

Development and Validation of the Public Speaking Attitude Scale: A Theoretical Approach to Assess Student Performance in Public Speaking Courses in Higher Education

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Although anxiety is an important component of individuals' relationship with public speaking, it only represents a portion of the story. Specifically, understanding attitudes toward public speaking can help instructors develop improved methods for teaching and assessing student performance in speech classes, and on oral communication-based university-level learning outcomes. This study addresses our lack of understanding of attitudes towards public speaking by collecting and examining data from 1,112 college students to develop a Public Speaking Attitude Scale and examine the scale's ability to predict students' intent to leverage skills learned in introductory speech classes in their future endeavors. Initial item development and validation are described, and the scale is compared against existing measures to determine which scale accounts for more variance in students' intent to leverage public speaking skills. Findings suggest that Public Speaking Attitude accounts for significantly more variance than public speaking anxiety and shyness in a student's intent to leverage skills learned in the basic speech course. Implications and avenues for future research are discussed.

Keywords: basic course, public speaking anxiety, public speaking attitude, scale development

INTRODUCTION

Communication skills or communication fluency have become salient in academia, as not only a marker of student success during college, but also after graduation. A cursory glance at job postings will demonstrate that nearly all current job openings cite effective communication as one of the most important skills that employers seek in applicants (Smith, 2022). Moreover, the National Association of College and Employers (NACE) indicates that oral/written communication skills are the second most in-demand career readiness skill (NACE, 2022). Although oral communication is consistently listed as a highly desired skill (Gewertz, 2018), only 41% of employers surveyed by the American Association of Colleges and Universities feel that recent college graduates are proficient communicators (Flaherty, 2021). Although employers rank communication as a top skill set for potential employees and intentionally seek employees who are able to orally communicate in clear and organized manners, few studies have examined college students' attitudes about the importance of this skill.

Beyond our lack of understanding of student attitudes toward public speaking, of all the communicative acts, public speaking is widely considered to be the most feared by general populations and socially phobic individuals (Mannuzza et al., 1996; Stein et al., 1996). One of the primary goals of introductory public speaking courses is to increase students' confidence in their speaking abilities. A major factor that has been studied in relation to this goal is students' public speaking anxiety and communication apprehension (Su, 2015). Given the widespread fear of public speaking, it is not surprising that many scholars have devoted time to developing measures that assess this anxiety (e.g., McCroskey, 1970; Paul, 1966). These scales have been widely employed in the communication discipline to better understand how anxiety affects public speaking performance. What has not been as widely examined, however, is how individual attitudes toward public speaking impact speaking performance, development of public speaking skills, and likelihood to engage in public speaking in the future.

Although public speaking anxiety is a factor that certainly inhibits skill development and confidence, we argue that an individual's attitude toward public speaking is equally important in shaping their experience throughout the public speaking process, both during their college experience and as they prepare for the job market. Understanding students' attitudes toward public speaking helps instructors to ensure that students master the practical skills taught in the basic course, and offers universities the opportunity to assess and improve students' attitudes toward this important skill. As such, the goal of this article is twofold. The first goal is to develop and validate a scale (Public Speaking Attitude Scale) that assesses students' attitudes toward public speaking. The second goal is to examine the relationship between students' public speaking attitude and their intent to leverage this skill in their future endeavors.

LITERATURE REVIEW

Importance of Public Speaking

Oral communication is a fundamental aspect of everyday life. Although most people take "everyday talk" for granted, we could argue that it has some common features with public speaking. For example, in our everyday conversations with others, we organize utterances, attend to the needs of conversational partners, and make decisions about conversational goals and how to best address them (Florian, 1981). Similarly, in public speaking, speakers make language choices, adapt to the needs of their audiences, and make decisions about how to present a speech that will accomplish their goals (Lucas, 2020). In short, communication - whether in a public setting or between relational partners - is a strategic act, in which communicators adapt their messages to each other and talk in a way that helps them achieve specific outcomes.

However, while it's likely that most people agree that good communication skills are important, and that effective communication between relational partners leads to successful interpersonal relationships, a change occurs when people speak publicly in front of others. Estimates suggest that one in every five people experience anxiety related to public speaking (Bartholamy & Houlihan, 2016), and for those that do, they may experience physical manifestations of their fear rendering them incapable of effectively communicating their ideas.

