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Improving Well-Being in the Basic Course: The Impact of Interpersonal Communication Competence and Public Speaking Anxiety on Loneliness, Belongingness, and Flourishing

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Abstract

This study evaluated whether interpersonal communication competence and public speaking anxiety had an impact on three indicators of student well-being (loneliness, belongingness, and flourishing) as well as evaluated whether the two most popular types of the introductory communication course (public speaking and hybrid/fundamentals) impacted interpersonal communication competence and public speaking anxiety to the same extent. Survey data was collected from 1378 students enrolled in one of these two introductory communication courses. Results showed that interpersonal communication competence was the strongest predictor of all three outcome variables, and public speaking anxiety predicted some additional variance in loneliness and belongingness, but not flourishing. Both types of courses significantly increased interpersonal communication competence and reduced public speaking anxiety, and there was no difference between the two course types in the extent to which they impacted those outcomes.

Keywords: belongingness, flourishing, interpersonal communication competence, loneliness, public speaking anxiety.

Student well-being has been an important concern for colleges and universities, and this concern has been elevated as students have experienced even higher levels of mental health concerns during the COVID-19 pandemic (Conrad et al., 2021). Students' socioemotional well-being and sense of belonging to a community have direct impacts on student academic performance, engagement, and sense of belonging to a community (Dix et al., 2012; Eisenberg et al., 2009; Gillen-O'Neel, 2019; Hartley, 2011). While colleges and universities are working to provide access to medical resources to support mental health, communication faculty should also consider whether parts of our curriculum might support these efforts by building interpersonal skills that might offer some protective benefits to students by helping them thrive.

The introductory communication course (also known as the Basic Course) is the communication course that meets the general education oral communication outcome and is typically taken in the first year. The two most popular versions of the course—public speaking and the hybrid communication course (Morreale et al., 2016)—are often lauded as courses that help students build relationships with another and build life-long communication skills that are critical for engaging with others and in community, and if that is true, then it might also be possible that the development of communication competencies might help students engage in meaningful human interactions in ways that also support well-being (Jardim, 2022).

The goal of this study is twofold. First, we seek to evaluate whether interpersonal communication competence (ICC) and public speaking anxiety (PSA) help to predict three indicators of overall student well-being: loneliness, belongingness, and flourishing. Second, we will assess whether the two most popular formats for the introductory communication course (public speaking and the hybrid course) result in similar, significant increases in ICC and PSA. If these courses do have significant effects of ICC and PSA, and those variables in turn impact students' well-being, there are important implications for the value and the appropriate timing of the introductory course across all colleges and universities.

Literature Review

Three of the indicators that scholars often associate with well-being are loneliness (inverse relationship), belongingness, and flourishing (Arslan, 2020; Eraslan-Capan, 2016; Keyes, 2002; McCallum et al., 2021), so for the purposes of this study, we will use those three constructs as a proxy for well-being. First, we will briefly summarize existing scholarship about these three indicators of well-being, followed by scholarship about two frequently used assessments of communication competence and confidence: interpersonal communication competence and public speaking anxiety.

Loneliness

Loneliness is a "multifaceted phenomenon, often characterized by an unpleasant, painful, anxious yearning for another person or persons" (Ponzetti, 1990, p. 336). Loneliness is present within every age group; however, many studies have found that the younger population is more vulnerable to feeling lonely (Brennan, 1982; Ponzetti, 1990; Rubenstein & Shaver, 1982). Some personal attributes that contribute to loneliness include personality dynamics, family background variables, cognitive characteristics, interpersonal behaviors, and social networks (Ponzetti, 1990).

Previous studies have found that loneliness can lead to depression among college students (Cacioppo et al., 2010; Diehl et al., 2018; van Winkel et al., 2017), which in turn impacts how students engage with one another and in the classroom. Lonely students tend to disclose less; are less effective in utilizing nonverbal communication indicators; and tend not to use effective interpersonal tools in their communication, such as negotiation, empathy, warmth (Ponzetti, 1990). Mai and Asma'A (2016) found that lonely students also have lower self-esteem, which in turn decreases their student engagement in the classroom. Similarly, Singh et al. (2020) found that loneliness is associated with lower student engagement and increased academic burnout. In contrast, when students feel like they belong to a classroom community, they feel less lonely and more confident in themselves, increasing their self-esteem and motivation to engage in the classroom environment (Mai & Asma'A, 2016).

