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Research Article

Thriving Instead of Surviving: The Role of the Reasoned Action Model in Assessing the Basic Course

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Abstract

The current study investigates the use of the reasoned action model (Fishbein & Ajzen, 2010) as an assessment tool for the basic communication course. Specifically, this study examines how attitude towards behaviors, subjective norms, and perceived behavioral control influence students' behavioral intentions to use communication behaviors taught in the basic course outside of class. In addition to the stated variables in the reasoned action model, this study also examines how knowledge gain influences behavioral intention. Data was collected from 2,228 students enrolled in a basic communication course at a large southwestern university, and a random sample of 666 students was included in the analyses for the current study. Attitudes toward the behaviors, perceived behavioral control, and knowledge gain all positively influenced students' behavioral intention to enact behaviors learned in the basic course, while subjective norms had a negative effect. The theoretical and practical implications discussed provide basic course directors with innovative ways to use the reasoned action model to assess the utility of the communication behaviors taught in basic courses.

Keywords: basic course, reasoned action model, assessment, theory

Introduction

The basic communication course is under siege at many universities, forcing basic course directors and their departments to continuously provide a rationale for preserving their communication course as part of the general education curriculum (Beebe, 2013). According to Hart Research Associates (2016), many universities have recently opted to remove their communication requirement from their general education program completely. Further, 30% of all institutions fail to even include communication skills outcomes in their general education requirements (Hart Research Associates, 2016). The National Communication Association (n.d.) also supports these claims by providing several resources focused on basic course advocacy, stating that, “providing a rationale for the inclusion of the basic course in the general education curriculum presents a significant challenge on many campuses” (para. 1). NCA goes on to postulate that many basic course directors have been able to save their courses by arguing the value that communication provides to students (Advocating for the basic course, n.d.), but this is most effective when there are meaningful assessment results or other data points related to marketable skills and learning backing these claims.

The skills taught in the basic course (i.e. persuasion, collaboration, public speaking, adaptability, audience analysis, etc.) are not only skills employers are seeking (Petroni, 2019), they are also skills that benefit students’ personally. The basic course teaches students to be more skilled communicators, helping them to better navigate their college experience, build meaningful interpersonal relationships, and create a sense of belonging, all of which contribute to retention and on-time graduation (Myers et al., 2016). Further, the basic course incorporates training on presentations, dialogue, and civility; all skills that are central in developing responsible social participation in the world (Morreale & Pearson, 2008; Valenzano, 2018; Ruiz-Mesa & Broeckelman-Post, 2018). Hart Research Associates (2015) report that oral and written communication skills are the most desirable employee attributes, followed by specific interaction skills such as effective teamwork and problem-solving with people from different backgrounds and cultures. Because of this, it is important to ensure that communication departments continue to adapt their teaching and assessment to remind administrators of how the basic course supports university, industry, and societal needs.

However, despite these reports, basic communication courses are still fighting to be seen as relevant in the core curriculum. Learning communication concepts and

transferring them from cognition to behavior gives a competitive advantage for students' when applying for jobs; however, these successes must be supported by data. The communication skills taught in the basic course are obviously paramount for students' personal and professional success (Morreale & Pearson, 2008), but unfortunately, it is difficult to assess these outcomes and benefits when they often occur after the course is completed.

To remain in the general education curriculum, it is imperative for course directors to adapt their approaches for teaching these skills and to continuously search for better ways to assess or explain students' retention and behavior regarding these skills (Valenzano et al., 2014). If researchers and course directors cannot assess student learning and better understand how they take these skills into the real world, the basic communication course may lose its position as a general education requirement (Morreale et al., 2006). But what is interesting, is as a field, we have access to theories and research that helps us explain human interaction, motivation, and decision making, yet we rarely use these concepts in our assessment plans and arguments. Looking inward may be the solution to this problem.

The reasoned action model (Fishbein & Ajzen, 2010) may provide an assessment framework that would allow departments to better articulate the value of communication skills. Using this model would give us data on students' likelihood of using what they learned in the basic course outside of the classroom and after graduation. The goal of the current study is to investigate the effectiveness of using the reasoned action model to assess students' intention to enact communication skills taught in the basic course. Using this persuasion theory as part of an assessment plan may provide departments more data points to argue the importance of communication courses in the core curriculum. Using our own field's theories and research may be how we move the basic course from simply surviving to thriving in the core curriculum.