As fearful as many are of public speaking, educators and credentialing organizations have largely agreed that oral communication, often in the form of public speaking, is an important skill to develop, and this is evident in the number of higher education institutions adopting oral communication fluency as an undergraduate learning outcome. Further, many degree program accreditation organizations specifically have an oral communication component as a requirement. For example, Criterion 3.3 of the Accreditation Board for Engineering and Technology (ABET), which is Marshall University's accrediting organization for its Engineering program, requires that students be able to communicate effectively with a range of audiences (ABET, 2021). Beyond accreditation, licensing examinations for students in nursing programs also have a communicative component (National Council on State Boards of Nursing NCLEX Exam, 2022).

In addition to the importance of public speaking in the accreditation process, employers routinely list communication and presentational skills as some of the most desired abilities (Crosling & Ward, 2002; Marcel, 2015). Possession of these skills may be the difference between landing a job offer or rejection, as

hiring managers look for indicators of communication skills in applicants' resumes, cover letters, and interviews (Smith, 2022). In a 2002 study, Crosling and Ward found that 84% of employers claim that oral communication constantly occurs in the workplace, and 95% said that communication skills are vital for job success and promotion. Strong communication skills are even important during conversations with colleagues, as those social interactions act as informal training opportunities, allowing employees to develop new skills (Crosling & Ward, 2002). Furthermore, according to a meta-analysis on the importance of communication education, oral communication skills can help individuals succeed in their career and effectively contribute to organizational processes and norms (Morreale & Pearson, 2008).

Despite the vital role that oral communication plays in the workplace, employers indicate that most college graduates lack proficiency in this area (Crosling & Ward, 2002). A 2018 survey asked company executives to rank 15 job skills according to their importance and found that, when evaluating new hires, employers ranked effective oral communication as the most important (Gewertz, 2018). Specifically, participants ranked oral communication above skills like critical thinking, innovation, and teamwork. However, of the individuals surveyed, only 40% believe that recent college graduates are well prepared to handle tasks that require oral communication skills (Gewertz, 2018).

As organizations have adapted to a "new normal" during the COVID-19 pandemic, the importance of oral communication skills has only increased. In a 2022 interview with CNBC, LinkedIn career expert Andrew McCaskill said, "The pandemic has exacerbated the need to excel at communicating, to make sure nothing gets lost in translation because we're working in different places" (Smith, 2022). However, of the 3,000 business leaders surveyed for the article, 58% said that the most challenging aspect of the hiring process during the pandemic is finding people with the necessary skills (Smith, 2022).

Required public speaking courses are one method for ensuring that college students graduate with the communication skills necessary to excel in their future careers. In a 2015 study, Marcel asked college alumni how often they engage in public speaking in their career and how confident they are with different aspects of speech preparation and delivery (i.e. finding relevant research, creating slides, holding the audience's attention). Results indicate that 65% of participants present at least one formal speech each month and 27.9% present at least once every week (Marcel, 2015). Most significantly, the participants that reported the highest levels of confidence in eight of the twelve public speaking skills were alumni who had taken a basic speech course in college. Therefore, if taught effectively, speech courses have the ability to better prepare students for professional success after graduation.

Assessment of Public Speaking Courses

In efforts to assess the efficacy of public speaking courses, universities and faculty have measured various factors including development of public speaking skills, increases in public speaking confidence, and decreases in communication apprehension. Empirical evidence of the utility of public speaking courses is necessary for departments and programs to justify their existence and their teaching methodologies. However, this has proved a difficult task, as there are multiple assessment methods and there is disagreement on which methods are most effective. Evaluating student speaking skills and changes in those skills has been used to demonstrate skill development in introductory courses (Stern & Hailer, 2007; Farris et al., 2013; Cutspec et al., 1999; LeBanc et al., 2011). Assessment efforts have focused on reported levels of public speaking anxiety and self-confidence in public speaking abilities. Unlike the difficulties that have arisen in evaluating public speaking competence, multiple scales and surveys exist to measure levels of public speaking anxiety and confidence.