Taken together, these studies suggest that student loneliness has significant implications for academic performance and overall wellbeing. They also demonstrate an inverse relationship between the enactment of interpersonal communication skills and loneliness.

Belongingness

Self-Determination Theory (SDT) argues that there are three basic psychological needs that impact student motivation: autonomy, relatedness, and competence (Ryan & Deci, 2000). Relatedness is the need to feel socially connected, cared for by others, and to feel a sense of belonging with and contributing to the experiences of others (Deci & Ryan, 2014). When students feel a sense of belongingness to their campus community and feel like they are receiving support from that community, they are more likely to succeed (Beachboard et al., 2011; Glass & Westmont, 2014; Neimiec & Ryan, 2009; Wang et al., 2019).

In instructional communication scholarship, belongingness among college students has also been conceptualized as resulting from a connected classroom climate since the classroom is the context within which many social relationships are built (Dwyer et al., 2004; Rosenfeld, 1983). Perceptions of a connected classroom climate are positively linked to increased cognitive and affective learning, academic efficacy, motivation, and participation (Dorman, 2001; Johnson, 2009; Mazer & Hunt, 2008; Sidelinger & Booth-Butterfield, 2010), whereas a negative classroom climate is associated with increased stress, poor academic performance, and risk for dropping out of college (Cutrona et al., 1994; Demakis & McAdams, 1994).

Belongingness is essential in understanding the interrelationship between crucial social and mental health constructs among college students (Baskin et al., 2010). Osterman (2000) further suggests that "students' experience of acceptance is linked in many important ways to students' engagement and performance" (p 344). Within the classroom, instructors can create opportunities for more interaction to facilitate a greater sense of inclusiveness and connection, and students who feel connected to their classmates learn better, engage more, and support each other more (Dwyer et al., 2004; Johnson, 2009; Prisbell et al., 2009). It is basic human nature to yearn for satisfaction and inclusion within a network (Glass & Westmont, 2014; Osterman, 2000), so it is important to explore how interpersonal communication competence can impact students' sense of belongingness in order to understand how it contributes to overall well-being (Dwyer et al., 2004).

Flourishing

Mental health is not simply the absence of mental illness; it is possible to be free from mental illness and still not be leading a productive, healthy, happy life (Keyes, 2005). Positive mental health—or subjective well-being—is conceptualized as

flourishing, and is defined as a combination of emotional, social, and psychological wellbeing (Howell, 2009; Keyes, 2003; Keyes, 2005). There are two separate areas of functioning that are necessary for psychological flourishing: the hedonic stream and the eudaimonia stream (Keyes, 2006). The hedonic stream is associated with having positive affect and happiness, and is the extent to which someone experiences positive emotions over time. The eudaimonia stream involves how well someone is meeting their human potential and functioning in life. Individuals who have high hedonic and eudaimonia stream scores are categorized as *flourishing*, those who have low scores are categorized as *languishing*, and those who have moderate scores have moderate mental health (Keyes, 2005, 2006).

There are individual, interpersonal, and institutional conditions that contribute to students' flourishing or languishing in college (Byrd & McKinney, 2012). Students are more vulnerable to experiencing languishing during their first year in college—a year in which they are likely to experience uncertainty, practical challenges, social isolation, and overwhelming academics—but begin to flourish once they begin to achieve academic mastery, find a social support system, and experience personal growth and independence (Knoesen & Naudé, 2017). Supportive college environments, sense of belonging, professional confidence, coping abilities, confidence in communication skills, and civic engagement are some predictors of student flourishing (Byrd & McKinney, 2012; Fink, 2014). Flourishing also has important impacts on student performance. Students who are flourishing place greater importance on civic and community engagement (Low, 2011); have lower procrastination, higher self-control, higher grades, and more mastery-approach goals (Howell, 2009); and have few emotional difficulties, higher psychosocial functioning, and better school integration (Keyes, 2006). Since individual and interpersonal conditions contribute overall to students' flourishing, we expect to see an inverse relationship between flourishing and communication apprehension and a positive relationship between flourishing and interpersonal communication competence.

