Basic Communication Course Annual

Volume 33 Article 8

2021

'Public Speaking is a Skill that Everyone Needs No Matter What': Exploring Peer Perceptions toward Students on the Autism Spectrum in Basic Course Classrooms

Jill C. Underhill
Marshall University, underhillj@marshall.edu

Victoria Ledford
University of Maryland, vledford@umd.edu

Hillary M. Adams
Marshall University, brown235@marshall.edu

‘Public Speaking is a Skill that Everyone Needs No Matter What’: Exploring Peer Perceptions toward Students on the Autism Spectrum in Basic Course Classrooms

Cover Page Footnote

An earlier version of this manuscript was presented at the National Communication Association's annual convention in November 2020. We would also like to thank the reviewers for their insightful recommendations.

Research Article

‘Public Speaking is a Skill that Everyone Needs No Matter What’: Exploring Peer Perceptions toward Students on the Autism Spectrum in Basic Course Classrooms

Jill C. Underhill, Marshall University
Victoria Ledford, University of Maryland
Hillary M. Adams, West Virginia Autism Training Center, Marshall University

Abstract

The interactive nature of basic communication courses creates an ideal environment for students to form connections with their peers. Unfortunately, when students on the autism spectrum display atypical communication and behaviors, their classmates often reject and isolate them. Basic course programs can change these social dynamics through building connected classrooms and proactively fostering inclusion. Understanding peer perceptions and willingness to engage with autistic students is necessary, as peers play a central role in creating connected classrooms. This investigation explores basic communication course peers’ knowledge of how autism can influence students; peer perceptions of full inclusion of students on the autism spectrum in the basic course; and peers’ desire to learn more about how to support autistic classmates in basic communication courses. Open-ended responses (N = 216) to an online survey revealed an awareness that students on the autism spectrum can face a variety of obstacles in communication classrooms. Peers also expressed a strong preference for inclusion of autistic students, but often without expectation for their full participation in the basic course. Too many of these students held stigmatizing beliefs about their autistic peers that need to be

challenged and changed through intervention. Finally, most respondents indicated a desire to learn more about how to effectively communicate with and become an ally to autistic peers on their campus. Implications and strategies to promote inclusivity in basic course programs are discussed.

Keywords: inclusion, peer perceptions, autism spectrum, basic course, oral communication

Introduction

An estimated 443,000 students on the autism spectrum will pursue a college degree in 2020, largely due to mainstreaming and increased transitional support within secondary education (Cox, 2017). Moreover, enrollment of students on the autism spectrum in postsecondary education is growing and expected to outpace nearly every other demographic in the coming decade (Bakker et al., 2019; Cox, 2017). Most institutions are not prepared for an influx of students on the autism spectrum (Jackson et al., 2018). With a waiver of the many legally mandated accommodations and resources required at secondary levels (HEOA, 2008), the types of supports many students on the autism spectrum need to be successful are no longer readily available to them. In particular, the social dynamics of college environments often prove to be the most challenging aspect for autistic students[3] to navigate without support (Ashbaugh et al., 2017; Elias & White, 2017).

Although there is a myriad of reasons why students on the autism spectrum face adversity in educational contexts, scholars have identified the "hidden curriculum" as a central obstacle (Myles et al., 2004). The hidden curriculum is a term used to describe the implicit social norms that govern a classroom, for which neurotypical students rarely need instruction to follow. An inability to perceive and conform to the hidden curriculum often leads to social rejection and isolation in the classroom (Gerhardt & Holmes, 2005). Although institutional-level supports can be implemented to help students on the autism spectrum learn to navigate hidden

[3] Note on language: We use both the phrase "on the autism spectrum" and the term "autistic" in this manuscript. Research has shown that many members of the autism community prefer identity-first language (autistic individual), while professional communities tend to use person-first language (person with autism; Kenny et al., 2016). Research and conversations with our own students indicate that while some prefer the term autistic, many also want the term "autism spectrum" used because it explicitly reflects neurodiversity.

curriculums, more research is needed to understand how to effectively "extend the sphere of intervention" to instructors and peers (Gerhardt & Holmes, 2005).

Research indicates that students' knowledge, beliefs, and attitudes toward autistic peers are not wholly inclusive. In classroom and educational contexts, students seem to express more inclusive attitudes when considering having autistic students on their campus more broadly and less inclusive attitudes about having autistic students in their classes (Nevill & White, 2011). Reasons for such stigmatizing attitudes may stem from a lack of knowledge about autism (Gillespie-Lynch et al., 2015; Huws & Jones, 2010; Morrison et al., 2019), beliefs that autistic peers' communication behaviors are "atypical" (Sasson et al., 2017), or a student's belief that working with autistic peers in their classes could negatively affect their academic performance (Underhill et al., 2019). Together, this research suggests a need to better understand the roots of exclusionary attitudes toward students with autism.

The basic course presents an excellent opportunity to foster acceptance and inclusivity early in students' college careers. However, as Joyce et al. (2019) found in their synthesis of research published in the *Basic Communication Course Annual,* little to no research has examined how students with disabilities may experience a basic course classroom. The authors argue that there is a "serious chasm in the inclusivity of the basic course" and urge researchers to "focus on disabilities that could specifically influence a student's experience in the basic course classroom" (Joyce et al., 2019, p. 26). Simultaneously, one of the core competencies identified for introductory communication courses is the ability to adapt to others, which means being able to consider the diversity of human characteristics and adapt communication as needed (National Communication Association, Task Force on Core Competencies, 2013). The introductory communication course is therefore an ideal location for basic course directors to guide their instructors in building students' capacity to adapt to and interact with different types of peers.