Public Speaking Anxiety

One of the most widely studied and documented outcomes of public speaking courses is their impact on students' anxiety toward public speaking. Public speaking anxiety is highly prevalent with over 85% of individuals reporting some level of apprehension about speaking in front of others (Burnley et al., 1993). Research on public speaking anxiety has focused on techniques to reduce and manage the anxiety, and on the effectiveness of public speaking skills training, in the form of public speaking courses, to achieve these goals (Brockleman-Post & Pyle, 2017; Dwyer et al., 2002; Finn et al., 2009; Hunter et al., 2014). Similarly,

scholars have examined the impact of public speaking courses on students' self-reports of public speaking confidence.

Several scales have been developed to measure levels of public speaking anxiety and confidence. These measures include the Personal Report of Communication Apprehension [PRCA-24] (McCroskey et al., 1985), the Personal Report of Public Speaking Anxiety [PRPSA] (McCroskey, 1970;), Self-Statements during Public Speaking Scale [SSPS] (Hofmann & DiBartolo, 2000; Osório et al., 2013), Personal Report of Public Speaking Confidence [PRCS] (Heeren et al., 2013; Hook et al., 2008;), and the Public Speaking Anxiety Scale [PSAS] (Bartholomay & Houlihan, 2016). These self-report measures ask individuals to consider their cognitive, emotional, and physical responses to public speaking situations, but do not ask them to consider factors such as their enjoyment or dislike of public speaking, or their beliefs about the importance and value of public speaking skills.

Attitudes

One limitation of using anxiety as a primary factor in assessing the impacts of a public speaking course is that it is just one aspect of an individual's overall relationship with public speaking. One important area to address is the way that public speaking anxiety is defined. While some scholars have conceptualized communication anxiety as a trait with individuals having innate levels of anxiety, others have conceptualized anxiety as an attitude toward public speaking (Hancock et al., 2008; Scott & Wheelless, 1977). Attitudes are the evaluative judgements a person makes about an object (Fishbein & Ajzen, 2010). Even if anxiety is conceptualized as an attitude, it only represents one facet of a person's overall attitude toward public speaking (Feingold, 1983). Little work has been done to examine how other aspects of individuals' attitudes about public speaking, including their enjoyment of it and their belief in its value, influence their development of public speaking skills. One exception is a 2017 article that reported on a preliminary exploration of how students' attitudes, and specifically their attitudes regarding the fixed or fluid nature of public speaking ability, influenced their experience of public speaking and their public speaking course (Stewart et al., 2017). Additionally, there is strong evidence that individuals' attitudes are related to their anxiety levels. Individuals with higher levels of public speaking anxiety are more likely to report disliking public speaking (an emotional component) and avoiding public speaking situations (a behavioral component).

Attitudes matter because they strongly influence an individual's behavior (Ajzen & Fishbein, 1975), as people attempt to act in ways that are consistent with their attitudes (Festinger, 1957). In terms of public speaking, individuals who hold negative attitudes about public speaking, such as not enjoying the process or not thinking that it is a valuable skill, are less likely to engage in public speaking. Attitudes have three main components: affective, cognitive, and behavioral. Attitudes reflect a person's emotions about the object (affective), their knowledge about the object (cognitive), and the way they act when encountering the object (behavioral). These three components work together to form overall evaluations of the object, running on a continuum from positive to negative.

Research on attitudes and learning has found that student attitudes about the subject are strongly predictive of student achievement. A 2017 study on math attitudes found that students with more positive attitudes about math were more likely to succeed in math courses than those with negative attitudes (Sahri et al., 2017). This study also found that math attitudes and math anxiety were highly correlated. In other words, the more positive attitude a student had toward a course, the better they performed.

Furthermore, in a 2005 study, Popovich and Masseur reported on the development of a writing attitude scale. They noted that while there was an existing scale that measured writing anxiety (Riffe & Stacks' 1988, Mass Communication Writing Apprehension Measure), the scale did not provide a full picture of what was influencing students' writing success. Specifically, the scale consisted of 56 items that measured the eight factors contributing to writing apprehension but did not explore other aspects of students' relationship with the writing process. Researchers argued that students' beliefs about the importance of writing skills and their enjoyment of writing were equally important factors to consider (Popovich & Massé, 2005).

Research on student attitudes and achievement of learning outcomes in a design course also found that students with more positive attitudes about the subject were more likely to achieve learning outcomes. Specifically, students who held positive attitudes about their design abilities and the utility of the material were more successful (; Huang et al., 2013; Kristiani et al., 2015; Lee, 2013;; Metsaerinne & Kallio, 2015). These studies demonstrate the value of positive attitudes on student learning and skill development. Being able to accurately measure changes in public speaking attitudes can be another way to assess the effectiveness of public speaking courses.