Interpersonal Communication Competence

Over time, there has been some debate about how to best define communication competence, particularly regarding the social context in which the communication is taking place, the ability to adapt, and the extent to which knowledge and intentionality matter when measuring behavior (Backlund & Morreale, 2015). However, one of the most commonly accepted definitions suggests that

communication competence is a subjective evaluation of the quality of communication interaction comprised of two primary evaluations: appropriateness and effectiveness (Spitzberg, 2015). Appropriateness is an assessment of whether others in the interaction perceive the behavior or enactment as acceptable in a particular context, whereas effectiveness is an assessment of how the behavior achieves the communicator's desired outcomes (Spitzberg, 2015). Interpersonal communication competence is an assessment of an individual's competence in interpersonal interactions and is "an impression or judgment formed about a person's ability to manage interpersonal relationships in communication settings" (Rubin & Martin, 1994, p. 33). Rubin and Martin (1994) identified ten types of interpersonal skills that are important to assessing interpersonal communication competence: self-disclosure, empathy, social relaxation, assertiveness, altercentrism, interaction management, expressiveness, supportiveness, immediacy, and environmental control. These skills contribute directly to more satisfying communication interactions, and the ability to use those skills is in part predicted by self-efficacy (Rubin et al., 1993). Therefore, a course that helps students develop interpersonal communication skills and confidence should help students develop more satisfying communication interactions and relationships.

Public Speaking Anxiety

Public Speaking Anxiety (PSA) is defined as "situation-specific social anxiety that arises from real or anticipated enactment of an oral presentation" (Bodie, 2010, p. 72) that varies across four contexts: groups, meetings, interpersonal, and public speaking (McCroskey, 1982). PSA is a subset or type of Communication Apprehension (CA), which is a broader anxiety associated with communicating with others, and both are comprised of trait components associated with speaking in any context, as well as state components associated with specific speaking contexts (McCroskey & Richmond, 2006; Spielberger, 1966). Trait PSA often has a genetic and neurological basis (Beatty et al., 2011), and is also often learned from negative experiences in the past that result in negative self-focused thoughts (Daly et al., 1989; McCroskey, 1984), which make it difficult, if not impossible, to change (Beatty et al., 2011). Trait PSA partially predicts state PSA, so it can never be mitigated completely (Harris et al., 2006). However, several environmental factors can impact state PSA, including audience size, type of delivery, whether the speech is being evaluated, and the type of audience response (Bodie, 2010). There are also several treatments that

can help to reduce CA and PSA (Bodie, 2010), such as systematic desensitization (Finn et al., 2009), cognitive modification (Glogower et al., 1978), communication-orientation modification therapy (COM therapy; Ayres et al., 2000), visualization (Ayres, 1995), and skills training and feedback, which are often done in the context of a public speaking or introductory communication skills course (Broeckelman-Post & Pyle, 2017; Dwyer, 1995; Hunter et al., 2014).

Reduction in PSA is often identified and assessed as an important outcome of introductory communication skills courses (e.g., Broeckelman-Post & Pyle, 2017; Hunter et al., 2014; McCroskey, 2009) because PSA can have such negative impacts on individuals. PSA and CA are associated with negative behavioral, cognitive, and physiological effects during speeches (Bodie, 2010), lower GPAs, and higher college drop-out rates (McCroskey et al., 1989; Rubin et al., 1997).