This study examines open-ended survey responses to explore peer perceptions of autistic students within the basic course. We review literature surrounding connected classrooms and peer support and frame our approach to this research through considering three primary sources of peer support: knowledge, beliefs, and attitudes. Our qualitative analyses aim to shed light on the nature of such knowledge, beliefs, and attitudes, therefore illuminating possible spheres for intervention within the basic course.

Literature Review

Peer Support and Inclusion

College students on the autism spectrum and their families frequently report that the student's greatest unmet needs are social support and peer mentoring (Elias & White, 2017; Jackson et al., 2018). Research shows that many autistic students want friends and romantic partners to be part of their college experience (Ashbaugh et al., 2017). Students on the autism spectrum often struggle to increase their social networks on campus (de Boer & Pijl, 2016), but the basic course classroom offers a space to foster this opportunity. Thus, this study focuses on understanding peer perceptions and support of autistic students in basic course classrooms.

Although research has shown that peers feel positively about having students on the autism spectrum on campus, their feelings have been mixed about having those students in their classes (Nevill & White, 2011). Peers are often less willing to interact with individuals who display atypical verbal and nonverbal communication (Sasson et al., 2017). First impression data has revealed that peers rate autistic adolescents and adults as being more awkward, less attractive, and less likeable than matched neurotypical individuals in a control group (Morrison et al., 2019; Sasson et al., 2017; Sasson & Morrison, 2019). However, these perceptions were largely driven by characteristics of the raters, especially lack of knowledge about and stigma towards autism (Morrison et al., 2019). These negative perceptions too often lead to rejection, alienation, and isolation for autistic people across the lifespan (Sasson et al., 2017).

Research has also shown mixed feelings about interacting with autistic students in communication courses, and this offers a challenge for basic course programs seeking to foster inclusion (Underhill et al., 2019). Whereas formalized peer-mediated interventions and campus-based support groups are needed resources, social support and relationship building can also be practiced in our classrooms. Although an academic course is not the only place to locate viable social options, the structure, size, and nature of many basic course classrooms create unique opportunities for students to develop relationships. Instructors of the basic course can model and teach peers how to create more inclusive classroom environments.

Peer Support and a Connected Basic Course Classroom

A connected classroom climate, one that fosters a sense of belonging and supports opportunities for peer connection, can have significant effects on academic, behavioral, and psychological outcomes for all students (Dwyer et al., 2004). As Sollitto et al. (2013) point out, peer relationships within classrooms are fundamental to student integration. It is especially important to note that "when students report at least one quality relationship with a classmate, they are more connected to the class as a whole…" (Sollitto et al., 2013, p. 326). To create a wholly inclusive classroom, basic course instructors should not only focus on creating a connected classroom climate for all students but should intentionally create connection opportunities for students who may enter the classroom feeling isolated.

As such, connected classrooms may be especially important for autistic students who experience isolation and peer rejection on campus and within their classrooms. College students on the autism spectrum may enter college already feeling lonely and isolated (Müller et al., 2008). Evidence from secondary education classrooms also suggests that autistic students are more likely to be socially rejected than their neurotypical peers (de Boer & Pijl, 2016). As they step foot on campus, feelings of isolation and alienation may grow, especially since college students with autism frequently report having fewer than three friends on campus (Jackson et al., 2018) and lacking meaningful peer connections (Ashbaugh et al., 2017; Elias & White, 2017). Feeling accepted and valued by their instructor and establishing even one additional peer relationship could change the tenor of a classroom experience for otherwise isolated students.

A connected basic course classroom can positively impact students' classroom and social connections, and using the basic course as a site for intervention could help autistic students thrive. As Sidelinger and Frisby (2019) argue, the basic communication course is "an important point of entry for students, but also an important point of intervention to assist first-year students in making academic and social connections in the campus community, and to increase persistence, retention, and even graduation rates" (p. 96). Research has demonstrated that within the basic course, student connectedness is positively correlated with perceived student learning (Prisbell et al., 2009; Sidelinger & Frisby, 2019). Students in the basic course who small talk, tell each other stories, cooperate, and praise each other report learning more in the class (Prisbell et al., 2009). Furthermore, students who expressed that they were more connected to their peers in the basic course classroom also reported

greater participation in the course (Sidelinger & Frisby, 2019). Connected students can participate in the classroom freely without fear of judgment or censorship (Sidelinger & Frisby, 2019). These communicative activities could serve as antidotes for alienation, lack of companionship, and isolation experienced by too many college students on the autism spectrum (Jackson et al., 2018).

The basic course classroom can facilitate peer interaction in a space where students on the autism spectrum might need it most. In a course that often requires social interaction and public speaking, autistic students, who may communicate differently than neurotypical students, may also be more likely to thrive when peers offer support.

Exploring Antecedents of Peer Support

The integrative model of behavioral prediction (IMBP; Fishbein, 2000, 2008; Yzer, 2011) is a good starting point for understanding how to change peers' behavior to be more inclusive toward autistic students. This model offers an apt frame for exploring the three primary antecedents, and subsequently targets, of behavioral change—knowledge, beliefs, and attitudes. The IMBP argues that a combination of specific belief types and attitudes influence behavioral intentions, which in turn, will influence individuals' behavior. The IMBP also situates a series of individual difference variables as distal variables that can influence individuals' beliefs. Knowledge may be one such variable. As Eagly and Chaiken (1993) argue, knowledge about attitude objects can influence the consistency of the attitude-behavior relationship and may be targeted by increasing an individual's direct experience. Knowledge, beliefs, and attitudes may be useful sites for intervention in changing peer perceptions toward autistic students, but more work is needed to understand the antecedents of inclusion.