One field that has looked at attitudes about communication skills, learning, and education is medical education. Because communication skills are essential for physicians, communication skills courses and training are embedded into the medical curriculum. Rees and Garrud (2001) argued that while medical education incorporated communication skills training into its curriculum, there was no research about medical students' attitudes about the material and the impact those attitudes had on communication skill development. This gap meant that educators were unaware of how students were responding to and engaging with communication-related topics. Rees, Sheard, and Davis (2002) developed the Communication Skills Attitude (CAS) scale to fill this gap. The CAS measures students' attitudes about the value of communication skills in the medical profession, as well as their attitudes toward developing those skills. Further studies using the scale found that, while students tended to hold positive attitudes about the value of communication skills in general, their attitudes about learning the skills were less positive (Ahn et al., 2009; Anvik et al., 2008; Koponen et al., 2012; Rees et al., 2002). The results of these studies provide insight into how medical curricula could better incorporate communication skills training and build on students' positive attitudes about the value of communication to improve attitudes about skill development.

While this line of research offers a glimpse into the connections between attitudes and learning in the communication field, this work is limited in that it focuses on medical students. The scale also focuses on a variety of communication skills, the majority of which are related to interpersonal communication. Exploring students' attitudes toward the public speaking process and the value of public speaking skills would provide educators with information about what attitudes need to be targeted for change. Therefore, the first research question is posed:

***RQ1:** What underlying factors constitute students' attitudes toward public speaking?*

Additionally, as indicated above, there is often a relationship between attitude, student performance, and intent to engage in specific behaviors. Therefore, it is likely that having a positive attitude toward public speaking may impact a student's intent to leverage what they have learned in their public speaking courses in their future endeavors. As such, we propose the following hypothesis:

***H1:** Public speaking attitude predicts student intent to leverage speaking skills in their career above and beyond speaking apprehension and shyness.*

METHODS

Public Speaking Attitude Scale Development

During the development of initial pool items, validity and reliability were our highest priority. Judgmental and empirical evidence are the basis for validity arguments. According to Cronbach (1951) content validity evidence is judgmental in nature and is gathered prior to the administration of the scale. Specifically, content validity is answering questions concerning how well the items on the instrument actually measure the underlying construct of interest. Based on this reasoning, we constructed our primary items both independently and then in collaboration based on an extensive review of the literature. Further, our initial items were generally conceptualized following the tripartite attitude model, which contends that individuals have three types of reactions to stimuli: affective, behavioral, and cognitive (Shaver, 1987). Thus, from our perspective, a scale assessing public speaking attitudes should have items that reflect each of these dimensions.

The preliminary list contained 186 different items. To reduce the number of items and further assess validity, we assembled a Delphi panel of five Basic Course Directors and Assistant Directors from different programs in the Midwestern United States. Consistent with the purpose of Delphi panels (Avella, 2016), we used the panel to establish a consensus of which items would best represent the construct as well as which items were redundant or irrelevant to our students. The panel procedure asks each panelist to rank each scale item during a series of rounds until items are reduced and a consensus is reached (Linstone & Turoff, 2002). In the current project, we asked panelists to score each item on a 1-7 scale with one indicating that an item does not address a construct of interest and seven indicating that the item is strongly related to the construct of interest. After each round of rankings, scores were tabulated and items were either removed or retained. Rounds continued until an agreement of 70% was reached on each item. Our threshold to retain or remove items reaching 70% of panelist consensus is considered standard for Delphi panels (Vernon, 2009). After eight rounds panelists reached consensus on items and 111 items were retained.

Procedure

After items were loaded into a Qualtrics survey, participants accessed the instrument through a research participation system serving many departments in a large, Midwestern University in the United States. After consent was obtained, participants were instructed to read each item carefully and choose the answer that best reflects their views. All items were five-point Likert-type scales with “strongly disagree” and “strongly agree” as anchors. We employed item randomization in order to avoid bias. Results were anonymous and participants received course credit for completing the survey. On average it took participants 23 minutes to complete the survey. Any participant whose average length of time completing the survey fell three standard deviations below the mean were removed from the study. This resulted in the removal of 25 cases.