Because communication is critical to the development of quality relationships (Gillen-O'Neel, 2019); and communication confidence and/or competence should enhance flourishing, relationship satisfaction, and a sense of belonging in the classroom (Byrd & McKinney, 2012; Dwyer et al., 2004; Rubin & Martin, 1994); we expect that interpersonal communication competence (ICC) will positively predict indicators of well-being indicators such as belongingness and flourishing and negatively predict loneliness. At the same time, because PSA can have negative impacts on communication interactions, it should have the opposite impacts on indicators of wellbeing. Moreover, this study seeks to assess whether both of the most popular versions of the introductory communication course, public speaking and the hybrid course, have similar significant effects on PSA and ICC. Therefore, this study posits the following hypotheses:

H1: ICC and PSA predict loneliness.

H2: ICC and PSA predict belongingness.

H3: ICC and PSA predict flourishing.

H4: There is a difference in the extent to which public speaking and hybrid introductory communication courses reduce all four types of PSA and increase ICC.

Methods

Procedures and Context

This study was conducted at a large, mid-Atlantic public university. All students enrolled in courses that meet the general education requirement for oral communication (Public Speaking or Fundamentals of Communication) in the Spring 2018 semester were invited to participate in this study. The Public Speaking course is a traditional public speaking course that focuses almost entirely on developing public speaking skills through the development and delivery of three individual speeches. The Fundamentals of Communication Course is a hybrid (Morreale et al., 2016) or comprehensive communication skills course that includes public speaking, interpersonal communication, small group communication, and intercultural communication content. In addition, students enrolled in the Fundamentals course prepare and deliver an individual, partner, and team presentation during the semester.

All students enrolled in these courses were asked to complete a pre-course survey during the first two weeks and a post-course survey during the last two weeks of the semester. At the end of the semester, the pre- and post-surveys were merged using student identification numbers to allow for within-subjects (repeated measures) analysis. The surveys were assignments in the class, but students could check a box to opt out of the study, and students who opted out were removed from the dataset before analysis, per procedures approved by the Institutional Review Board.

Participants

A total of 1378 students participated in this study. A total of 451 (32.7%) of the students were enrolled in the Public Speaking course, and 927 (67.3%) were enrolled in the Fundamentals of Communication course. Demographic data was collected in the pre-course survey, which was completed by 907 students. Of these students, 50.8% ($N = 461$) reported being male, 47.9% ($N = 434$) reported being female, 0.6% ($N = 5$) reported being transgender, and 0.8% ($N = 7$) indicated that they preferred not to disclose their gender. Of these students, 61.7% ($N = 560$) were freshmen, 19.7% ($N = 179$) were sophomores, 11.7% ($N = 106$) were juniors, 6.5% ($N = 59$) were seniors, and 0.3% ($N = 3$) were non-degree seeking students. Since this is a general education course, students reported majoring in a variety of majors, including those fitting in the following colleges: engineering (28.0%, $N = 254$), humanities and

social sciences (20.3%, $N = 184$), business (16.8%, $N = 152$), science (10.6%, $N = 96$), undecided (6.3%, $N = 57$), visual and performing arts (5.7%, $N = 52$), health and human services (5.3%, $N = 48$), policy and government (4.2%, $N = 38$), education and human development (2.3%, $N = 21$), and conflict analysis and resolution (0.6%, $N = 5$), which reflects the overall undergraduate population at this university. The diversity of the student body is reflected in the languages spoken; 64.3% ($N = 583$) report speaking English as their first and primary language (L1), 25.8% ($N = 234$) learned a language other than English as their first language and speak that language at home but have gone to English-speaking schools and are fluent in the English language (Generation 1.5), 7.8% ($N = 71$) primarily speak languages other than English (L2), and 2.1% ($N = 19$) were not sure which category best reflected them. Participants were invited to select multiple ethnicities; for this sample, 0.9% ($N = 12$) identified as American Indian or Native American, 17.6% ($N = 243$) as Asian, 8.5% ($N = 117$) as Black or African-American, 6.3% ($N = 87$) as Hispanic or Latino, 4.8% ($N = 66$) as Middle Eastern or North African, 0.4% ($N = 6$) as Hawaiian or Pacific Islander, 34.9% ($N = 481$) as White or Caucasian, and 1.2% ($N = 16$) selected other and entered an additional ethnic identity. For student status, 8.9% ($N = 81$) reported being international students, 14.7% ($N = 133$) out of state domestic students, and 76.4% ($N = 693$) as in-state students. Chi-squared tests and t -tests were run to evaluate whether there were demographic differences in who took the public speaking and the hybrid course. While most demographic variable did not have significant differences, there were small effects for age, academic level, and major. Students in the public speaking course were more likely to be slightly older (t [906] = 3.47, $p < .001$, $M = 20.16$ vs. 19.41), more likely to be seniors (χ^2 [4, 907] = 50.02, $p < .001$), and more likely to be engineers (χ^2 [9, 907] = 73.43, $p < .001$). These differences are an artifact of historic curriculum changes. Until 2018, engineering students were required to take the public speaking course and were often advised to take it later in their academic career, rather than being given a choice between courses and encouraged to take their communication course during their first year, so there were still some seniors who were catching up after being grandfathered into the older requirements.