Knowledge

Despite overall growth in students' understanding of autism (Gillespie-Lynch et al., 2020), college students still have knowledge gaps that could inhibit their ability to support their peers in the basic course classroom. Lower knowledge levels about autism are associated with a variety of problematic beliefs, attitudes, and behaviors. Peers with less autism knowledge tend to be less open, less empathetic, hold more stigmatizing beliefs, and desire social distance from autistic people (Gillespie-Lynch et al., 2020). Some knowledge-based interventions have been effective at increasing

autism-related knowledge (Gillespie-Lynch et al., 2015; Obeid et al., 2015; Someki et al., 2018), but other intervention results have been mixed (Mac Cárthaigh & López, 2020) Research suggests that peers fail to identify key communication challenges that autistic students may face in the classroom (Underhill et al., 2019). Given the relative scarcity of research on the exact nature of this knowledge in the classroom setting, we proposed the following research question:

> RQ1: What types of knowledge do college peers have about how being autistic can influence communication in a classroom setting?

Beliefs

Beliefs about autistic students' participation in courses may be highly relevant to fostering peer inclusion. Autistic adults report that they the most commonly encounter negative stereotypical beliefs from their peers (Treweek et al., 2019), and lay beliefs about autism are replete with negative assumptions about lack of ability and competence (Huws & Jones, 2010). Wood and Freeth (2016)'s study shed additional light on college students' stereotypical beliefs about the autism spectrum. In their first study, students listed all the characteristics they believed society associated with autism. In the second study, a different group of participants rated the valence of the 10 most frequently listed stereotypes. Overall, eight of the ten most reported stereotypes were explicitly negative and included beliefs that autistic people have poor social communication skills, are withdrawn, have difficult personalities, and engage in challenging behaviors (Wood & Freeth, 2016). Such erroneous beliefs could drive peer perceptions about autistic students' ability to be successful in classroom contexts. Given the relative scarcity of research on beliefs about classroom participation, more research is needed to understand the nature of peer beliefs and discover relevant points for intervention. As such, we asked the following research question:

> RQ2: What types of beliefs do college peers have about how their autistic peers should participate in the basic communication course?

Attitudes

Much research has examined colleges students' attitudes related to autism, but this study is one of the first to investigate the nature and basis of those attitudes in

the basic course. Although generally favorable toward inclusion on campus, peer attitudes become less positive when discussing inclusion within their own classes (Gibbons et al., 2015; Nevill & White, 2011). Underhill et al. (2019) also found that while college peers expressed generally supportive sentiments toward having their peers with "atypical" behaviors in their communication courses, some participants tempered their inclusive attitudes when asked about their willingness to work with these students on projects that could influence their own academic performance. Despite research indicating positive attitudes toward autistic college students more broadly, it is still unclear under what circumstances and in what settings college students retain those inclusive attitudes. Given research about campus-wide attitudes, we are interested in understanding the nature of attitudes toward a campus-wide autism training. Furthermore, the basic course curriculum centers the study of communication and should explore the diversity of communication behaviors characteristic of different groups—such as students on the autism spectrum. As such, we sought to answer the following research question:

> RQ3: What types of attitudes do college peers have toward learning more about the autism spectrum as a) part of the basic communication course curriculum and b) part of a campus-wide training?

Knowledge, beliefs, and attitudes have all been identified as pathways to facilitating inclusion (Gillespie-Lynch et al., 2015; Obeid et al., 2015; Sasson & Morrison, 2019), but not enough is known about college students' perceptions of their autistic peers. Thus, knowledge, beliefs and attitudes are important antecedents to understand when approaching behavior change, and open-ended research eliciting this audience information is an important step in applying the IMBP (Montaño & Kasprzyk, 2015). This study seeks to understand basic course students' knowledge, beliefs, and attitudes related to autistic peers.

Method

Participants

Two hundred sixteen basic communication course students at an Appalachian university completed the online survey, including 113 women (52.3%), 89 men (41%), and 9 participants (4.2%) who did not identify their sex. On average,

participants were 20 years old (M = 19.85, SD = 3.30). The sample was majority White/Caucasian (78%, n = 169). Additionally, 6.5% of participants were Black/African Americans, (n = 14), 2% were Asian/Asian-American (n = 5), 0.9% were Native American (n= 2), 0.5% were Pacific Islander (n = 1), and 1% selected "other" for their ethnicity (n = 2). Six percent (n = 12) of participants identified membership in more than one ethnic group, and 5% chose not to identify their ethnicity (n = 11). The sample was also predominantly composed of college freshman (71%, n = 153), with sophomores comprising 16% (n = 35), juniors 7% (n = 14), and seniors 3% (n = 6) of the sample. Eight students did not report their college status.