Review of Literature

The reasoned action model⁴ (RAM) (Fishbein & Ajzen, 2010) postulates three sets of beliefs (behavioral, normative, and control) that influence a person's behavior through cognitive evaluations. These evaluations are formed by individuals when they consider their attitudes toward a behavior, how others may perceive that

1. Fishbein and Ajzen (2010) now refer to the theory of planned behavior (Ajzen, 1991) as the reasoned action model to account for modern ideas but the primary variables remain the same (Perloff, 2014).

behavior, and their perceived ability to control the behavior. Fishbein and Ajzen (2010) argue that beliefs are developed “from a variety of sources, such as personal experience, formal education, radio, newspapers, the Internet and other media, and interactions with friends and family” (p. 20). The evaluations of these beliefs help determine a person’s intent to enact a given behavior and these intentions determine whether people will subsequently engage in the behavior (Ajzen, 1991). An individual’s beliefs serve as the cognitive foundation from which their behavior reasonably follows (Blank & Hennessy, 2012; Fishbein & Ajzen, 2010; Yzer, 2013). Considering these claims, it makes sense that students’ beliefs about the skills and concepts being taught in the basic communication course will influence whether they enact these behaviors later.

RAM is made up of three belief constructs: behavioral beliefs, normative beliefs, and control beliefs. *Behavioral beliefs* are beliefs focused on whether the behavior will result in positive or negative outcomes (Ajzen, 1991; Ajzen, 2002; Hrubes et al., 2001; Perloff, 2014). Behavioral beliefs guide individual *attitudes toward the behavior* (Ajzen, 1991) which refer to a person’s evaluation of whether performing the behavior will be good or bad (Perloff, 2014). *Normative beliefs* consist of others’ expectations of the behavior and how motivated an individual is to conform to the social expectations (Ajzen, 1991; Ajzen, 2002; Hrubes et al., 2001). Normative beliefs influence *subjective norms*—the pressures people feel to perform or refrain from performing said behavior (Perloff, 2014). The final construct, *control beliefs*, are perceptions of interaction elements that may support or limit individuals from performing behaviors (Ajzen, 1991). Control beliefs also involve perceptions regarding the degree of influence certain factors have on an individual’s behavior (Ajzen, 1991; Ajzen, 2002; Hrubes et al., 2001). These perceptions guide *perceived behavioral control*, or “people’s perception of the ease or difficulty of performing the behaviour of interest” (Ajzen, 1991, p. 183). Fishbein and Ajzen (2010) also explain people can have actual control over a behavior when they possess the needed skills and a non-constraining context (Yzer, 2013).

The three constructs of RAM (attitude toward the behavior, subjective norms, and perceived behavior control) influence an individual’s behavioral intentions. *Behavioral intention* is a person’s readiness to perform the behavior (Yzer, 2013); these then predict the actual enactment of the observable behavioral response. People with positive attitudes toward a behavior, perceptions of favorable subjective norms, and greater behavioral control, are likely to have stronger intentions to perform the behavior (Ajzen, 1991). This would then prompt individuals to perform the given

behavior, as behavioral intentions are the strongest precursors to perform actual behavior (Ajzen, 1991; Perloff, 2014; Yzer, 2013). Therefore, measuring behavioral intention may be beneficial for assessment since it is very difficult to assess students' actual behavior after they complete the course or graduate.

RAM is a useful and valid model to predict behavioral enactment and has been utilized in various contexts across the communication discipline (Hale et al., 2002; Johnston & White, 2003; Wang, 2009). However, RAM is rarely used in the instructional communication or assessment contexts. Henningsen et al. (2011) successfully compared the goals—plans—actions model and the theory of planned behavior (name of RAM prior to 2010) to predict students' conversations with teachers about grades. Additionally, Burns et al. (2017) found the theory useful when examining how teacher confirmation behaviors influence the likelihood of a student communicating with an instructor via students' attitudes, subjective norms, and perceived behavioral control related to communicating with that same instructor. However, these studies did not examine how attitudes, subjective norms, and perceived behavioral control influence the goals and outcomes claimed in courses (enacting competent communication behaviors) and they also failed to address learning or knowledge gain, instead focusing on specific teacher and student communication behaviors.

These previous studies (Burns et al., 2017; Henningsen et al., 2011) provide evidence that RAM is useful in an educational setting, and it may be helpful to basic course administrators and other stakeholders as they strive to find new ways to assess the value, impact, and outcomes of core communication courses. RAM may be a useful framework in this context, because it provides a model for predicting a student's enactment of the behaviors we teach via their attitudes, norms, behavioral control, and behavioral intention. However, the current RAM model does not include the impact of knowledge gain on an individual's behavioral intention. Since the focus of any course is on knowledge acquisition in some form, it is important to consider the impact knowledge gain from the basic course has on a student's behavioral intention to enact the behaviors taught in the course. With this in mind, the second purpose of the study is to fill the void in the literature by exploring these specific associations.