Measurements/Instrumentation

Loneliness. Loneliness was measured in the post-test only using Hughes et al. (2004) loneliness scale, adapted to refer to our specific university context. This scale

consists of three items measured on a three-point Likert scale ranging from 1 = Hardly Ever to 3 = Often. Sample items include "How often do you feel that you lack companionship at [University]" and "How often do you feel left out at [University]." The overall reliability in the post-course survey was $\alpha = .90$.

Belongingness. Belongingness was measured in the post-test only using the Belongingness of Needs sub-scale of the Basic Psychological Needs Scale (Ryan & Deci, 2000) adapted to refer to our specific university context. The scale included eight items measured on a seven-point Likert scale ranging from 1 = Strongly Disagree to 7 = Strongly Agree. Sample items include "People in my life at [University] care about me" and "I consider the people I regularly interact with at [University] to be my friends." The overall reliability of this measure in the post-course survey was $\alpha = .84$.

Flourishing. Flourishing was measured in the post-test only using Diener et al.'s (2010) Flourishing scale. This scale includes eight items measured on a seven-point Likert scale ranging from 1 = Strongly Disagree to 7 = Strongly Agree. Example items include "I lead a purposeful and meaningful life" and "I am optimistic about my future." The overall reliability of the scale in the post-course survey was $\alpha = .94$.

Interpersonal Communication Competence. Interpersonal Communication Competence (ICC) was measured in the pre-test and post-test using Rubin & Martin's (1994) Interpersonal Communication Competence Scale. This scale comprised 30 items measured on a five-point Likert scale and was designed to include items related to the following dimensions: self-disclosure, empathy, social relaxation, assertiveness, altercentrism, interaction management, expressiveness, supportiveness, immediacy, and environmental control. Sample items include "Other people think that I understand them" and "I communicate with others as though they are equals." While these dimensions did not hold up as separate factors when we conducted a factor analysis using this dataset, they hold together as a reliable single factor when used together. For this study, the overall reliability of this scale in the pre-survey was .89 and in post-course survey was $\alpha = .89$.

Public Speaking Anxiety. Public Speaking Anxiety was measured in the pre-test and post-test using McCroskey's (1982) Personal Report of Public Speaking Anxiety (PRCA-24). This scale includes 24 items measured on a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Sample items include "While giving a speech, I get so nervous I forget the facts I really know" and "I dislike participating in group discussions." This scale includes four sub-scales that represent anxiety in different contexts: group discussion, meetings, interpersonal, and

public speaking. The reliability for the overall scale was $\alpha = .97$ in the pre-course survey and $\alpha = .95$ in the post-course survey. For groups, $\alpha = .90$ in the pre-course survey and $\alpha = .86$ in the post-course survey. For meetings, $\alpha = .91$ in the pre-course survey and $\alpha = .89$ in the post-course survey. For interpersonal, $\alpha = .89$ in the pre-course survey and $\alpha = .85$ in the post-course survey. For public speaking, $\alpha = .90$ in the pre-course survey and $\alpha = .87$ in the post-course survey. Means and standard deviations for all measures are shown in Table 1.