Procedures & Measures

After receiving institutional review board approval, the online survey was offered to all undergraduate students enrolled in a university's basic communication course. Students who consented and completed the survey were given a small amount of course credit. As part of a larger data collection on peer perceptions of autistic students (Underhill et al., 2019), the survey included three closed and open-ended questions focused on the basic communication course classroom. The participants' frame of reference was a traditional public speaking class. First, respondents were asked: "What do you know about how autism influences someone's ability to communicate in a classroom setting?" Next, respondents were asked a two-part question: "Do you believe students with autism should be required to take introductory communication courses?" Respondents were asked to indicate yes, no, or maybe, and then asked to explain their response with the prompt: "Please explain your belief about whether or not students with autism should be required to take introductory communication courses." Then, respondents were asked: "Would you like your communication class to cover information about autism and communication so that you would be empowered to support classmates with autism?" Respondents were again asked to indicate yes, no, or maybe, and then asked to explain their response with the prompt: "Please explain why you would or would not like autism and communication covered in your class." Finally, respondents were asked about their interest in taking a one-hour ally training (yes, no, maybe) to learn how to better support students on the autism spectrum on campus. Demographic information that inquired about their sex, race, age, and year in college was also collected. The survey took approximately 20 minutes to complete.

Qualitative Coding

Participant responses to open-ended questions were examined for emergent patterns that helped develop coding schemes (Lindlof & Taylor, 2011). Each of the three responses from the open-ended questions were analyzed separately because each prompt aimed to investigate different dimensions of peer perceptions and attitudes toward students on the autism spectrum in their basic communication course. For each of the open-ended responses, all three authors first independently identified themes. Then, all three authors engaged in a debriefing process to discuss, norm and revise emerging themes, ultimately revising themes to achieve parallel theme labels (Lincoln & Guba, 1985). Finally, the first and third authors coded a random selection of 20% of the data for each open-ended question to promote reliability (Gillespie-Lynch et al., 2015). Percent agreement was above 95%. With adequate reliability, the first author finished coding the data.

Results

Knowledge

The first research question explored peer knowledge and perceptions of how autism can influence an individual's ability to communicate in a classroom setting. Four themes were expressed in the peer responses (N = 187) to the question: "What do you know about how autism influences someone's ability to communicate in a classroom setting?" Themes included: awareness of perceived communication challenges for some students on the spectrum; a lack of awareness of how autism can influence communication in classroom settings for some students; awareness of social challenges that some students on the spectrum face; and awareness of behavioral challenges that some students on the spectrum face (Table 1). These themes were not mutually exclusive.

Table 1
Knowledge Themes- Research Question 1

Theme	Frequency
Communication Challenges	89
Lack of Awareness	44
Social Challenges	34
Behavioral Challenges	20

The first theme illustrated peers' knowledge that autism can present communication challenges for some students in classroom settings. Nearly half of respondents expressed an awareness that students on the autism spectrum can face communication challenges in classroom settings. These respondents used deficit terminology, with the words *challenging*, *difficult*, *struggle*, and *issues* to describe how autism can influence communication abilities in the classroom. Many of these respondents specifically discussed how verbal communication can be hampered: "They have trouble with clear communication. Their thoughts and ideas are just as important as everyone else's, but they have a harder time clearly communicating them." Responses also showed an acute awareness of how important communication is considered for academic performance. As one respondent noted: "They often have problems explaining an idea or thought to others which could prove difficult in some college courses or assignments." Other respondents focused on expressive language challenges: "Autism may cause speech issues with some people, which might not allow them to have confidence in themselves to communicate with other people."

Conversely, the second theme demonstrated that a sizeable portion of peers were not aware of how autism can influence some students' communication abilities in classroom settings. Almost one-quarter of respondents indicated that they were "not sure" about how autism can influence communication. These respondents were honest about their lack of awareness: "Honestly I do not know a lot about autism and how it affect [*sic*] the individual." Some responses showed a lack of awareness about peers on the autism spectrum already taking the basic communication course at their institution: "I do not know much about how autism influences someone's ability to communicate in a classroom setting. However, they might be able to take a communications class." Lack of experience was also cited as reason for not being

able to respond to the question: "I do not know anything because I have never had a person with autism in any of my classes."

The third theme illustrated that some peers, just under one-fifth of respondents, are knowledgeable about how autism can present social and relational challenges for some students in classrooms settings. As one respondent noted, interpreting nonverbal communication can be difficult: "…they [usually] can't read social and body cues very easily." Others offered more nuanced understandings of how students on the autism spectrum often face social obstacles. The hidden curriculum was singled out by one respondent: "From what I know about autism it can cause them to miss subtle hints or cultural norms that are easier for most to pick up and sometimes it requires the instructor to be direct with more nuanced subjects." Within this set of responses, social anxiety was also identified as a common challenge for students on the autism spectrum: "I understand that individuals with autism find communicating to people they don't know very difficult." Ten responses specifically noted that autism can cause difficulties with social interactions required for building relationships in the classroom, with responses like: "Autism makes it harder for interpersonal relationships to form in social settings because of impaired ability to communicate both verbally and non-verbally."

The last theme centered around peer knowledge of behavioral challenges in classroom settings. Often drawing from their prior experience of knowing people on the autism spectrum, approximately one-tenth of respondents discussed how anxiety, attention deficits, fixations, and emotional dysregulation can impact classroom performance for some autistic students. One respondent explained how these challenges can lead to communication difficulties: "Sometimes people with autism cannot relay what they are trying to say and will get flustered and [*sic*] will cause them to over think and get anxious." Another respondent noted how an inability to modulate focus can create a challenge to engagement in the classroom, saying that "I know people with autism may sometimes get fixated on one thing, so they may get distracted sometimes." Others demonstrated an even more nuanced knowledge that the struggles faced by students on the autism spectrum vary: "I think that sometimes they are very smart in certain subjects so they surpass the standards, but I also think that sometimes they don't and need extra help or support."