Examinations of how to predict and/or improve the effective dissemination and retention of knowledge have increased in both frequency and focus over the last half-century (Farris et al., 2018), in a variety of fields besides communication (Sohoni et al., 2013; Titsworth et al., 2015; Young & Bippus, 2008). Said literature often

implicitly and sometimes explicitly supports the notion that cognitive learning can and will affect behavioral change. However, there are mixed results on whether knowledge plays a role in predicting behavioral intention. Ajzen et al. (2011) offered a poignant critique of this assertion, suggesting that some scholars have taken issue with the assumption that knowledge is a sufficient condition for influencing individuals' behavioral intention.

Ajzen et al. (2011) argue that, "the possession of accurate information is no guarantor of wise judgments, nor is misinformation necessarily a precursor of bad decisions" (p. 101). Although we do not discount this assertion, it is important to recognize that knowledge is necessary in the context of performing specific taught behaviors. In particular, we argue that knowledge is a prerequisite in instances when the behavior measured in the model is related to course content. Ajzen et al. (2011) seem to agree that the type of knowledge may be considered influential depending on the circumstances; thus, the authors did not completely disregard the role of knowledge in affecting behavioral change.

In their study, Ajzen et al. (2011) reported no predictable relationship between accurate information and behavioral change. Even so, the authors conceded the "possibility" that, "on occasion," accurate information may correspond to the behavioral, normative, or control beliefs that individuals hold and play a role in behavior change (p. 115). This concession was followed up by specific knowledge qualifications, including accurate knowledge being directly related to the desired behavior itself and the implications of its control and normative characteristics. It logically follows, then, that if accurate knowledge meets those qualifications, it may yield predictive utility in RAM. As stated previously, an individual's beliefs serve as the cognitive (i.e. knowledge) foundation from which their behavior reasonably follows (Blank & Hennessy, 2012; Fishbein & Ajzen, 2010; Yzer, 2013). The instructional setting is a context in which these qualifications are typically met. Consequently, communication instructors provide accurate knowledge of fundamental communication concepts directly related to behaviors and spend time practicing these skills and providing feedback to students about how to improve their competence with these skill sets.

Lane et al. (2018) synthesized researchers' conceptualization of learning from various disciplines and referred to the learning process as "a relatively stable or permanent change in behavior as a result of reinforced practice or experience" (p. 224). Therefore, true learning entails change, particularly in behavior (Beebe et al., 2013). Considering this fundamental principle, instructional communication scholars

remain concerned with predicting and understanding learning outcomes (Farris et al., 2018), and RAM may provide different types of data points to measure these outcomes. In light of the decades of work to develop RAM (Fishbein & Ajzen, 2010), especially with regard to the (un)predictability of knowledge (Ajzen et al., 2011), basic courses appear to be a unique context for its application, particularly because of the type of knowledge it fosters and its clear connection to behavioral learning. In other words, students' knowledge gain from course content may be associated with the exogenous variables in the model and may also predict students' behavioral intention to engage in the fundamental communication skills learned in the basic communication course. Based on this literature the following hypothesis and research question are proposed:

H1: a) Attitudes toward, b) subjective norms regarding, and c) perceived behavioral control related to communication skills learned in the basic communication course will be positively associated with students' behavioral intention to engage in those behaviors.

RQ1: Is knowledge gain related to communication positively associated with students' behavioral intention to engage in communication skills learned in the basic communication course?

Methodology

Participants

Participants ($N = 2228$) were recruited from a basic communication course at a large southwestern university over the course of an academic year. To reduce the likelihood of overpower in the analyses, a random sample of 666 students was identified and included in the analyses. Most participants identified as female (64.5%), while a smaller number of participants identified as male (35.5%). The sample was overwhelmingly classified as freshmen students (65.8%), followed by sophomores (19.9%), juniors (9.4%) and seniors (4.8%). The ethnic identity of the students in the sample was: 9.1% African American or Black American; 2.7% Asian or Asian-American; 52.6% Caucasian, non-Hispanic; 30.4% Hispanic or Latinx, and 5.1% Other. The majority of participants were enrolled in a fully face-to-face version of the course (94.5%), while a small number of students were enrolled in a hybrid

version of the course (5.5%) wherein the students learned about the cognitive objectives in an online environment and applied the content and learned behavioral outcomes in a face-to-face classroom.