Table 1: Means and Standard Deviations

	Pre-Course Survey					
	Public Speaking		Fundamentals		All Courses	
	M	SD	M	SD	M	SD
Loneliness						
Belongingness						
Flourishing						
ICC	108.59	15.17	108.15	15.96	108.30	15.67
PRCA-24	65.93	21.05	67.55	22.33	66.97	21.88
Group PSA	15.75	5.83	15.72	5.89	15.74	5.86
Meetings PSA	16.16	6.21	16.82	6.03	16.60	6.10
Interpersonal PSA	15.35	5.36	15.85	5.95	15.67	5.75
Public Speaking PSA	18.66	5.87	19.15	6.47	18.97	6.26
	Post-Course Survey					
	Public Speaking		Fundamentals		All Courses	
	M	SD	M	SD	M	SD
Loneliness	5.05	1.95	5.01	1.91	5.01	1.93
Belongingness	41.51	8.10	41.94	8.22	41.83	8.19
Flourishing	46.06	8.42	46.90	8.12	46.71	8.18
ICC	111.09	16.71	111.61	15.06	111.43	15.65
PRCA-24	62.43	20.16	62.37	19.80	62.39	19.91
Group PSA	14.77	5.38	14.45	5.13	14.45	5.22
Meetings PSA	15.40	5.60	15.17	5.61	15.25	5.60
Interpersonal PSA	14.63	5.16	14.88	5.25	14.79	5.21
Public Speaking PSA	17.62	6.15	18.05	6.05	17.90	6.09

Results

Loneliness

To test H1, this study sought to determine whether Loneliness can be predicted by ICC and PSA, using post-course data collected at the same time for all variables. The regression analysis indicated that 9.1% of the variance in Loneliness could be predicted by the two predictors variables, $F(2, 775) = 39.98, p < .001$. Analysis of regression coefficients indicated that ICC predicted Loneliness most powerfully [$\beta = -.18, t = -4.02, p < .001$] followed by PSA [$\beta = .16, t = 3.53, p < .001$].

To further explore these results, a subsequent regression was run to find out which of the four types of PSA (groups, meeting, interpersonal, and public speaking) measured by the PRCA-24 predicted variance in loneliness when put in a regression model with ICC. The regression analysis indicated that 9.4% of the variance in loneliness could be predicted by the five predictors variables, $F(5, 772) = 57.43, p < .001$. Analysis of regression coefficients indicated that ICC predicted Loneliness most powerfully [$\beta = -.16, t = -3.55, p < .001$] followed by Interpersonal PSA [$\beta = .15, t = 2.19, p = .03$]. Group, meetings, and public speaking PSA were not significant predictors of loneliness.

Belongingness

To test H2, this study sought to determine whether Belongingness can be predicted by ICC and PSA, using post-course data collected at the same time for all variables. The regression analysis indicated that 24.6% of the variance in Belongingness could be predicted by the two predictors variables, $F(2, 775) = 127.97, p < .001$. Analysis of regression coefficients indicated that ICC predicted Belongingness most powerfully [$\beta = .43, t = 10.56, p < .001$] followed by PSA [$\beta = -.10, t = -2.39, p = .02$].

To further explore these results, a subsequent regression was run to find out which of the four types of PSA (groups, meeting, interpersonal, and public speaking) measured by the PRCA-24 predicted variance in belongingness when put in a regression model with ICC. The regression analysis indicated that 25.9% of the variance in belongingness could be predicted by the five predictors variables, $F(5, 772) = 55.45, p < .001$. Analysis of regression coefficients indicated that ICC predicted Belongingness most powerfully [$\beta = .405, t = 9.87, p < .001$] followed by Group PSA [$\beta = -.21, t = -3.48, p = .001$] and Meeting PSA [$\beta = .13, t = 2.02, p =$

.04]. Interpersonal and public speaking PSA were not significant predictors of belongingness.