Measures

After providing some basic demographic information (sex, age, ethnicity), participants responded to the 111 items related to Public Speaking Attitudes. Participants were also asked to complete the Public Speaking Anxiety Inventory (Berko et al., 2004) which consists of six statements concerning feelings about speaking in public. Items were scored on a 5-point Likert-type scale with “strongly disagree” and “strongly agree” as anchors. Possible scores range from 6-30 with six indicating very low speaking anxiety and 30 indicating a high level of speaking anxiety. Cronbach’s alpha indicated the scale was reliable ($\alpha = .86$). Participants also completed the Shyness Scale (McCroskey & Richmond, 1982) which consisted of 14 judgments people make about themselves. Items were rated on a 5-point Likert-Type scale ranging from strongly disagree to strongly agree. Possible scores ranged from 14 to 70. Scores below 32 indicate a low level of shyness, scores between 32-52 indicate a moderate level of shyness, and scores above 52 indicate a high level of shyness. Cronbach’s alpha indicated the scale was reliable ($\alpha = .81$). The final set of items participants were asked to complete was the Intent to Leverage Public Speaking Skills to Future Employers Scale. This scale contained five items concerning participants’ intent to leverage public speaking skills in their future careers. Items were rated on a 5-point Likert-type scale ranging from strongly disagree to strongly agree. Mean scores were calculated from the set. Possible scores ranged from one (indicating a low intent to leverage public speaking skills) to five (indicating a high intent to leverage public speaking skills). Cronbach’s alpha indicated the scale was reliable ($\alpha = .80$).

Participants

The final sample consisted of 1,112 individuals ranging in age from 18 - 42 years ($M = 19.24$, $SD = 1.68$). There were 525 males (47.2%), 581 females (52.2%), and 6 individuals chose not to specify their sex. The sample consisted of 607 first-year learners (54.6%), 184 second-year learners (16.5%), 185 third-year learners (16.6%), and 136 fourth-year learners or beyond (12.2%). Ethnicity of participants consisted of 815 White or Caucasian (73.3%), 198 Asian / Pacific Islander (17.8%), 40 Hispanic or Latinx (3.5%), 32 Black or African Americans (2.9%), 6 Native American or American Indian (.5%), and 21 (1.9%) did not indicate an ethnicity.

RESULTS

Research Question One

The research question asked what underlying factors constitute students' attitudes toward public speaking. In order to develop and validate our scale on independent datasets, we randomly split the data in half before conducting any analyses. Next, we began by looking at item communalities. Costello and Osborne (2005) note that a reasonable communality range for social sciences is .40 to .70 and that if an item has a communality of less than .40 it may not be related to other items. We screened for communalities of less than .30 (being more conservative than the literature suggests). We identified items with communalities of less than .30 and discussed the implications of item removal. Ultimately, we chose to be more conservative than previous literature and removed 45 items.

We conducted a principal components analysis with direct oblimin rotation on the remaining 66 items to identify underlying factors of individuals' attitudes toward public speaking. Direct oblimin rotation was used because it allows for correlation among factors (Field, 2017). We deleted items with primary loadings less than .6 and cross-loadings above .4, leaving us with 16 items. Our initial solution consisted of two factors and accounted for 66.44% of variance. However, factor one included 11 items while factor two included only five. Furthermore, three of factor one's items loaded negatively and differed conceptually from the other eight. For these reasons, we kept the 16 items in the model but forced a three-factor solution to compare results. The three negatively loaded items from the first solution loaded on the third factor, while the other items remained the same, leaving us with a three-factor solution that accounted for 71.79% of variance. Because the three-factor solution provided more theoretically interpretable results and accounted for more variance, we decided to retain that solution in further analyses (See Table 1 for items and factor loadings). The factor accounting for the most variance (45.94%) was "Enjoyment" ($\alpha = .95$), which measured individuals' enjoyment of public speaking and included both affective items ("I like giving speeches") and behavioral items ("I seek out opportunities to give public speeches"). The second factor was "Importance" ($\alpha = .87$) which accounted for 20.5% of variance and measured individuals' beliefs that public speaking is a vital skill ("Public speaking is an important skill for everyone to have;" "Regardless of your major, having public speaking skills will help you get ahead in the future"). Finally, "Anxiety" ($\alpha = .78$) accounted for 5.34% of variance and measured individuals' feelings of apprehension and self-efficacy regarding public speaking ("I feel anxious while waiting to give a speech;" "I find public speaking challenging").