Beliefs

The second research question investigated peer perceptions about whether students on the autism spectrum should also be mandated to take the required general education basic communication course, a public speaking class, at their institution. First, respondents were asked: "Do you believe students with autism should be required to take introductory communication courses?" Forty-three percent of respondents (n = 93) said students on the autism spectrum should have to complete a required basic communication course, 42% said maybe (n = 91), 11% said they should *not* have to take a required basic communication course (n =24), and 4% (n = 8) did not respond to this question. Respondents were then asked to provide-open ended feedback explaining their beliefs with the prompt: "Please explain your belief about whether or not students with autism should be required to take introductory communication courses." Three themes emerged from peer responses (N = 186): betterment, benevolence, and fairness (Table 2). These themes were not mutually exclusive.

Table 2

Beliefs about Inclusion Themes- Research Question 2

Theme	Frequency
Betterment	69
Benevolence	66
Fairness	46

The first theme focused on the benefits of taking a basic communication course and how the class can make every student a better communicator. More than one-third of respondents expressed a belief about these benefits for all students. The centrality of public communication to life was most often cited as the reasoning behind their belief: "Public speaking is a skill that everyone needs no matter what." Many of these respondents also explicitly noted that developing communication skills is especially important for students on the autism spectrum: "I think students with autism could benefit from interacting with other students and learning how to communicate in conversations and in front of a group of people." These respondents believed communication ability should not exclude anyone. As one student argued: "Just because someone has trouble communicating doesn't mean

they shouldn't." Moreover, these respondents expressed a belief that the basic communication course could improve communication skills. Another respondent noted: "they should take it because it could help them improve their speech and socializing skills so that they can feel comfortable in a classroom and speaking to other people." Some even argued that students on the autism spectrum need the basic communication course more than other students. As one respondent noted: "They, more than most others, need more development and training in developing communication skills because their mental disorder limits them and makes it harder for them to do so." Communication skills were also linked to vocational aspirations in the responses: "Taking a communications class would be extremely beneficial to a student with autism. It would help them with communication skills needed to interact with others and obtain employment." Another respondent said: "Because communication is key to a future in any job. If a person can't communicate then they will never be able to further themselves in a career."

Next, an almost equally large number of respondents, just above one-third, communicated a need for an individualized approach when considering whether a required basic communication course should also be mandatory for students on the autism spectrum. Students seemed to weigh the pros and cons with a desire to decide what they thought would be *best* for students on the autism spectrum. These respondents suggested a "case-by-case" approach that assessed each student's severity, communication ability, and anxiety levels; they also stressed the fact that autism presents different challenges for affected individuals: "Due to autism being a spectrum, it could possibly be decided on a case to case basis, depending on the individual and their needs." These respondents arguably did not seem concerned about students on the autism spectrum meeting the standardized course requirements. Instead, these respondents were especially concerned that no student should be set up for failure: "Forcing someone with a disability that makes them extremely introverted to speak in public or fail the class is messed up." What constituted the insurmountable barrier for participation varied in the minds of respondents: "I think they should be required only if they can speak clearly, if they can't speak clearly than that's setting them up for failure and isn't right." Respondents who thought students should be in the class suggested grading and curricular modifications in addition to accommodations. As the basic communication course at their institution focuses on public speaking, most of these responses focused on accommodations for speeches: "I would not be against them having a modified rubric for things such as eye contact and fidgeting because it's

different for them than someone without autism." Others thought exempting students from presenting to the class was warranted: "…if they absolutely cannot give the speech, maybe they should communicate with their professor and give it privately." One respondent suggested that attempting the class should be sufficient: "They should be able to try and even if they are unable to pass it still could help everyone else be more understanding and the course grade not be held against them of course." One respondent made a suggestion to broaden the scope of oral communication for the general education requirement:

> I believe that all students, autistic or not, should take some sort of communications class. Although, they should not be limited to only having the option to get up and speak in front of the class, but to choose their own way of communicating. Some communicate better with music, art, etc. Speaking is not the only way to communicate.

The final theme explored peer perceptions of what constitutes fairness in the context of taking the basic communication course. These students, approximately one-fourth of all respondents, frequently mentioned that the basic communication course is a general education requirement for graduation at their institution and equated fairness with everyone being held to the same standards: "All students should have the same requirements for completing …" Many believed that the requirement should be consistent for all students on the autism spectrum "…because they are just like any other student." According to these respondents, it would therefore be unfair to provide exemptions. As one respondent noted: "It's a double standard if they do not have to take communication classes." Other respondents equated exemptions to "special treatment": "I believe since people who have other disorders that make it hard for them to publicly speak like an anxiety disorder are required to take the class, they should be too. Their condition shouldn't be given special privilege." A basic communication course student who was obviously taking minimal pleasure from their own experience opined: "It has been made part of the required curriculum, so if those with autism are attending universities at which it is a requirement then they should have to suffer through it with everyone else."

Attitudes

The third research question explored peer attitudes toward learning more about supporting students on the autism spectrum. First, respondents were asked: "Would you like your communication class to cover information about autism and communication so that you would be empowered to support classmates with autism?" Fifty percent of the respondents said yes (n = 107), 35% of the respondents said maybe (n = 75), 11% said no (n = 25), and 5% did not respond (n = 9). Respondents were then asked to provide open-ended feedback with the prompt: "Please explain why you would or would not like autism and communication covered in your class." Three themes were expressed in peer responses (N = 163): endorsement of content being added to the basic communication course; perceptions that content is not appropriate for the basic communication course; and perceptions that content is not necessary for the basic communication course (Table 3). These themes were not mutually exclusive.