Flourishing

To test H3, this study sought to determine whether Flourishing can be predicted by ICC and PSA, using post-course data collected at the same time for all variables. The regression analysis indicated that 41.2% of the variance in Flourishing could be predicted by the two predictors variables, $F(2, 775) = 273.60, p < .001$. Analysis of regression coefficients indicated that ICC predicted Flourishing most powerfully [$\beta = .60, t = 16.79, p < .001$], but PSA did not [$\beta = -.06, t = -1.64, p = .10$].

Course Effects

While previous research shows that taking an introductory communication course decreases PSA (Broeckelman-Post & Pyle, 2017; Hunter et al., 2014; McCroskey, 2009; Nordin & Broeckelman-Post, 2020) and increases ICC (Nordin & Broeckelman-Post, 2020), this study sought to confirm that the effect exists in this context, as well as to evaluate whether the effect is similar for both of the two most popular types of introductory communication courses, public speaking and a hybrid skills course that includes public speaking, interpersonal, small group, and intercultural communication skills (Morreale et al., 2016).

To test H4, a within-subjects MANOVA with one between-subject factor (course) and five within-subjects factors (ICC, Group PSA, Meetings PSA, Interpersonal PSA, and Public Speaking PSA) was conducted. Multivariate tests showed a significant within-subjects effect for time [$F(5, 579) = 11.79, p < .001, \eta_p^2 = .09, \text{power} = 1.00$], but no significant between-subjects effects for course [$F(5, 579) = 1.81, p = .11, \text{power} = .62$] or interaction effects for course by time [$F(5, 579) = 1.42, p = .22, \text{power} = .50$]. Univariate within-subjects effects were significant for all five dependent variables. For ICC, $F(1, 583) = 29.88, p < .001, \eta_p^2 = .05, \text{power} = 1.00$. For Group PSA, $F(1, 583) = 38.59, p < .001, \eta_p^2 = .06, \text{power} = 1.00$. For Meetings PSA, $F(1, 583) = 35.95, p < .001, \eta_p^2 = .06, \text{power} = 1.00$. For Interpersonal PSA, $F(1, 583) = 17.81, p < .001, \eta_p^2 = .03, \text{power} = .99$. For Public Speaking PSA, $F(1, 583) = 28.50, p < .001, \eta_p^2 = .05, \text{power} = 1.00$. While there were no differences between courses, taking either a public speaking or fundamentals of communication course significantly increased students' ICC and reduced all four

types of PSA over the course of the semester. Means and standard deviations for all variables are shown in Table 1.

Discussion and Conclusion

Impacts on Well-Being

This study set out to accomplish two broad tasks. First, this study was intended to evaluate whether communication skills improve students' overall wellbeing. Second, it was designed to assess whether or not there is a difference between public speaking and hybrid courses in the extent to which they improve those skills during a single semester course.

The first three hypotheses examined whether Interpersonal Communication Competence (ICC) and Public Speaking Anxiety (PSA) predicted each of three indicators of wellbeing: loneliness, belongingness, and flourishing.

For Loneliness (H1), ICC was the most powerful predictor of loneliness, followed by PSA. Students with higher ICC were less lonely, and students with more elevated PSA were lonelier. When we examined each of the four types of PSA after accounting for ICC, we found that higher levels of Interpersonal PSA predicted higher levels of loneliness, but once Interpersonal PSA was accounted for, none of the other types of PSA (Group, Meeting, and Public Speaking) had any impact on loneliness.

For Belongingness (H2), ICC was once again the most powerful predictor of belongingness, followed by PSA. Students with higher ICC felt like they belonged more, and students with higher PSA had lower perceptions of belonging. When we examined each of the four types of PSA after accounting for ICC, we found that Group PSA predicted the most variance in belongingness, followed by Meeting PSA, but neither Interpersonal nor Public PSA were significant predictors of belongingness. Higher group PSA predicted lower belongingness, but perhaps surprisingly, higher meeting PSA predicted higher belongingness. For Flourishing, students with higher ICC had higher levels of Flourishing, but once Flourishing was accounted for, PSA did not predict significant variance in Flourishing.