Procedures

The university's Institutional Review Board deemed this project exempt. The data reported here are part of a larger dataset that students complete in a pretest-posttest, online survey design via *Qualtrics*. Students completed the pretest items within the first 12 class days of the semester, while posttest data was collected within the last week of regularly scheduled classes. Students earn ten points of their course grade for completing the pretest-posttest items; this is assessed as a completion grade and students earn all points for completing both sets of items. After matching each student's pretest and posttest items, all data were de-identified and only the aggregate data will be reported in this manuscript.

Measures

Attitudes, subjective norms, perceived behavioral control, behavioral intention were all constructed by the first and second authors based on the reasoned action model items developed by Fishbein and Ajzen (2010). The reasoned action model items were measured at the posttest administration of the questionnaire during the last several weeks of the semester, so that students would be better able to articulate their attitudes, subjective norms, and perceived behavioral control regarding the communication skills taught in the basic communication course. The students' knowledge of communication was measured at both the pre-test (during the first week of the semester) and the post-test administration. Unless otherwise noted, each variable was measured using a 7-point, Likert-type scale. The following section will describe the measures in more detail.

Attitudes Toward Communication Behaviors. This scale included ten items that assessed students' behavioral beliefs regarding the importance of the communication skills they learned in the basic communication course (see Appendix A). Higher scores on this scale suggest students find the communication behaviors important to their lives. Sample items included "The skills I learned in [the basic communication course] apply to my daily life," "Using communication skills in my future job is important," and "Using what I learned in [the basic communication course] will improve my relationships." The mean for the sample was 5.03 ($SD =$

1.06), while the reliability estimate was .86. We conducted a confirmatory factor analysis to ensure the items were related to the latent variable; results suggest the data fit the model well: $\chi^2(31) = 512.56, p < .001$, RMSEA = .08, CFI = .97, TLI = .96, SRMR = .03.

Subjective Norms Regarding Communication Behaviors. Ten items were developed to operationalize students' normative beliefs regarding their enactment of communication skills learned in the basic communication course. Sample items included "The professors in my major expect me to use effective communication skills I learned in [the basic communication course]," "I use the skills I learned in [the basic communication course], because employers expect me to communicate effectively," and "My family thinks it is important to use effective communication skills I learned in [the basic communication course]." The internal reliability of the measure was excellent ($\alpha = .90$), and the mean for this sample was 5.14 ($SD = 1.16$). The confirmatory factor analysis for this latent variable suggests the data fits well: $\chi^2(25) = 428.58, p < .001$, RMSEA = .09, CFI = .97, TLI = .95, SRMR = .04.

Perceived Behavioral Control. Ten items were created to measure students' perceptions of their control beliefs related to the communication skills learned in the basic communication course. Sample items included "I'm not confident that I can apply the skills I learned in [the basic communication course] in my daily life," "I will use the skills I learned in [the basic communication course], because I'm outgoing and sociable when communicating with others," and "I will still use the skills I learned in [the basic communication course] even if I'm not confident in my ability to communicate." The mean for the students in the sample was 5.40 ($SD = 1.21$) with an internal reliability estimate of .94. The confirmatory factor analysis suggests the items of the scale measure the latent variable fairly well: $\chi^2(31) = 512.56, p < .001$, RMSEA = .08, CFI = .97, TLI = .96, SRMR = .03.

Behavioral Intention. Six items were created to measure students' intent to enact the communication skills they learned in the basic communication course. Sample items for this measure included: "I intend on using the skills I learned in [the basic communication course] in my relationships," "in my daily life," and "to be a better employee." The mean for the sample in the current study was 6.0 ($SD = 1.30$). The internal reliability estimate was high ($\alpha = .90$), and the confirmatory factor analysis suggests the data fit the model well: $\chi^2(5) = 94.90, p < .001$, RMSEA = .09, CFI = 1.0, TLI = .98, SRMR = .01.

Knowledge of Communication. Knowledge of communication was operationalized by 25 multiple-choice items previously published by Burns et al.

