Let’s Talk About Attitudes: What Predicts First-Year Oral Communication Competence?

Kathryn Thompson, Briana Craig, Brian C. Leventhal, & S. Jeanne Horst

Abstract
The ability to competently engage in oral communication is a commonly identified learning outcome that universities expect of all students. Understanding factors related to students’ oral communication competence is critical in order to plan interventions for assessing and promoting student success. In the current study, the relationship between attitudes toward communication and students’ competency on a communication assessment was investigated. After controlling for gender and entering attitude (SAT), it was examined whether attitudes toward communication predicted first-year students’ speech communication competency.

Introduction
Students benefit from communication education, as it is positively linked to their future academic and professional success (Rubin & Morrele, 1996). Growth and Fixed Mindset
• Both are implicit beliefs of whether our intelligence can grow which can influence the way in which a person performs in the educational setting (Castella & Byrne, 2015).
• Motivational factors that are challenging allow students to be more persistent with their growth (Dweck, 1986).
• Students’ growth mindset attitudes correlated significantly with achievement (Castella & Byrne, 2015).
• Willingness and Confidence
• Two factors make up unwillingness: approach-avoidance and reward. Both of these influence a person’s ability to communicate (Burgoon, 1976).
• Communication apprehension and shyness are traits that can have a negative effect on the way a student communicates orally (Mccroskey & Beatty, 1986).
• Those high in confidence will be able to have better capacity for understanding spoken information (Clark, 1989).

School of Communication (SCOM) studies at James Madison University (JMU) offers a general education course for first-year students to achieve human communication skills. The course has four learning outcomes: (1) Use information literacy skills expected of general education course for first-year students to achieve human communication skills. (2) Explain the fundamental processes that significantly influence communication, (3) Construct messages consistent with the diversity of communication purpose, audience, context, and ethics, (4) Respond to messages consistent with the diversity of communication process, audience, context, and ethics.

Research Questions
1. Do gender, Evidence-Based Reading and Writing SAT score, and Mathematics SAT score predict first-year oral communication competence?
2. Do confidence, willingness, growth mindset, and fixed mindset predict first-year oral communication competence?

Methods
Participants:
• This sample consists of 1,687 (63.7% female, 86.2% white) first-year students who enrolled in SCOM 121 (n = 11), 122 (n = 335), 123 (n = 1200), and 123H (n = 141) in the fall semester of 2017.

Measures:
• The School of Communication’s oral communication final exam is a 100-item course-embedded final examination given to students in a first-year students oral communication course as part of the General Education program at JMU (Coefficient α = .80).
• Uses of the exam include:
  - In-class final exam (high stakes)
  - Institution level oral communication competency
  - Attitudes Towards Communication (ATC)
• The original ATC consisted of 11 items broken into two subscales: willingness and confidence. The willingness subscale measured student’s willingness to learn oral communication skills, and involved questions such as, “Everyone should develop effective public speaking skills” (Coefficient α = .66). The confidence subscale measured student’s confidence in their own oral communication abilities and involved questions such as “I find it easy to speak up during class discussions” (Coefficient α = .61)
• A second version of the ATC added two additional subscales, which measured fixed and growth mindset in the context of oral communication. This ATC assesses fixed mindset with questions such as, “I don’t think I can do much to increase my speaking performance” (Coefficient α = .78). Growth mindset includes questions such as, “I believe I can always substantially improve on my speaking performance” (Coefficient α = .85).

Results/Discussion

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Log Odds Coefficient</th>
<th>Odds</th>
<th>Wald</th>
<th>p-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.85</td>
<td>2.33</td>
<td>41.27</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>SAT – Reading &amp; Writing*</td>
<td>1.18</td>
<td>3.26</td>
<td>208.87</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>SAT – Math*</td>
<td>.28</td>
<td>1.32</td>
<td>13.91</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Fixed Mindset</td>
<td>-.14</td>
<td>.87</td>
<td>7.76</td>
<td>.01</td>
</tr>
<tr>
<td>Growth Mindset</td>
<td>.06</td>
<td>1.06</td>
<td>.52</td>
<td>.47</td>
</tr>
<tr>
<td>Confidence</td>
<td>-.09</td>
<td>.91</td>
<td>.52</td>
<td>.47</td>
</tr>
<tr>
<td>Willingness</td>
<td>-.04</td>
<td>.96</td>
<td>.07</td>
<td>.79</td>
</tr>
</tbody>
</table>

• Researchers examined a series of nested logistic regression models. The above table depicts the final model.
• Gender, SAT, and fixed mindset predicted passing the SCOM final. For every standard deviation increase in the evidence-based Reading and Writing SAT score, the odds of competence increased by a multiplicative factor of 3.26.
• Future SCOM courses could include activities that will reduce fixed mindset.
• Further replication will be done on data from spring 2018, and will incorporate the 2x3 Achievement Goal Model in addition.

