

All individuals' TI and II may also impact the extent to which they are granted informal leadership by others, particularly in a team context (e.g., via their status in the group).

## HYPOTHESES

Individuals with a teammate with high TI and high II will be more committed to a shared goal (*H1*), have a higher expectancy of completing the shared goal (*H2*), and believe that teammate should lead the team toward the shared goal to a greater extent (*H3*) compared to individuals with a teammate with low TI and/or low II and those with no information regarding instrumentality.

## 2. METHOD

- Soldiers in the U.S. Army across 5 installations were randomized into one of nine TI x II conditions created using a 3 (TI: low, neutral, high) x 3 (II: low, neutral, high) between-subjects design.
  - $N = 361$  ( $M_{Age} = 24.58$ ,  $SD_{Age} = 4.82$ ; 83.38% male)
- Participants read a vignette describing a hypothetical member of a squad ("target") with a specific goal.
  - TI and II of the target were manipulated via the characteristics they were described as having (see "Vignette" below).
- Participants were asked to imagine themselves as part of the squad and responded to the following items representing the outcomes of interest:
  - *Goal commitment*: "With what intensity would you dedicate yourself to your squad's goal?" (1 = no intensity, 5 = extreme intensity) and "How irritated would you feel if your squad's goal was not attained?" (1 = not at all irritated, 5 = very irritated). The mean of these items served as goal commitment.
  - *Goal expectancy*: "How likely is your squad to successfully deliver the box of photos to the CP?" (1 = not at all, 5 = very much).
  - *Lead*: "How much do you think Terry should lead the squad when they plan to scale the cliff?" (1 = not at all, 5 = very much so).

## VIGNETTE<sup>‡</sup>

"Terry, a(n) [aggressive and controlling/no information/sociable and good-natured] member of the squad, recently [failed the Army Physical Fitness Test/no information/earned the Physical Fitness Badge for scoring 280 points on the Army Physical Fitness Test]. Imagine you are in Terry's squad. Your squad has been tasked with evacuating a box of photos that is evidence of intelligence value. The squad must protect the evidence and deliver it to the company command post (CP) for evacuation. En route to the CP, the squad encounters a cliff that must be scaled in order to cross a chain bridge over a ravine. Time is critical and the situation does not permit the squad to find an alternate crossing. The squad begins to develop a plan for scaling the cliff."

<sup>†</sup>The research described herein was sponsored by the U.S. Army Research Institute for the Behavioral and Social Sciences, Department of the Army (Cooperative Agreement No. W911NF-16-2-0092). The views expressed in this presentation are those of the author and do not reflect the official policy or position of the Department of the Army, DOD, or the U.S. Government.

<sup>‡</sup>For study purposes only. Vignette does not represent a real Army squad.