(2017). Students were not allowed to use their textbooks or course notes during the administration of the pretest and posttest. Scores were calculated by totaling one point for every correct answer and zero points for every incorrect answer. Thus, the lowest score a student could earn was a zero, while the highest score was a 25. A difference score was created by subtracting the students' mean pretest score from the students' mean posttest score. Consequently, the variable of interest for the current study was conceptualized as knowledge gain from the beginning to the end of the semester. We conducted a paired samples *t*-test to determine whether retaining the difference score would be appropriate for inclusion in the model. There were significant differences between the means on the pretest and posttest knowledge measures: $t(2227) = 8.37, p < .001$. The mean of the sample for the pretest was 12.34 ($SD = 3.46$), while the mean of the sample for the posttest was 13.09 ($SD = 4.25$). Cohen's *d* was used to determine the effect size of the difference. The results suggest ($d = 0.2$) the significant difference in knowledge from the beginning to the end of the semester was small (LeCroy & Krysik, 2007). The internal reliability of the pretest was .59, and the reliability estimate of the posttest was .74. Although the pretest reliability estimate is below the general standard of acceptability in the discipline, previous research has argued that these would be satisfactory based on their dichotomous nature (i.e., right or wrong response; Burns et al., 2017; Kehoe, 1995).

Results

Preliminary Analysis

Before engaging in hypothesis testing, the second author screened the data for outliers and evaluated the normality assumptions via visual inspection of histograms and by examining the skewness and kurtosis values of the variables. Additionally, multicollinearity was evaluated by examining the correlations between the predictor variables and tolerance and variance inflation factor (VIF) values. Although there is some evidence of multicollinearity based on the high correlation values (see Table 1), there are several reasons we left all four predictors in the model. First, scholars suggest that multicollinearity might be an issue if the tolerance value is below 0.01 (Afifi & Clark, 1984). Second, other researchers suggest that a VIF value of above ten would indicate a multicollinearity issue (Neter et al., 1985). Since none of the tolerance or VIF values cross these threshold scores, we made a methodological decision to retain the four predictors in the model. Finally, Miles and Shelvin (2011) suggest only removing predictors that are not theoretically meaningful in the event of

multicollinearity. Consequently, since the three reasoned action model variables (e.g., attitudes, subjective norms, perceived behavioral control) were highly correlated, we chose to preserve the model proposed and validated by Fishbein and Ajzen (2010). Further, the valence of the regression coefficients is in the predicted direction as proposed by Fishbein and Ajzen (2010) and confirmed in subsequent literature testing the reasoned action model – which is another indicator that multicollinearity should not be of major concern (Schroeder et al., 1990).

Table 1
Bivariate Correlations between Study Variables

Variable	1	2	3	4	5
1 Attitudes	1	.90**	.87**	.04	.76**
2 Subjective Norms		1	.91**	.03	.76**
3 Perceived Behavioral Control			1	.10*	.83**
4 Knowledge Gain				1	.14**
5 Behavioral Intention					1

Note. ** $p < 0.01$, * $p < .05$

Primary Analyses

The hypothesis in the current study was tested using a multiple regression analysis with attitudes, perceived behavioral control, subjective norms, and knowledge gain in the model as the predictor variables and behavioral intention as the outcome variable. The results suggest the model significantly predicted students' behavioral intention to enact the communication behaviors learned in the basic communication course: $F(4, 662) = 389.57, p < .001$. The predictor variables in the model accounted for approximately 70% of the variance in the outcome ($R^2_{adj} = 0.70$). Perceived behavioral control was a significant predictor of behavioral intention, $t(662) = 13.46, p < .001$. For every increase of 1 in perceived behavioral control, students in the sample reported an increase of 0.81 in behavioral intention (95% *CI*: 0.69, 0.93) while holding the other predictor variables in the model constant. The attitude variable was also a significant predictor in the model, $t(662) = 4.79, p < .001$. Holding the other predictors in the model constant, for every increase of 1 in student attitude, behavioral intention was predicted to increase by 0.30 (95% *CI*: 0.17, 0.42). Subjective norms was also a significant predictor of student behavioral intention, but in the opposite direction we anticipated, $t(662) = -2.23, p = .03$. Holding the other predictors in the model constant, for every increase of 1 in students' perceived subjective norms, student behavioral intention was predicted to decrease by 0.15 (95% *CI*: -0.29, -0.02). Thus, there was partial support for the hypothesis in our study. Knowledge gain over the course of the semester was a significant predictor of student behavioral intention to enact the communication skills learned in the basic communication course, $t(662) = 2.91, p < .01$. For every increase of 1 in knowledge gain, student behavioral intention was predicted to

increase by 0.49 (95% *CI*: 0.16, 0.82) while holding the other predictor variables in the model constant. Please see Table 2 for the standardized beta weights for the predictors in the model.

