Leadership and Upward Influence in NSF I/UCRCs:
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Objectives

- Identify leadership relationship and upward influence behaviors that contribute to important outcomes for I/UCRC directors and the university administrators to whom they report.
- Identify best practices that represent effective leadership relationships and upward influence and share them with center directors (and university administrators?) involved in the NSF I/UCRC program.
Leadership and Influence Model

Leadership Relationship (LMX, Trust, and Perceived Supervisor Support) → Upward Influence → Center Performance → Individual Outcomes (e.g., Center Satisfaction, Commitment, Turnover Intentions)
Methods

- Pilot interviews with 4 center directors
- Developed Web-based survey
- Emailed invitations to center and site directors
- Contacted directors for university administrator information
- Emailed invitations to university administrators
- Phone and email reminders to directors and administrators
Sample

- 126 center directors were invited to respond; 112 responded (88.8%); 96 (76.2%/85.7%) provided usable questionnaires.

- 85 university administrators were invited to respond; 59 responded (69.4%); 52 (61.2%/88.1%) provided usable questionnaires.

- 47 centers, 63 universities
- 24 single site centers, 23 multi-site centers
Center Director Demographics

- Average length of time as center director: 4.20 years
- Average length of time in relationship with university administrator: 4.75 years
- 13 center directors reported moving their center since its founding
Measures

- Leadership relationship: LMX-7 (Graen et al., 1982)
- Perceived supervisor support: Survey of Perceived Organizational Support (SPOS) (Eisenberger et al., 1986)
- Leadership relationship (Index containing LMX, perceived supervisor support, and trust)
- Influence tactics and influence effectiveness: Influence Behavior Questionnaire (IBQ) (Yukl et al., 1991)
- Satisfaction with center, research, IAB: items created for this study
- Center commitment: Organizational Commitment Questionnaire (OCQ; Mowday et al., 1979; Porter et al., 1974)
- Turnover intentions (intention to quit university, directing center: Michigan Organizational Assessment Questionnaire (MOAQ; Cammann et al., 1983)
- Center performance: NCSU evaluation base; performance rating using 5 items created for this study
CD and UA Rater Agreement

- Satisfaction with center ($r = .34^*$)
- Center commitment ($r = .40^{**}$)
- Upward influence effectiveness ($r = .21$, ns)
- Trust ($r = .47^{**}$)
- LMX ($r = .38^{**}$)
Center Director Outcomes

- Significant direct leadership relationship:
  - Upward influence effectiveness

- Significant leadership relationship partially mediated by upward influence effectiveness (i.e., model predicts accurately):
  - Satisfaction with center research
  - Satisfaction with university administrator
  - Commitment to center
  - Enhanced R&D
  - UA perceptions of relationship with CD
  - Resources provided by UA

- Non-significant predictions
  - Intention to quit directing center or university
  - NCSU indicators of center performance
University Administrator Outcomes

- Significant direct leadership relationship:
  - Upward influence
  - Center performance (I/UCRC compared to other centers and directors)

- Significant leadership relationship partially mediated by upward influence effectiveness predicts:
  - Satisfaction with center research
  - Satisfaction with interactions
Effectiveness of Upward Influence Practices on University Administrator Outcomes (N = 52)

- Upward Influence Effectiveness (see Table 1)
  - Rational persuasion (r = .51**)
  - Inspirational appeal (r = .44**)
  - Consultation (r = .42**)
  - Collaboration (r = .53**)

* p < .05, ** p < .01, two tailed test
Effectiveness of Upward Influence Practices on University Administrator Outcomes (cont.)

- Satisfaction with I/UCRC
  - Upward influence effectiveness (r = .36**)

- Commitment to I/UCRC
  - Rational persuasion (r = .36**)
  - Inspirational appeal (r = .41**)
  - Consultation (r = .38**)
  - Upward influence effectiveness (r = .35**)
Effectiveness of Upward Influence Practices on University Administrator Outcomes (cont.)

- Center performance rating (I/UCRC compared to other centers and directors)
  - Rational persuasion ($r = .38^{**}$)
  - Apprising ($r = .35^{**}$)
  - Inspirational appeal ($r = .48^{**}$)
  - Consultation ($r = .33^{*}$)
  - Collaboration ($r = .31^{*}$)
  - Upward influence effectiveness ($r = .43^{**}$)
Implementation of Results at JAN 2007 Center Director Meeting

- Distribute handout of recommended leadership and upward influence practices to center directors and discuss their use in a breakout session
- Collect suggestions for core relationships to examine in new study
New Research

- Identify and unpack center director leadership relationships with others
- Focus on core relationships and behaviors associated with effective influence
- Telephone interviews to discover core relationship behaviors, followed by
- Internet survey to rate frequency of behaviors and their impact on outcomes
- Submit current final report before submission of new proposal (Submit proposal SEP 2006 to start research JAN 2007)