Table 3

Attitudes Toward Learning about Autism Themes-Research Question 3

Theme	Frequency
Endorsement	114
Not Appropriate	26
Not Necessary	23

The first theme reflected the large number of students, nearly two-thirds of respondents, who were enthusiastic about adding course content focused on autism and communication. Many of these students saw the value of "raising awareness" or "increasing understanding" of autism that could happen through the basic communication course. Additionally, these respondents indicated that the ability to communicate with people on the autism spectrum was considered central to the course goals. As one respondent suggested:

> There are all kinds of different people, and autistic people are people you may come in contact with. How to communicate with an array of people, I feel like, is one of the sole purposes of a communications

> class, not just how to speak in front of people, but how to speak and truly communicate with all kinds of people.

Many of these respondents indicated they did not yet feel equipped to communicate effectively: "I just feel that I would be more comfortable reaching out to those with autism if I knew more about it." Moreover, these respondents recognized a need for their peers to adapt their communication skills to others: "I think it would help others know [*sic*] how to communicate with others who have disabilities." Many expressed interest in learning how to support students on the autism spectrum: "Yes, I would want to know how to help a student with autism in my class and help encourage them." Additional benefits of learning about autism and communication were also identified. As one respondent noted:

> I would like autism to be covered in relation to communication. I believe that it would be relevant to learn about how to communicate with others with autism, as well as learning patterns of communication is important. This could cause autism to be looked at differently, and result in actual friendship building.

The second theme, while only expressed among a little over one-sixth of respondents, revealed attitudes that the basic communication course is not an appropriate venue for learning about autism and communication. These respondents did not believe content about autism and communication was suited to the basic communication course. As one respondent noted: "I do not see how it could fit in with the rest of the communications curriculum." There was an overarching perception that public speaking is totally separate from learning about other aspects of communication: "I do not believe that autism should be covered in communication class because it has nothing to do with it. It's a speech class." These respondents were focused on their own skills-based learning: "I want the class to be based on improving my speech skills not how I think of others, I'm not selfish but I'm not paying for a class to teach me about autism," and "I feel like COMM [*sic*] is for presenting and learning how to get comfortable with talking in front of people." Other respondents thought that another class would be a more appropriate venue for learning about autism and communication: "There could be a separate class for that where all we are learning about is communication in a workplace." Finally, a few students who perceived the content as inappropriate for the basic communication

course purportedly rooted their attitudes in concern for students on the autism spectrum: "If it fit smoothly with the rest of the course content absolutely, but if it felt tacked on because it was required it might make people feel like a spectacle." Another respondent reflected these concerns: "If there is a student with autism it could make them feel singled out and even less accepted." The risk of being stigmatized seemed to outweigh any potential benefits in these respondents' minds: "I don't think so because they may feel singled out and that is not fair."

The third and final theme, again expressed among about one-sixth of respondents, reflected attitudes about why it is not necessary to educate students about autism and communication in the basic communication course. Many of these respondents did not believe the information was necessary because "it has been taught before" and "everyone should already support people with autism i dont [*sic*] think we need a class to learn how to support someone …" Moreover, these respondents seemed to have positive attitudes toward their own inclusivity, making statements like: "I try to treat everyone with the same respect and opened [*sic*] mind so it really wouldn't matter to me," and "I have never had any classes with someone who has autism and it really wouldn't matter to me if a person had it or not I would still talk to them as I would anyone else." Other respondents tended to express an attitude that everyone already knew enough about autism. As one respondent asserted: "I was raised in a school that mixed the special ed [*sic*] in with normal classes, it's not like we need to study every little thing about their disability, they're just like us they just don't want to talk to people cause [*sic*] they find them annoying." Finally, only a few respondents indicated that it was not necessary to include information about autism and communication in the basic communication course because: "It doesn't affect me."

Finally, peers were asked if they were interested in taking a one-hour training to learn how to be an ally for students on the autism spectrum on campus. Twenty-six percent (n = 55) reported that they were interested in taking the one-hour ally training, 42% of respondents (n = 91) reported that they might be interested, 28% (n = 62) reported that they would not be interested.

Discussion

Most campus communities are not fully prepared to offer the extra supports many college students on the autism spectrum need to thrive (Jackson et al., 2018). College students on the autism spectrum often report that they encounter persistent social isolation and lack meaningful connections with peers (Ashbaugh et al., 2017;

Elias & White, 2017; Jackson et al., 2018). Isolation on campus occurs when students on the autism spectrum are stigmatized by their peers and harshly judged for their diverse styles of verbal communication, nonverbal communication, and behaviors that do not fit social norms (Sasson et al., 2017). Peer rejection and isolation often occur in our classrooms when autistic students cannot decipher or follow the hidden curriculum (Myles et al., 2004). However, when peers are instead empowered to help other students navigate the hidden curriculum, autistic students may feel more welcome in their classrooms (Gerhardt & Holmes, 2005).