Table 2
Standardized Beta Weights for Multiple Regression Analysis

	β	SE
Attitudes	0.24	0.06
Subjective Norms	-0.13	0.07
Perceived Behavioral Control	0.74	0.06
Knowledge Gain	0.06	0.17

Discussion

The primary goal of this study was to investigate students' behavioral intention to enact communication skills gained in the basic course. Specifically, we examined how the constructs of RAM (attitude towards the behavior, subjective norms, and perceived behavioral control) along with knowledge gain about communication influenced students' behavioral intention. The findings of this study provide both theoretical and practical implications for basic course administrators and instructors to consider when assessing their courses and making arguments for their effectiveness.

Explanation of Results

The results of the current study support previous research using RAM to predict behavioral intention (Ajzen, 1991; Fishbein & Ajzen, 2010). We found large, positive associations between students' perceived behavioral control and their behavioral intention to engage in the communication behaviors learned in the core communication course. In other words, when students perceived themselves to be more capable and efficacious in their communication skills, they were also more likely to report greater behavioral intention to enact those behaviors outside the classroom. This supports extant literature that suggests students who have greater self-efficacy are also likely to have greater communication competence and higher course grades in communication classes (Dwyer & Fus, 2002; Rubin et al., 1997). Additionally, students in the current study were more likely to report greater behavioral intention to enact communication behaviors learned in the basic course

when they also reported positive attitudes towards what they were learning. This finding is consistent with existing research using RAM to predict behavioral intention (Ajzen, 1991). This may be explained by previous research that suggests students are likely to spend more time practicing behavioral skills (Dornan & David, 2000) and enacting behaviors they learn (Newble, 2000) when they have positive attitudes toward those behaviors. Furthermore, this supports the notion that students' affective and behavioral learning are associated (Thweatt & Wrench, 2015).

Surprisingly, subjective norms negatively predicted students' behavioral intention to engage in the communication behaviors learned in the course. Other scholars have argued that significant predictors and direction in RAM are dependent on a variety of factors including context, past experience, timing, and the behavior itself (Bracchittam, 2006; Burns et al., 2017; Doukas et al., 2004; Fingerson, 2005; Johnston & White, 2003). The likely explanation, then, for this negative association may be related to autonomy. Students may feel that they are the primary decision makers when it comes to their communication skills not their family and peers. This may mean students are resistant to suggestions coming from family, professors, friends, etc. Additionally, the course this data was collected from does emphasize that it is the individual who has the power to change and improve their communication skills. Another explanation for this finding may be that if students' family or friends think communication skills are not important and engage in incompetent communication themselves, this could motivate students to behave differently in an attempt to engage in more prosocial communication. Finally, the construction of the scale may have also contributed to these results. The scale items only asked students about their normative beliefs based on influences of their parents, friends, classmates, professors, and employers. Future scholars interested in using a similar scale should consider altering the items to be more inclusive of other influences that help students develop their normative beliefs about what they are learning in the basic communication course.

Finally, we found that greater knowledge gain across the semester positively predicted students' behavioral intention to engage in communication skills learned in the basic course. This finding corresponds with Ajzen et al.'s (2011) assertion that there are specific contexts in which accurate information is a necessary condition for behavior change to occur. Consequently, students may be less likely to engage in the communicative behaviors they are learning in the basic course if they fail to have a good grasp on the underlying cognitive information about those behaviors.

Though the effect size of knowledge gain from the start of the semester to the end was small in this study, it was still significant. As LeCroy and Krysik (2007) state, “even if an effect size appears small it might still have important practical implications” (p. 245). Thus, the practical implication in this case is that students who have greater knowledge gain are more likely to intend to engage in communication behaviors learned in the basic course. It is also important to acknowledge that the time of the semester the post-test was given and the completion of the survey does have an insignificant impact on students’ grades. This may have contributed to the small effect size in the current study. Students tend to be busy with final projects and exams at the end of the semester and they may not have taken the post-test as seriously because of the small contribution to their final grade. Future research should continue to examine the impacts of knowledge gain on behavioral intention to enact the communication skills learned in the basic communication course along with students’ actual behavior after the class ends.