For more information, contact thompskn@jmu.com – Acknowledgements to Tim Ball and Gretchen Hazard
<table>
<thead>
<tr>
<th>Item</th>
<th>Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Everyone should develop effective public speaking skills.</td>
<td>Willingness</td>
</tr>
<tr>
<td>2. Listening is critical to effective communication.</td>
<td>Willingness</td>
</tr>
<tr>
<td>3. No one needs to take a class in communication.</td>
<td>Willingness</td>
</tr>
<tr>
<td>4. The ability to work effectively in groups is an important skill for every citizen.</td>
<td>Willingness</td>
</tr>
<tr>
<td>5. Effective communicators value the asking of questions.</td>
<td>Willingness</td>
</tr>
<tr>
<td>6. I can recognize when someone is trying to talk me into doing something.</td>
<td>Willingness</td>
</tr>
<tr>
<td>7. I find it easy to speak up during class discussions.</td>
<td>Confidence</td>
</tr>
<tr>
<td>8. I avoid circumstances in which I will be expected to engage in conversation.</td>
<td>Confidence</td>
</tr>
<tr>
<td>9. I believe that I can effectively use presentational software during a speech I am giving.</td>
<td>Confidence</td>
</tr>
<tr>
<td>10. I believe I can plan and develop an effective 7 to 8 minute research-based speech.</td>
<td>Confidence</td>
</tr>
<tr>
<td>11. I am confident I can communicate effectively.</td>
<td>Confidence</td>
</tr>
</tbody>
</table>

*Attitudes Toward Communication (ATC) created by Tim C. Ball*
The following statements are exploring students’ beliefs about their personal ability to change their intelligence level. There are no right or wrong answers. We are just interested in your views. Using the scale, below, please indicate the extent to which you agree or disagree with the following statements.

Please bubble in only one answer for each statement, making sure to use only options 1 (Strongly Disagree) through 7 (Strongly Agree).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Disagree Slightly</td>
<td>Neither Agree or Disagree</td>
<td>Agree Slightly</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

12. I believe I have the ability to change my speech performance level considerably over time.
13. I can learn new things, but I don’t have the ability to change my basic speech performance.
14. I don’t think I personally can do much to increase my speech performance.
15. Regardless of my current speech performance level, I think I have the capacity to change it quite a bit.
16. With enough time and effort I think I could significantly improve my speech performance level.
17. My speech performance is something about me that I personally can’t change very much.
18. I believe I can always substantially improve on my speech performance.
19. To be honest, I don’t think I can really change how I perform.
AGQ Items

The following statements represent types of goals that you may or may not have for your achievement in your courses this semester. "Achievement measures" referenced below include exams, homework assignments, quizzes, and projects. For each statement, indicate your level of agreement using a scale from 1 (strongly disagree) to 7 (strongly agree). All of your responses will be kept confidential. There are no right or wrong responses. Please be open and honest.

<table>
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This semester, my goal in my courses is:

20. To do better on achievement measures than I typically do.
21. To avoid doing worse than other students on achievement measures.
22. To get a lot of questions right on achievement measures.
23. To outperform other students on achievement measures.
24. To avoid incorrect answers on achievement measures.
25. To avoid doing worse than I normally do on achievement measures.
26. To perform better on achievement measures than I have done in the past.
27. To avoid doing poorly in comparison to others on achievement measures.
28. To know the right answers to the questions on achievement measures.
29. To do well compared to others on achievement measures.
30. To avoid getting a lot of questions wrong on achievement measures.
31. To avoid performing poorly compared to my typical level of performance on achievement measures.
32. To do well on achievement measures relative to how well I have done in the past.
33. To avoid performing poorly relative to my fellow students on achievement measures.
34. To answer a lot of questions correctly on achievement measures.
35. To do better than my classmates on achievement measures.
36. To avoid missing a lot of questions on achievement measures.
37. To avoid doing worse than I have done on prior achievement measures.
38. To perform well.
39. To not work hard in my classes.
40. To avoid misunderstanding the material.
41. To avoid bad achievement results.
42. To get through my courses by doing the least amount of work possible.
43. To understand the material.
44. To avoid performing poorly.
45. To do as little work as possible this semester.
46. To obtain good achievement results.
47. To work really hard.
KEY

Implicit Theories of Intelligence (TOI; Self-Theory)
(from Castella & Byrne, 2015)

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<table>
<thead>
<tr>
<th>Entity Self-Theory</th>
<th>Incremental Self-Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 + 14 + 17 + 19</td>
<td>12 + 15 + 16 + 18</td>
</tr>
</tbody>
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7.8.16: Sara & Jeanne emailed De Castella to confirm the response scale above was the one she used in her publication.
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Scoring: (Note – There is 1 reverse-coded item, which is 28R on the Work-avoidance subscale.)

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Task-Avoid: 24, 30, 36</td>
<td>Self-Avoid: 25, 31, 37</td>
<td>Other-Avoid: 21, 27, 33</td>
</tr>
<tr>
<td>Task-approach-general: 38, 43, 46</td>
<td>Task-avoid-general: 40, 41, 44</td>
<td>Work-avoidance: 39, 42, 45, 47R</td>
</tr>
</tbody>
</table>

Items 1-18 adapted from

Task-approach and Task-avoidance general items are adapted from
Mascret, Elliot & Cury (2015). Extending the 3x2 achievement goal model to the sport domain: The 3x2 Achievement Goal Questionnaire for Sport. Psychology of Sport and Exercise, 17, 7 – 14.

Work-avoidance items are adapted from Pieper (2003).
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- Do confidence, willingness, growth mindset, and fixed mindset predict first-year oral communication competence?

- Uses of the exam include: in-class final exam (high stakes) & institution level oral communication competency
- Ability measure: math and verbal SAT
- Attitudinal measures: Attitudes Toward Communication (ATC) scale was utilized to measure fixed mindset, growth mindset, willingness, and confidence
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