To orient basic communication course students toward proactively making connections with their autistic peers, basic course directors and instructors first need a more nuanced understanding of their knowledge, beliefs, and attitudes. Research indicates that peer perceptions and attitudes are antecedents for crafting classroom connections (Sollitto et al., 2013), and the integrative model of behavioral prediction (IMBP; Fishbein, 2000; 2008; Yzer, 2011) offers a useful mechanism for crafting these interventions in the classroom. While the academic, behavioral, and psychological benefits of connected classroom climates are valuable outcomes for all students (Dwyer et al., 2004), a connected and inclusive classroom climate is especially critical for autistic students who often experience alienation, loneliness, and isolation (de Boer & Pijl, 2016). When basic communication course instructors can identify the knowledge, belief, and attitudinal obstacles to connection that occur in their classrooms, they can facilitate connection opportunities for autistic students. Our study offers preliminary insight in this process.

First, our findings indicate that while students have preliminary knowledge about autism, their awareness does not often extend to facets of inclusion. The majority of students demonstrated an awareness that autism can cause communication, social, and behavioral challenges in classroom settings. However, a number of peers were uncertain or incorrect about the specific challenges that can manifest in classroom settings, and most peers did not consider the diversity of experiences of students on the autism spectrum (Ashbaugh et al., 2017; Cox, 2017; Jackson et al., 2018). These findings are, unfortunately, not unique to the present study. In a previous intervention study using an online autism training program, Gillespie-Lynch et al. (2015) found that although college students' quantitative measure of autism knowledge increased between pre-test and post-test, students still could not provide accurate explanations of autism when asked to write a definition after the intervention. Therefore, not only should future interventions focus on increasing knowledge, but on distinguishing autism from other disorders (Gillespie-Lynch et al.,

2015; Gillespie-Lynch et al., 2020) and ensuring that students' knowledge lasts past the moment of intervention. By intentionally discussing autism and working to increase students' direct experience with autistic students, behavioral interventions could ensure more consistency between the attitude and behavior relationship (Eagly & Chaiken, 1993).

Respondents' beliefs about their autistic peers' participation in the basic course also indicate a need for more tailored interventions. Many respondents' beliefs about *why* their autistic peers should be required to take the introductory course were rooted in benefits and empowerment, and several students even acknowledged the need for "case-by-case" accommodations. However, in line with past research (Huws & Jones, 2010; Wood & Freeth, 2016), respondents rarely generated positive thoughts about the autism spectrum, and often focused on the ways in which a basic communication course could create hardships for students on the autism spectrum. Several respondents also suggested that their autistic peers should be required to take the basic communication course because that would be most "fair" to all students. Past research has found that college students view classroom disability accommodations as less fair, particularly when that accommodation fuels student success (Paetzold et al., 2008). While most students in this sample seemed to counter that stigmatizing viewpoint, the discouraging number of students who held this belief may require more tailored anti-stigma interventions that focus on attitudes and context (Mac Cárthaigh & López, 2020). These interventions could consider investigating and targeting peer norms and work to increase awareness and positive beliefs about neurodiversity (Gillespie-Lynch et al., 2020). Though the current study offers preliminary evidence about such norms, understanding these students' willingness to follow such classroom norms can help instructors craft interventions that transform peer beliefs for the better.

One additional explanation for why some peers believed that students on the autism spectrum would be unable to complete the full requirements of an introductory communication course may be rooted in stereotypical beliefs (Wood & Freeth, 2016). Perhaps thinking about their own public speaking class activated stereotypes related to communication abilities of individuals on the autism spectrum. Too many students did not see autistic peers as having the capacity for effective communication in the classroom, supplementing past findings that people hold inaccurate beliefs about autistic people's competence (Huws & Jones, 2010). These peers endorsed a deficit view of autism, which leads people to "focus one-sidedly on deficits, to overlook alternative explanations, and to be too quick to assume that one

offers a valid explanation or faithful description of the relevant phenomena merely by pointing to a lack of or an absence" (Dinishak, 2016). In highlighting their autistic peers' communication deficits, even if well-intentioned, these participants point to a false view of autism and disability. Students' incorrect and often cruel perceptions of their autistic peers represent a serious challenge to fostering connected classrooms. Future research should seek to better understand and target these erroneous beliefs about autistic peers and classroom participation.

Finally, results of this study indicate that students have positive attitudes toward learning more about autism in the basic communication course, but only when they perceive this information as relevant and beneficial—a potentially problematic belief that can be the target of intervention. Overall, peers indicated a tentative interest in learning more about supporting classmates on the autism spectrum via a short training or the addition of course material focused on autism and communication. Even so, the endorsement for adding course content was predicated on the belief that the ability to adapt communication to the needs of others was central to basic communication course goals (NCA, 2013). This provisional agreement mirrors the mixed attitudes reported in past research on college classroom inclusion (Gibbons et al., 2015; Nevill & White, 2011). Those who did not agree with adding in this type of course material often viewed developing their own public speaking skills as the central purpose of the class, while others worried about the stigmatizing effect it could have for students on the autism spectrum. Although there was a small group of students who did not yet understand the value of learning how to adapt their communication to be more inclusive, the majority of respondents expressed interest in learning how to better communicate with and support autistic classmates. Interventions should therefore focus on increasing students' efficacy for interacting with their autistic peers and increasing students' perceived relevance of inclusive communication topics.