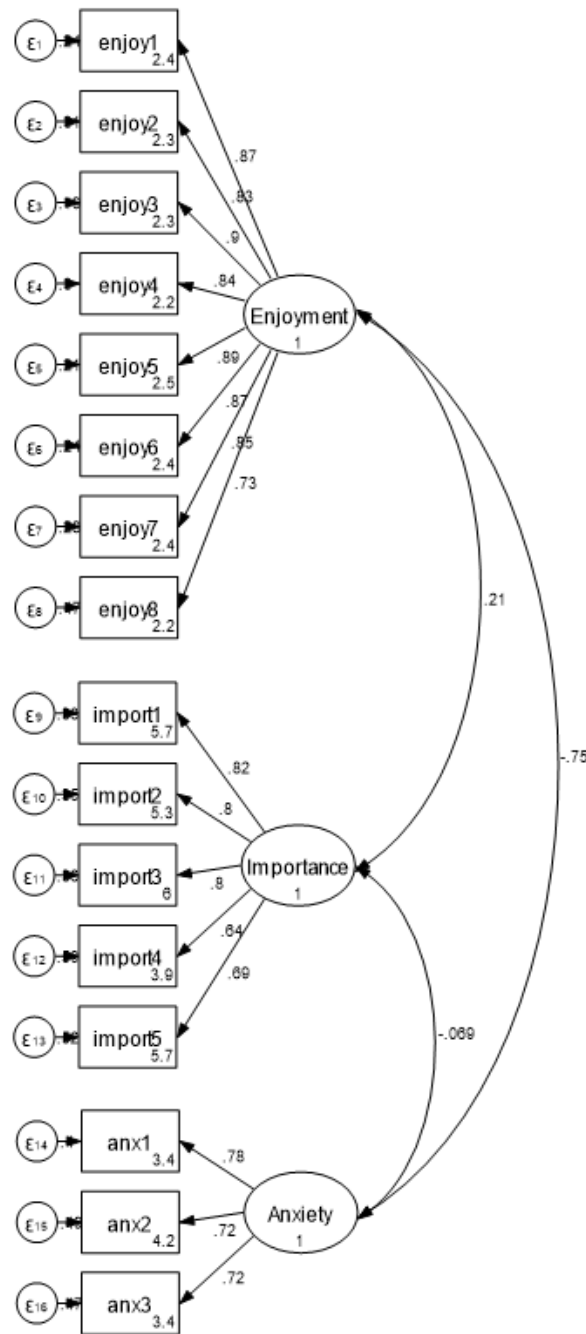
TABLE 1
FACTOR STRUCTURE AND PRIMARY LOADINGS FOR PUBLIC SPEAKING
ATTITUDE SCALE

Items	Factor Loadings			Mean	Standard Deviation	Cronbach's α
	1	2	3			
Enjoyment				2.44		.95
1. I get excited about public speaking.	.92			2.49	1.06	
2. I look forward to giving speeches.	.88			2.49	1.09	
3. It's fun to give speeches in front of audiences.	.86			2.62	1.13	
4. I get excited when I'm about to give a speech in class.	.86			2.35	1.07	
5. Speaking in front of others is enjoyable for me.	.85			2.68	1.11	
6. I like giving speeches.	.85			2.64	1.13	
7. I like giving speeches in front of my classmates.	.82			2.59	1.08	
8. I seek out opportunities to give public speeches.	.80			2.14	.99	

Importance			4.09	.87
1.	Public speaking is an important skill for everyone to have.	.88	4.20	.76
2.	Public speaking is one of those things that everyone should know how to do.	.85	4.04	.80
3.	Regardless of your major, having public speaking skills will help you get ahead in the future.	.81	4.27	.73
4.	Regardless of major, every college student should be required to take a public speaking class.	.79	3.85	1.01
5.	Being a good public speaker will help me get a job.	.75	4.18	.72
Anxiety			3.77	.78
1.	I feel very self-conscious when giving a public speech.	.84	3.63	1.07
2.	I feel anxious while waiting to give a speech.	.81	4.05	.94
3.	I find public speaking challenging.	.71	3.54	1.04

We conducted a confirmatory factor analysis on the second half of the data to validate our scale (see Figure 1). Results indicated excellent model fit (RMSEA=.055; CFI=.97; TLI=.97; SRMR=.03). Therefore, the Public Speaking Attitude Scale contains 16-items, each rated on a 5-point Likert-type scale with strongly disagree and strongly agree as anchors. Possible scores range from 16-80 (16 indicating a very negative attitude toward public speaking and 80 indicating a very positive attitude toward public speaking). Results for RQ1 indicate that students' attitudes toward public speaking consist of three factors: Enjoyment, Importance, and Anxiety.