In addition to having pragmatic consequences, this result seems to support previous research that has consistently found a positive association between cognitive and behavioral learning outcomes (Houser & Hosek, 2018). However, our study adds to the scholarly literature as this is the first, to our knowledge, to demonstrate that students will be more likely to want to enact the behaviors when they leave the classroom. Finally, and most importantly, this aids in our understanding of the role knowledge gain may play in predicting communicative behavioral intention, and eventual enactment of behavior. Thus, the current study contributes to our theoretical understanding of RAM by suggesting that the communication classroom is a context in which knowledge of the behavior prompts greater likelihood for students to intend to enact the communication skills they are learning. In addition, by pairing the behavioral intention results outlined in this model with significant knowledge gain results that most assessment reports require, departments will have more data points for assessment and richer arguments supporting the value of the basic communication course

Practical Implications

This study’s findings have led to many meaningful practical implications for basic course administrators to showcase the value of their courses. As Morreale et al. (2006) describes, without evidence of successful student learning from assessment, the basic course is and will continued to be threatened. Thus, the data from the

current study may be helpful in demonstrating to university stakeholders and decision-makers that the course is actually doing what it intends to do and has long lasting impact. Specifically, by predicting behavioral intention, basic course administrators would be able to showcase that the course material and skills taught and gained have a high likelihood to be enacted after course completion, giving more value to often lifeless assessment reports. Considering the importance of students' enactment of these behaviors for their personal and professional lives (Morreale & Pearson, 2008; Ruiz-Mesa & Broeckelman-Post, 2018; Valenzano, 2018), the findings of the current study provide additional legitimacy for requiring the basic communication course to be housed in general education curricula. The results also provide evidence that students are engaging in a learning experience that goes further than knowledge recall. Essentially, RAM can provide theoretically based claims that enable us to predict students' likelihood of enacting the skills they are learning about in their basic course classrooms. RAM provides a solution to the problem related to assessing students' behaviors after they have completed the course. Understanding how attitudes, subjective norms, and perceived behavioral control, along with knowledge gain, play a role in predicting students' behavioral intention provides additional data points for the basic course's value in general education curriculum. If basic course administrators can show that students see the value in the course, believe they can engage in the behaviors, and intend to use the skills and knowledge taught to gain employment and improve their personal lives, they will not only survive university threats, they will thrive in our current legislative environment focused on transferable skills (Valenzano, 2018). However, for this to occur, basic course directors should consider innovative methods for data collection in order to provide evidence to university stakeholders (i.e., general education committees, administration) that the basic communication course accomplishes what it intends; using theoretically driven methods such as what the authors have done in the current manuscript is one way to accomplish this.

The second major practical implication relates to training instructors who teach the basic course. Many communication programs value teacher training but rarely consider the persuasive underpinnings of teaching. Implementing training on how a persuasion theory, like RAM, plays a role in teaching will provide instructors with insight on how their communication about the course material impacts whether students intend to enact the behaviors or not. Training instructors on how to create messages that focus on positive attitudes towards the behaviors taught and how to increase students' perceived behavioral control about those behaviors will result in a

higher likelihood of students performing the behaviors outside of class and these results would appear in the assessment data. Further, continuing to train instructors in instructional communication strategies for disseminating knowledge may also contribute to students' behavioral intention according to the results of this study. Researchers should consider examining instructionally based exogenous variables that influence attitude towards the behavior, subjective norms, and perceived behavioral control in future studies to provide more insight on what teaching behaviors instructor training programs should include. For example, Burns et al. (2017) revealed that teacher confirmation behaviors do influence RAM variables in the classroom and there may be others that influence students' behavioral intentions and can be included in instructor training programs. Overall, RAM is one of the most validated theories in behavioral research (Hale et al., 2002) and the basic course would benefit from instructors taking time to learn how to better influence behavior change in our students and seeing how knowledge gain fits in this equation. Good assessment outcomes start with good teaching (LeBlanc et al., 2011), and good teaching starts with good training (Meyer et al., 2007). For the basic course to survive in general education we must start with the instructors on the front line who influence students' attitudes and control beliefs about communication and train them accordingly.

Future Directions and Limitations

Although the findings from the current study contribute to the literature in instructional communication and the study of the basic communication course, we should interpret them with the following limitations in mind. First, the data was primarily cross-sectional in nature. Although we have some data about knowledge gain across time, the other predictors in the model were measured at the same time as the outcome. Therefore, causal claims cannot be made regarding the associations of interest in the current study. Additionally, we only collected data from one institution's basic communication course. Although we recruited a large sample and the results are statistically and practically meaningful, the generalizability of the findings would be greater if a more diverse pool of students from various institutions were recruited for the study. Thus, future researchers should aim to minimize these limitations through using different methodological choices including a more generalizable sampling technique and implementing a longitudinal survey design.

