Actor and Partner Effects of Leadership Behavior in Teams

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What is Shared Leadership?

• Shared leadership is a “dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals or both”. (Pearce & Conger, 2003, p. 1)

• Facets of shared leadership (Pearce & Sims, 2002; Piecha & Wegge, in prep.)
  a) Transformational  b) Transactional
  c) Empowering  d) Directive
  e) Aversive  f) Laissez-faire
Effects of Shared Leadership

• Influences team effectiveness above and beyond hierarchical leadership (Pearce, Manz, & Sims, 2009; Pearce & Sims, 2002)

• Positively influences team processes
  ▪ Motivation (Solansky, 2008)
  ▪ Cohesion (Balthazard, Waldman, Howell, Atwater, 2004)
  ▪ Team–Empowerment (Hooker & Csikszentmihalyi, 2003)
Shared Leadership and Commitment

- Commitment: Identification with and attachment to the team (accept goals, exert effort, desire long membership; Bishop & Scott, 2000)

- Why this positive effect on commitment?
  - Own leadership behavior; empowerment (Srivastava, Bartol, & Locke, 2006)
  - Other team members’ leadership behavior
How Has SL Been Assessed?

• **Questionnaire Measures** (e.g., Avolio, Sivasubramaniam, Murry, Jung, and Garger, 2003; Pearce & Sims, 2002; Piecha & Wegge, in prep.)
  - Applied concepts of individual leadership behaviors to team
  - Target is team
  - Aggregate member ratings

• Advantages: “Big picture”; type of leadership behavior

• Disadvantages: What does the average tell us?
How Has SL Been Assessed?

• Social Network Methods (e.g., Carson, Tesluk, & Marrone, 2007)
  ▪ Not tied to any specific leadership theory
  ▪ Target: Link between actors (strength of mutual influence)
  ▪ Various network indices

• Advantages: M and SD examined separately; can be adapted to various frameworks

• Disadvantages: Data collection and analysis time-consuming
Actor–Partner–Interdependence Model

• Can model mutual influence (Kenny, Kashy, & Cook, 2006)

• Acknowledges complexity of multilevel data (Kenny, Mannetti, Pierro, Livi, & Kashy, 2002)

• A person’s outcomes are determined by own actions.
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Jürgen’s leadership influence  
Jürgen’s commitment
Actor–Partner–Interdependence Model

• Can model mutual influence (Kenny, Kashy, & Cook, 2006)

• Acknowledges complexity of multilevel data (Kenny, Mannetti, Pierro, Livi, & Kashy, 2002)

• A person’s outcomes are determined by own actions and by fellow team members’ actions.

Jürgen’s leadership influence  Jürgen’s commitment
Actor-Partner-Interdependence Model

Jürgen’s leadership influence

Leadership influence of Jürgen’s team members

Jürgen’s commitment
Actor-Partner-Interdependence Model

Own leadership influence \[\rightarrow\] Actor Effect \[\rightarrow\] Own commitment

Partner Effect

Others’ leadership influence

(Kenny, Kashy, & Cook, 2006)
Actor–Partner–Interdependence Model

Own leadership influence → Actor Effect → Own commitment

Partner Effect → Others’ leadership influence → Shared leadership
For every team member, the partner value is the average of all other team member’s values.

(Kenny, Kashy, & Cook, 2006)
Method: Overview

• 27 student teams (3–4 members)
  ▪ 77% female, $M_{\text{age}} = 22.11$, $SD_{\text{age}} = 3.27$
  ▪ 74% study psychology

• Task: Complete research project
• Duration: 5 months
• Measurement points: beginning, middle, end
Measures

• Leadership behavior (based on Items from Pearce & Sims, 2002)
  ▪ Transformational: «Ich mache den anderen klar, wie wichtig es ist, sich 100%ig für eine Sache einzusetzen.»
  ▪ Transactional: «Ich biete den anderen im Gegenzug für ihre Anstrengungen meine Hilfe an.»
  ▪ t1: $r = .42; ICC(1) = .17; ICC(2) = .45$
  ▪ t2: $r = .26; ICC(1) = .14; ICC(2) = .39$
  ▪ t3: $r = .48; ICC(1) = .11; ICC(2) = .33$
Measures

- **Team–Commitment** *(Bishop & Scott, 2000)*
  - 8 Items; Example: «Diese Gruppe spornt mich zu Höchstleistungen an.»
  - $t_1: \alpha = 0.86; \ ICC(1) = 0.15; \ ICC(2) = 0.41$
  - $t_2: \alpha = 0.92; \ ICC(1) = 0.08; \ ICC(2) = 0.26$
  - $t_3: \alpha = 0.91; \ ICC(1) = 0.28; \ ICC(2) = 0.61$
No Change in Leadership Behavior

Repeated-measures ANOVA: Time $F(2, 50) = 1.18, p = .32$
Covariate: Team size; $N = 27$ teams
Repeated-measures ANOVA: Time $F(2, 50) = 4.40, p = .02$
Covariate: Team size; $N = 27$ teams
Actor and Partner Effects t1

• HLM 7 with restricted ML estimation
• Tested a level–1 model

\[ b = 0.41, \quad t(76) = 5.46, \quad p < 0.001 \]

\[ b = 0.15, \quad t(76) = 1.51, \quad p = 0.13 \]
Actor and Partner Effects t2

Own Leadership Behavior → Own Commitment
\[ b = 0.34 \]
\[ t(63) = 3.10, \ p = 0.003 \]

Others` Leadership Behavior → Own Commitment
\[ b = 0.37 \]
\[ t(63) = 1.95, \ p = 0.056 \]
Actor and Partner Effects t₃

Own Leadership Behavior → Own Commitment

\[ b = 0.70 \]
\[ t(63) = 8.59, p < .001 \]

Others` Leadership Behavior → Own Commitment

\[ b = 0.26 \]
\[ t(63) = 1.40, p = .17 \]
Summary

• Beginning and end of a team project: Own leadership behavior influences own commitment stronger than others’ leadership behavior.

• Middle of a team project: Others’ leadership behavior influences own commitment (= effect of shared leadership).
Discussion

• Shared leadership can be modeled with the Actor–Partner–Interdependence Model.
• Positive effects of shared leadership seem to be based on own behavior (empowerment) rather than others’ influence.
• Team members are open to others’ leadership influence in some phases of the project.
Future Research

- Examine other-ratings of leadership behavior as predictors
- Examine the effects on additional outcomes
- Transfer research question to field
Merci!

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