FIGURE 1
CONFIRMATORY FACTOR ANALYSIS OF THE PUBLIC SPEAKING ATTITUDE SCALE



Hypothesis One

We hypothesized that public speaking attitude scores predict intent to leverage public speaking skills above and beyond scores on public speaking apprehension and shyness scales. A hierarchical multiple regression was performed to predict scores on intent to leverage public speaking in the future from the following variables: public speaking apprehension, shyness, and public speaking attitude. From the 1,112 cases, 53 were dropped due to missing data on at least one variable. The sample for this analysis was then $n = 1059$. Examination of all four variables' histograms and boxplots were used to check for assumption

violations and revealed that the data were normally distributed. Further, bivariate relations were linear, all slopes had the expected signs, and there were no bivariate outliers.

The hierarchical multiple regression was performed and the order of entry for variables is as follows: Step 1) Public Speaking Anxiety Score; Step 2) Shyness Score; Step 3) Public Speaking Attitude Score. Results for this multiple regression are summarized below in Table 2. The overall model was significant, $R = .691$, $R^2 = .478$, adjusted $R^2 = .477$, $F(3, 1059) = 645.021$, $p < .001$, $f^2 = .91$ or a large effect. This suggests that, together, the three predictor variables nicely predicted participants' intent to leverage public speaking to future employers with approximately 48% of the variance in intent scores accounted for by our model.

In order to determine the contribution of individual predictors, the t ratios for the individual regression slopes were examined for each variable in the step when it first entered the model. In Step 1, speaking anxiety was statistically significant, $t(1061) = -13.372$, $R^2_{\text{increment}}$ (which is equivalent to sr^2_{inc}) was .144. The nature of the relationship of speaking anxiety to intent was expected, with higher speaking anxiety scores predicting lower intent to leverage public speaking to future employers. Shyness scores significantly increased R^2 when entered in step 2, $t(1060) = -4.467$, R^2_{incr} was .016. Again, the nature of the relationship of shyness to intent was expected, as the shyer a participant, the less likely they are to leverage public speaking to future employers. Finally, public speaking attitude scores significantly increased R^2 when entered in step 3, $t(1059) = 25.397$, R^2_{inc} was .318. These results indicate that individuals with more positive attitudes toward public speaking have a higher intent to leverage those skills in their future careers.

Overall, the set of predictor variables nicely predicted participants' intent to leverage public speaking skills to future employers, and the strongest unique predictive contribution was from the Public Speaking Attitude score, even though the variable was entered at the last step. Based on these results, it is possible to reject the null hypothesis and conclude that public speaking attitude does predict intent to leverage public speaking skills above and beyond public speaking anxiety and shyness.

TABLE 2
HIERARCHICAL MULTIPLE REGRESSION PREDICTING INTENT TO LEVERAGE
PUBLIC SPEAKING SKILLS TO FUTURE EMPLOYERS

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Constant	4.477	.094		6.235	.404		1.546	.369	
Speaking Anxiety	-.062**	.005	-.380	-.057**	.005	-	.037**	.0054	.229
Shyness				-.044**	.010	-	-.020**	.008	-.057
Public Speaking Attitude							.061**	.002	.823
R^2	.144 **			.160**			.477**		
R^2 Change	.144**			.016			.318**		

DISCUSSION

Summary of Findings

Research Question 1 explored what underlying factors impact students' attitudes toward public speaking. Results indicate that, while speaking anxiety is one component, enjoyment of public speaking and perceived importance of the skill account for more variance.