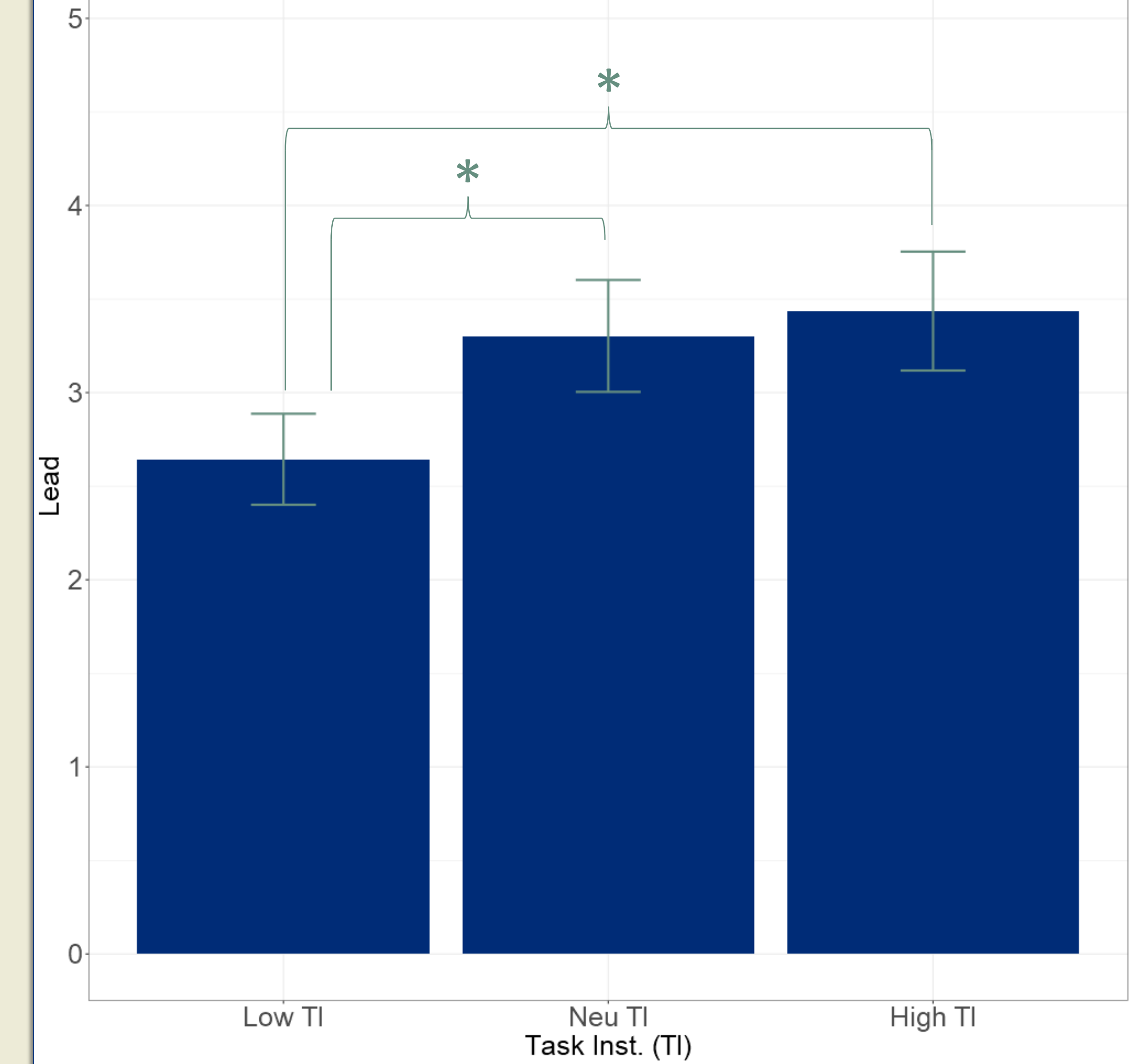


Figure 1. Main effect of task instrumentality on extent to which target should lead.

- Goal commitment (*H1*) and goal expectancy (*H2*)
  - No statistically significant interaction nor main effects were found for T
- Lead (*H3*)
  - No statistically significant interaction was found between TI and II on b
  - Simple main effects analysis showed that TI had a statistically significant effect. Leads were significantly lower in the low TI condition compared to both the h
  - Simple main effects analysis show that II also had a statistically significant effect. Leads were significantly lower in the low II condition compared to both the hi

## 4. DISCUSSION

- These results suggest that in situations where a leadership role is not fixed or formally granted by others, the likelihood of the role being granted (or not) may be influenced more on their perceived negative rather than positive characteristics.
- Although TI and II of a team member did not have motivational consequences once leadership is granted.
  - Participants may have assumed the target's low instrumentality could be perceived as a negative characteristic and low II may be perceived to be incongruent with "leadership" and not a positive characteristic.
- A teammate's TI and II may be more or less consequential for an individual's perception of their leadership role.
  - The current study examined a shared goal that involved a physical task. Future research may wish to examine goals that are less physical in nature and/or are more abstract.

<sup>1</sup>Fitzsimons et al. (2015). *Psychological Science*, 26, 1-11.

<sup>2</sup>Fitzsimons & Fishbach (2010). *Journal of Personality and Social Psychology*, 98, 1-11.

<sup>3</sup>Kruglanski et al. (2002). *Journal of Personality and Social Psychology*, 83, 1-11.

<b>REPORT DOCUMENTATION PAGE</b>				<i>Form Approved</i> <i>OMB No. 0704-0188</i>	
<b>1. REPORT DATE (DD-MM-YYYY)</b> February 2022		<b>2. REPORT TYPE</b> Final		<b>3. DATES COVERED (From - To)</b> April 2021 – February 2022	
<b>4. TITLE AND SUBTITLE</b>  The Motivational Dynamics of Task and Interpersonal Instrumentality				<b>5a. CONTRACT NUMBER</b> W911NF-16-2-0092	
				<b>5b. GRANT NUMBER</b>	
				<b>5c. PROGRAM ELEMENT NUMBER</b> 611102	
<b>6. AUTHOR(S)</b>  Hannah L. Samuelson, Maureen E. McCusker, & Gregory A. Ruark				<b>5d. PROJECT NUMBER</b> AA4	
				<b>5e. TASK NUMBER</b>	
				<b>5f. WORK UNIT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Consortium Universities of Washington    U. S. Army Research Institute 1100 H Street NW, Suite 500                    for the Behavioral & Social Sciences Washington DC 20005-5493                    6000 6TH Street (Bldg. 1464) Fort Belvoir, VA 22060-5610				<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b>  U. S. Army Research Institute for the Behavioral & Social Sciences 6000 6 <sup>TH</sup> Street (Bldg. 1464 / Mail Stop 5610) Fort Belvoir, VA 22060-5610				<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b> ARI	
				<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b>	
<b>12. DISTRIBUTION/AVAILABILITY STATEMENT:</b> Approved for Public Release; Distribution Unlimited.					
<b>13. SUPPLEMENTARY NOTES</b> ARI Research POC: Dr. Gregory Ruark, Foundational Sciences Research Unit Poster presentation at the 2022 Society for Personality and Social Psychology Annual Convention on February 19, 2022.					
<b>14. ABSTRACT</b> This research proposes 2 types of instrumentality an individual may be perceived to have toward a shared goal: task instrumentality (TI) and interpersonal instrumentality (II). The impact of TI and II on others' motivation toward a goal was experimentally examined among U.S. Army Soldiers. Findings are expected to improve understanding of the interpersonal dynamics of shared goal pursuit.					
<b>15. SUBJECT TERMS</b> motivation; goal pursuit; team goals; group status					
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b>	<b>18.</b> 15	<b>19a. NAME OF RESPONSIBLE PERSON</b> Dr. Gregory Ruark
<b>a. REPORT</b> Unclassified	<b>b. ABSTRACT</b> Unclassified	<b>c. THIS PAGE</b> Unclassified	Unlimited Unclassified		<b>19b. TELEPHONE NUMBER</b>  (703) 545-2441