Not supported

Study 2 Conceptual Framework

Study 2 sample

- Cloud Research, 80 survey questions, Qualtrics platform.

- We retain complete responses from 319 adult users in the United States.

- Respondents work primarily in health care, information services, retail, professional services, finance + insurance, education.

- More than 50% of respondents report their direct leader was responsible for forming the team, while in a separate question, 42% report they led the team on the project they worked on.

- 30% spend more than half of the project collaborating virtually

- 11% spend no time in physical presence with their fellow team members.

- 18+ years of total experience is the most common, with 14-17 next most common.

- 38% of our subjects have 1-4 years of experience as a team leader, 13% have 5-7 years.

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Study 2 results

Hypothesis		Beta	Std.Dev.	Sig.	Result
H1	Servant leadership behaviors -> Team serving culture	0.185	0.060	0.002	Supported
H2	Trust in team -> Team serving culture	0.200	0.066	0.003	Supported
H3	Trust in leader -> Team serving culture	-0.013	0.057	0.830	Not supported
H4	Team cohesion -> Team serving culture	0.571	0.055	0.000	Supported
H5	Team serving culture -> Team performance	0.789	0.025	0.000	Supported

Discussion

In Study 1, Trust in leader exhibits negative coefficient 0.7, contrary to our hypothesis

- With this result, we reviewed the literature on *disclosure*-based trust versus *reliance*-based trust.

- Consider trust in leader as the result of high leader involvement in day-to-day team member tasks (reliance)

- Excessive leader involvement requires the team to invest more working time into managing impressions of the team's performance

- At the expense of completing the tasks that lead to high team performance.

Contribution to theory

- We extend the framework built by Liden (2014) and Christensen-Salem (2021) by showing team performance not only depends on team serving culture, but also the significance of the project.

- Among the trust factors, trust in leader exhibits negative valence in developing team serving culture.

- A strong emphasis on trust in team and team cohesion may be over-stated in the earlier model in light of the temporary nature of project work teams.

- Our research provides further evidence of the strong positive relationship between team serving culture and performance.

Contribution to practice

- New empirical evidence that teams reap performance benefits from servant leadership behaviors through the causal model from servant leadership through team serving culture to team performance.

- Leadership behaviors play a critical role in the process of team formation and management, regardless of team size and the time required to sufficiently onboard new team members.

- Trust in leader is not an unbridled good, and maintaining such closeness to the team leader can distract from team performance in the context of limited-time, agile-minded, self-governing teams.

Implications and applications

- Organizational functions including research & development, marketing, training, talent management, finance, and operations teams rely increasingly on iterative continuous improvement efforts.

- Limited-time teams most often are self-directed teams working in an iterative project approach.

- Continued growth in the adoption of agile ways of working demands leadership behaviors that reliably drive team serving culture for its positive impact on team performance.

Limitations

- Data were collected primarily from individuals with recent experience contributing to team projects in the information, financial services, and manufacturing sectors.

- Project team members in public administration, hospitality, and retail may indicate a different result.

- We surveyed only English literate members of project teams in the United States, who typically adhere to a Western business orientation.

- Data analysis revealed a high degree of inconsistency in subject responses to questions about trust in team and trust in leader.

Future research

- Interesting follow-on questions to our results about individual motivation and sense of personal ownership of team outcomes.

- There are open questions about low team performance, project failure, and disbandment.

- After a failed project, what factors – trust in leader, trust in other members, team cohesion, mission significance, and team serving culture – contribute to a team members' willingness to work on the same team again?

- Factors driving project team withdrawal among team members: What aspects of trust in team and team serving culture may serve to moderate team members' intention to engage in work withdrawal behaviors?

Conclusion

- A team member's aspirations toward self-direction and self-sufficiency opens additional areas of empirical research about the nature of trust in leader.

- Further explored what aspect of trust in leader is most relevant in forming a team serving culture – disclosure-based trust versus reliance-based trust.

- Applies equally to trust in team.

- Our study firmly establishes mission significance having a strong positive effect on performance in limited-time teams.

Thank you

Blind pilot results

Table 2 Pilot study Exploratory Factor Analysis (n=217)

	Items	α	Dropped items	Retained items	α
Team Performance	9	0.831	4	5	0.801
Servant Leadership Behaviors	7	0.773	4	3	0.681
Trust in Leader	10	0.867	10	0	
Trust in Team	10	0.855	10	0	
Team Cohesion	6	0.781	3	3	0.769
Team Serving Culture	7	0.783	4	3	0.641

Note: Cronbach's alpha is reported first for all items (center column), then for retained items only (rightmost column).

Assessing discriminant validity based on confidence interval

Table 8 Confirmatory Factor Analysis using R: Covariance CIs in main study (n=399)

	THP	SLB	TL	TT	TC	TSC	TP
THP	1.000						
SLB	[.217,.358]	1.000					
TL	[.189,.321]	[.228,.384]	1.000				
TT	[.165,.286]	[.183,.318]	[.186,.325]	1.000			
TC	[.273,.432]	[.235,.387]	[.218,.365]	[.186,.321]	1.000		
TSC	[.252,.414]	[.221,.376]	[.206,.355]	[.190,.334]	[.277,.453]	1.000	
TP	[.257,.407]	[.179,.305]	[.153,.271]	[.140,.249]	[.248,.397]	[.231,.383]	1.000

Note: Covariance CIs for the CFA results.

Leadership models excluding "servant"

Transformational Leadership: Focuses on inspiring and motivating followers to achieve extraordinary outcomes

Autocratic Leadership: Characterized by individual control over all decisions with little input from team members

Democratic Leadership: Encourages input and participation from team members in decision-making processes

Laissez-faire Leadership: Hands-off approach where leaders provide minimal guidance and allow team members to make decisions

Transactional Leadership: Based on a system of rewards and punishments for meeting or failing to meet objectives

Charismatic Leadership: Relies on the leader's personality and charm to inspire and influence followers

Situational Leadership: Adapts leadership style based on the maturity level of team members and the specific situation

Coaching Leadership: Focuses on developing team members' skills and helping them reach their full potential

Pacesetting Leadership: Sets high performance standards and leads by example

Visionary Leadership: Focuses on creating and communicating a compelling long-term vision for the organization