Words and language are the very stuff of psychology and communication. They Talking more than others Quality of comments Research done by Counts Transcribed group discussions Independent observers viewed videotaped groups and provided 6 Being less “positive” (Less positive emotion language) Being less assenting (Agreeing or concurring less) Influence was assessed using methodology described by Would language usage patterns correlated with perceptions in problem solving groups? How similar/different are language usage patterns associated with leadership and influence in problem solving groups? Previous research suggests that less frequent use of the pronoun “I” and more frequent use of the word “we” is associated with higher levels of perceived power or status; the person is seen as higher in leadership. No research, however, has examined whether such language usage patterns are associated with actual influence during group problem solving tasks. We explored whether language usage patterns associated with perceived leadership would also be associated with greater influence within a group. Two hundred forty participants in eighty-three-person groups completed two different, conflict-filled, problem-solving scenarios. For each scenario, participants imagined they were stranded in a wilderness with various survival tasks. Participants completed two different decision-making tasks: a desert survival task and a moon survival task. In both scenarios, the groups were left with a number of items that may aid in survival. The groups’ tasks were to order these items in terms of their importance to the group’s survival with lower numbers indicating greater importance (e.g., an item ranked number one would be considered to be the most important to survival). Participants completed each exercise both individually and as a group. The order in which the tasks were completed was counterbalanced across experimental conditions.

Abstract

Research Questions

1. Would language usage patterns correlated with perceptions of leadership in prepared speeches and/or written text be similar for naturally occurring language usage in problem solving groups?
2. What language usage patterns are associated with being influential in a problem solving group?
3. How similar/different are language usage patterns associated with leadership and influence in problem solving groups?

Method

Participants Data were collected from a total of 276 undergraduate psychology students in 92 three-person groups. Seventy percent of the participants were female. Additionally, the mean age was 20.7 years. As an incentive for their participation, participants were eligible to receive extra credit in the psychology courses (20% for the individual and 22% for each member of the group who were the most accurate in the task). Eighty groups had usable videos for analysis.

Design A 2X2 experimental design involving both a forming activity and feedback manipulated group development. In the forming condition, participants became acquainted with other group members by answering questions about themselves. Participants received performance feedback by publicly informing each member how their individual rankings compared to the rankings of experts.

Tasks Participants completed two different decision-making tasks: a desert survival task and a moon survival task. In both scenarios, the groups were left with a number of items that may aid in survival. The groups’ tasks were to order these items in terms of their importance to the group’s survival with lower numbers indicating greater importance (e.g., an item ranked number one would be considered to be the most important to survival). Participants completed each exercise both individually and as a group. The order in which the tasks were completed was counterbalanced across experimental conditions.

Measures

Language Style Transcribed group discussions Transcripts analyzed using Linguistic Inquiry and Word Count (LIWC) Counts words occurring in each category Report results as percentages relative to total words in transcript.

Perceptions of Leadership Emergent Leadership was measured using the five-item updated version of the General Leadership Impression Scale (GLI) by Lord, Browne & Harvey (2001). Independent observers viewed videotaped groups and provided 8-point ratings of perceived emergent leaders. Previous research has shown the GLI scale to have high inter-rater consistency (r = .84).

Measure of Influence Influence was assessed using methodology described by Littlepage et al. (1995) using the formula

\[ \text{Influence} = \left( \frac{I}{I + \text{other's} \times \text{group rating}} \right) \]

Participants were viewed as more influential the closer the individual score was to the group’s score.

Procedure

Provided informed consent Completed questionnaires assessing personality Engaged in forming task, or read a paper on the stages of group development Completed first decision making task, first individually, and then as a group Received feedback or began the second task Completed second decision making task, first individually, and then as a group Obtained video consent, debriefed, and provided extra credit.

Discussion


classification: (1.50) (1.50) (1.00) (0.50) (0.60) - 0.20 (0.60) 0.20 (0.60) 0.20

language patterns are unique to this study. The finding that language usage patterns associated with inclusiveness were positively related to perceptions of leadership is in line with Pennabaker’s previous findings.

Language Usage and Leadership

The results showed that the perceptions of leadership were associated with:

- Talking more (Higher word count)
- Being expressive (Higher words per sentence, more prepositions)
- Being inclusive (More “we” words and fewer “I” words)
- Being less assertive (Avoiding or conceding less)

The findings that language usage patterns associated with inclusiveness were positively related to perceptions of leadership is in line with Littlepage’s previous findings. In contrast, increased equivocal and expatiative speech along with less assuming language patterns are unique to this study. This could be a function of making people group interactions instead of relying on prepared speeches.

Language Usage and Influence

The results showed that influence was associated with:

- Being expressive (Higher words per sentence)
- Being less assuming (Avoiding or conceding less)
- Being less "positive" (Less positive emotion language)

The finding that language usage patterns associated with expressiveness were positively related to influence is in line with littlepage’s previous findings. In contrast to Littlepage’s previous findings, however, we did not find a relationship between ingroup and influence. We did find that providing less, however, was related to influence. This may be due to the fact that positive word usage in discussion can often be seen as being agreeable or passive.