The results of this study have provided many possible future research directions for basic course scholars that would only strengthen arguments for the value of the course and provide more data points. One important avenue for future research would be focused on how online teaching impacts a student's behavioral intention. Although the students in this sample were enrolled in a face-to-face version of the course, with the proliferation of online learning, especially post COVID-19, many basic communication courses are delivered in online environments as well. Therefore, scholars should investigate whether course format (online vs. face-to-face) influences students' attitudes, subjective norms, or perceived behavioral control. Additionally, future researchers should explore whether students' behavioral intention to enact the communication skills learned in the basic communication course differs based on the format of the class.

Additionally, using longitudinal designs to track students after they complete the course would allow for self-reported behavior to be measured. Future research may consider ways to investigate and measure students' behaviors post course completion to demonstrate the connection between behavioral intention and actual behavior. If basic course administrators can provide evidence of actual behavior change and implementation of effective communication after completion of the course, this would not only strengthen the need for communication education in the core curriculum, but also make communication programs assessment leaders at universities.

The basic communication course is still fighting for survival but has potential to thrive because of its transferable benefits post-graduation. Basic course scholars must continue to find ways to track their courses' impact and progress; using our own theories may be a way to strengthen basic course assessment. Many of the basic course's most meaningful outcomes happen after students leave the classroom, these outcomes are difficult to measure. The reasoned action model provides basic course directors with more data points to showcase the value of communication skills and provides stronger evidence of the likelihood of students using these skills after the course is complete. The reasoned action model gives basic course administrators an advantage because it provides meaningful data that shows more than knowledge gain can show on its own. Adapting assessment techniques to show the value of the basic course in relation to students' likelihood to use the skills would move the basic communication course from surviving to thriving, and set the new standard in educational assessment.

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Appendix A

Theory of reasoned action survey items

Behavioral Belief Strengths

1. Using what I learned in my communication course will improve my relationships.
2. Using the skills I learned in my communication course will help me get a job in the future
3. The skills I learned in my communication course will help me be successful in my major.
4. The skills I learned in my communication course will be beneficial in my future job.
5. I believe the skills I learned in my communication course apply to my daily life.

Outcome Evaluations

1. Using the communication skills I learned in my basic communication course with my relationships is not important/important.
2. Using the communication skills I learned in my basic communication course to find a future job is helpful/not helpful.
3. Using the communication skills I learned in my basic communication course to help my major courses is not important/important.
4. Using the communication skills I learned in my basic communication course in my future job is not important/important.
5. Using the communication skills I learned in my basic communication course in my daily life is helpful/not helpful.

Normative Belief Items

Injunctive Normative Beliefs

1. My family thinks it is important to use the effective communication skills I learned in my communication course.
2. My friends think it is important to use effective communication skills I learned in my communication course.
3. My classmates think it is important to apply the effective communication skills I learned in my communication course.
4. My friends think it is important to use effective communication skills I learned in my communication course.

5. The professors in my major expect me to use effective communication skills I learned in my communication course.
6. Employers expect me to use effective communication skills I learned in my communication course.

Motivation to Comply

1. I use the skills I learned in my communication course, because my parents expect me to communicate effectively.
2. I use the skills I learned in my communication course, because my friends expect me to communicate effectively.
3. I use the skills I learned in my communication course, because my classmates expect me to communicate effectively.
4. I use the skills I learned in my communication course, because my professors in my major expect me to communicate effectively.
5. I use the skills I learned in my communication course, because employers expect me to communicate effectively.

Perceived Behavioral Control Items

Control Belief Strength

1. I'm not confident that I can apply the skills I learned in my communication course to my daily life.
2. I only use the skills I learned in my communication course because I'm doing well in the class.
3. I will not use the skills I learned in my communication course, because I don't view myself as a good communicator.
4. I will not use the skills I learned in my communication course, because I'm shy and nervous when communicating with others.
5. I will use the skills I learned in my communication course, because I'm outgoing and sociable when communicating with others.

Power of Control Factor

1. I will still use the skills I learned in my communication course even when I'm feeling shy and nervous when communicating with others.
2. I will still use the skills I learned in my communication course despite viewing myself as a poor communicator.
3. I will still use the skills I learned in my communication course even if I'm not doing well in the class.

4. I will still use the skills I learned in my communication course even if I'm not confident in my ability to communicate.
5. I will still use the skills I learned in my communication course even when I'm not feeling outgoing and sociable.

Behavioral Intention

1. I intend on using the skills I learned in my communication course in my relationships.
2. I intend on using the skills I learned in my communication course in my major classes.
3. I intend on using the skills I learned in my communication course to help me find a job in the future.
4. I intend on using the skills I learned in my communication course in my daily life.
5. I intend on using the skills I learned in my communication course to be a better employee.
6. I intend on using the skills I learned in my communication course to be a better communicator.