The big takeaway from these findings is that interpersonal communication skills have a significant positive impact on overall student wellbeing, particularly for enhancing feelings of belongingness and flourishing and reducing loneliness. While PSA had smaller effects, decreasing Interpersonal and Group PSA did improve student wellbeing, though Public Speaking PSA had no effect and Meeting PSA has a

small but unexpected effect on wellbeing. This has important implications for university campuses that are striving to improve student wellbeing. Since involvement and connection—both in the classroom and in cocurricular activities—are important keys for unlocking academic success and persistence to graduation (Astin, 1997), a course that helps students build the communication skills needed to build those interpersonal connections can potentially contribute to overall academic success as well and improve student well-being in and out of the classroom. This also suggests that universities might want to carefully consider the timing of the introductory communication course; while many universities already expect or even require students to take a communication course in their first year so that students can use those foundational communication skills in their future coursework (Ruiz-Mesa & Broeckelman-Post, 2018), others give students latitude to take the course whenever they wish. Because students tend to languish more in their first year in college (Knoesen & Naudé, 2017), these findings provide another powerful reason to encourage or require students to take their introductory communication course in their first year: to support the overall wellbeing of students in the year that students are most likely to drop out.

Impacts by Course

These findings also underscore the importance of building interpersonal communication skills through the introductory communication course. While we might be tempted to conclude that this suggests that universities should consider emphasizing a hybrid introductory course over a public speaking course as a general education requirement, the findings related to H4 suggest that might not necessarily be the case. Results showed that both the public speaking and fundamentals/hybrid communication courses significantly increased ICC and decreased all four types of PSA over the course of the semester, and there was no effect by course, which suggests that both types of courses are doing a similarly good job of impacting both outcomes. Since both of these courses are taught at the university where this study was conducted using an active learning approach that emphasizes small group activities, discussion, and peer workshops (see Broeckelman et al., 2007), both courses require a lot of student interaction and engagement with one another, so it is possible that the utilization of interpersonal and group communication skills is having as much of an effect than the content related to those skills.

Implications, Limitations, and Areas for Future Research

It is worth noting that this study was conducted before COVID-19, and the implications are perhaps even more critical now that most universities have experienced emergency transitions to remote learning, increased online courses, and dramatically higher levels of student mental health challenges (Conrad et al., 2021). Many students who spent COVID-19 learning online and social distancing are entering college with fewer interpersonal skills and less experience with everyday social interaction than previous cohorts of students, making the opportunity to learn about, build, and practice communication skills even more important than ever since the learning curve is steeper and the benefits for wellbeing might be more impactful than ever. At the same time, many programs have increased their online course offerings, and further research is needed to evaluate whether online courses have the same level of benefit for student wellbeing. Since previous research suggests that online and in-person classes have similar impacts on student public speaking performance and reduce communication apprehension and increase interpersonal communication competence, but have mixed results for communication competence (Broeckelman-Post et al., 2019; Westwick et al., 2015), we expect that the impacts can be similarly strong, but also hypothesize that the degree to which students interact regularly with one another might be an important consideration.

Additionally, the Covid era was accompanied by difficult national conversations about race, privilege, and inclusivity, which in turn continued to highlight the need for inclusive communication practices and intercultural communication skills. While belongingness is an important indicator of well-being, interpersonal communication competence might not be enough to facilitate a sense of inclusivity for all students. While previous research as explored whether the introductory communication course can also help students develop stronger intercultural communication competencies (Broeckelman-Post & Pyle, 2017), those results did not show growth in intercultural skills, which suggests that we need to do more to be intentional about developing those skills to ensure that all students are included in the classroom. Future research should explore the impacts of more intentionally incorporating content related to diversity, equity, and inclusion in the curriculum on overall student well-being. Future studies should also explore the extent to which indicators of student well-being impact student retention and on-time graduation (O’Keeffe, 2013), especially as universities strive to maintain enrollments on the heels of the pandemic as we head into an anticipated enrollment cliff nationwide.

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