Hypothesis 1 stated that Public Speaking Attitudes predict intent to leverage speaking skills in future careers above and beyond public speaking apprehension and shyness. This hypothesis was supported. Specifically, when controlling for apprehension and shyness, attitude accounts for 31.8% of variance in intent to leverage public speaking skills. A possible explanation for this is that public speaking anxiety and

shyness are individual differences, and while we work with students on managing their public speaking anxiety, we do not address shyness in the basic course. Further, this could indicate that we are doing an adequate job of teaching students to manage speaking anxiety, as speaking anxiety alone only accounts for 14% of variance in intent to leverage public speaking skills to future employers. Further, shyness only accounts for 1.6% of variance when controlling for speaking anxiety, and so it may be that an individual's shyness does not necessarily indicate whether they intend to leverage the skills they have learned in a basic speech course. As noted, Public speaking attitude accounts for 31.8% of variance when controlling for other variables; this may indicate that, in addition to focusing on managing public speaking anxiety, basic course instructors should demonstrate how skills learned in the course can translate to students' future careers.

Theoretical Implications

The findings of this paper have both theoretical and practical implications. Theoretically, we have demonstrated that there is more to individuals' relationship with public speaking than their level of public speaking anxiety. Specifically, our scale shows that, in order to understand an individual's overall attitude about public speaking, you must know whether they find the activity enjoyable and whether they consider it an important life skill. Therefore, to change individuals' relationship with public speaking, it is not sufficient to teach them how to manage public speaking anxiety; you must also demonstrate that this skill can be enjoyable and useful.

Practical Implications

Practically, these results provide useful guidelines for introductory speech course instructors who are trying to improve their students' relationship with public speaking. Currently, most basic course instructors spend time throughout the semester teaching students strategies for managing their public speaking anxiety. However, less time is spent teaching students how to make public speaking enjoyable or demonstrating the importance of the skill. In addition to anxiety management strategies and techniques for improving public speaking skills, introductory speech instructors should devote class time to demonstrating the importance of public speaking in students' future lives and careers, as well as providing suggestions for making the public speaking process more enjoyable.

Limitations

Although this study's findings provide significant contributions to public speaking literature, there are a few limitations that should be addressed. First, participants were college students from one public university in the Midwestern United States. Although the university is large and relatively diverse, public speaking attitudes may differ based on culture and geographical location. Secondly, this scale measures public speaking attitudes specifically in academia. Additional research is needed to expand the scale to include public speaking in other contexts.

Another important limitation worth noting is that these data were taken from students who were taking the Public Speaking Course in a traditional, face-to-face format. Students enrolled in virtual, hybrid, or other types of instructional modalities may have very different experiences and attitudes towards public speaking. Further, these data were collected prior to the COVID-19 pandemic and the changes in instructional modalities may have had significant impacts. Thus, further testing of this scale is warranted.

CONCLUSION

Despite these limitations, the current study advances literature by developing the first scale to measure individuals' overall attitudes toward public speaking. Whereas previous research has primarily examined public speaking anxiety, the Public Speaking Attitude Scale (see Appendix for complete scale) measures the multiple components that compose individuals' relationship with public speaking. Practically, this scale can be used in college courses to help enhance student performance and meet learning objectives. Future research should assess the value of this scale for predicting student achievement, among other outcomes.

Additionally, future research could investigate the relationship between different attitudes about public speaking and levels of communication apprehension and perceived public speaking competence.

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APPENDIX

Public Speaking Attitude Scale

1. I get excited about public speaking.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
2. I look forward to giving speeches.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
3. It's fun to give speeches in front of audiences.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
4. I get excited when I'm about to give a public speech in class.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
5. Speaking in front of others is enjoyable for me.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
6. I like giving speeches.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
7. I like giving public speeches in front of my classmates.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
8. I seek out opportunities to give public speeches.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
9. Public speaking is an important skill for everyone to have.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
10. Public speaking is one of those things that everyone should know how to do.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
11. Regardless of your major, having public speaking skills will help you get ahead in your future.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
12. Regardless of major, every college student should be required to take a public speaking class.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
13. Being a good public speaker will help me get a job.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
14. I feel very self-conscious when giving a public speech.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
15. I feel anxious while waiting to give a speech.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
16. I find public speaking challenging.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

Scoring:

Strongly Disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; Strongly Agree = 5

Add scores from items 1 – 13.

Subtract scores from items 14 – 16.

Your score should be between -2 and 62. A higher score indicates a more positive attitude toward public speaking.