Pedagogical Implications

These results reflect a challenge for instructors and peers in basic communication course classrooms: How can instructors and peers welcome difference and view is as a beneficial opportunity in their classrooms? Culture change can happen in a basic communication course program when all types of student diversity are viewed as opportunity rather than inconvenience. Instructors must take responsibility for creating environments that facilitate both learning and social integration (Sidelinger

& Frisby, 2019). This begins with proactively increasing accessibility in the basic course. As Strawser et al. (2017) argued, basic course classrooms first need to increase accessibility through implementing the principles of Universal Design for Learning (UDL). Accessible classrooms provide "an interactive environment that is free of judgment for all students, including those with disabilities" (p. 94). Unfortunately, UDL principles focused on student communication and interaction are often secondary considerations in communication classrooms (Brenneise, 2020). By making classrooms more accessible for autistic students, instructors will likely improve the basic communication course experience for many other types of diverse learners (Strawser et al., 2017). These instructors will also send a message to their classes about valuing students with all types of abilities, which is the first step in building inclusive classrooms.

The next step is for basic course instructors to take responsibility for being the social architects of their classroom spaces and create opportunities for social integration for all students (Sidelinger & Frisby, 2019). Facilitating an inclusive classroom begins with involving students in the creation of a connected and welcoming classroom environment. Instructors should dedicate time for students to engage in small talk, share stories, praise each other, and provide support (Prisbell et al., 2009). Moreover, instructors should explicitly tell students about the benefits of creating a connected classroom for all types of learning and invite students to play a role in building a welcoming environment (Dwyer et al., 2004; Sollitto et al., 2013).

Then, classroom-based interventions can focus on teaching students the communication skills needed to reach out to and interact with all different types of peers. Instructors can further facilitate positive interactions by providing clear instructions when forming pairs or groups for classroom activities. Encouraging peers to locate classmates they have not yet worked with, or using mechanisms that assign group membership, are helpful for all students who struggle with social interactions. When students are working together, instructors can build in opportunities for students to connect during think-pair-share exercises and structured small group discussions, and they can encourage students to provide praise and support during presentations. Finally, inviting students to announce extracurricular events and organizational meetings with a genuine invitation for classmates to attend with them may encourage otherwise isolated students to participate and extend the effects of classroom connectedness into the campus community. It is imperative that any classroom intervention does not require autistic students to disclose their diagnosis, feel tokenized, or increase their anxiety (Botha &

Frost, 2020). Although research indicates that peers often improve their attitudes toward individuals who disclose an autism diagnosis (Sasson & Morrison, 2019), disclosure should be a purely personal choice and not a prerequisite for acceptance.

To do all these things well, basic course directors will need to provide training and professional development opportunities for their instructors to learn about inclusion and the many ways they can encourage their students to be allies to autistic peers. Instructors need to feel confident about making their classrooms open environments in which discussions about diversity and difference in ability are productive and do not unintentionally further marginalize diverse student populations. Basic course directors should consider partnering with organizations and offices on their campus that support diverse types of students. Ally trainings for instructors can also play an important role in orienting them to the challenges and needs of diverse communities.

Limitations and Future Directions

Several limitations must be discussed in order to fully understand and interpret these findings. First, using a convenience sample of basic communication course students on one campus prevents the results from being generalizable. These students lack diversity in a meaningful way, and no attempt to generalize the results of this study should be made to any population of interest. Next, the way prior educational experiences have shaped basic communication course students' perceptions and attitudes about autism are not accounted for in our research. Finally, this project does not address the perceptions and experiences of students on the autism spectrum who enroll in the basic communication course. Instead, this project seeks to provide insight about how basic communication course programs can proactively explore peer perceptions with the goal of identifying promising strategies to promote full inclusion.

The results from this study can be used to chart pathways for future work on creating an inclusive basic course classroom that celebrates neurodiversity. While our study found that peers were generally willing to learn more about autism, we still have a long way to go in overcoming stereotypes and helping students recognize not just how to appreciate diversity but to implement inclusive classroom behaviors. To make strides toward this goal, future research should investigate issues of disability, diversity, inclusion, and social dynamics within the basic communication course (Joyce et al., 2019). Future research is also needed to identify the antecedents of

social rejection and isolation in the basic communication course in order to develop ways to combat stigma in our classrooms (Rudick & Dannels, 2018). In doing so, basic course research also needs to focus on autistic students and work to center their experiences. Our scholarship should seek to amplify the voices of students with different abilities and diverse perspectives. Finally, basic communication course researchers need to interrogate how our curricula and assessment processes reinforce stigmatizing attitudes toward students on the autism spectrum. In all of these endeavors, we should investigate diverse types of basic communication course programs, instructors, peers, and campus communities to offer greater generalizability of results. These future directions offer multiple avenues for basic course researchers and instructors to better understand and subsequently create connected classroom climates for all students.

Conclusion

The basic course is uniquely positioned to make a major contribution to building more inclusive classrooms and campus communities through empowering peers to become allies to neurodiverse students. The results of our study offer hope that we can reach this goal and provide us with more information about where we should focus peer interventions in the basic course. The students in our study expressed generally empathetic beliefs and attitudes toward their autistic peers. Some even expressed a level of understanding about autism that far exceeds what we expected. Still, responses overwhelmingly only considered autism as a barrier to students' success, suggesting that students need more than just knowledge about autism to understand and celebrate neurodiverse peers. Taken together, these somewhat contradictory findings should prompt us to reconsider our own approaches to framing neurodiversity and ensure that the assumptions on which we ground our interventions are rooted in inclusive practices. We can change hearts, minds, and campus culture through promoting acceptance and celebrating all types of diversity in our basic communication course classrooms.

References

Ashbaugh, K., Koegel, R. L., & Koegel, L. K. (2017). Increasing social integration for college students with Autism Spectrum Disorder. *Behavioral Development Bulletin*, *22*(1), 183-196. https://doi.org/10.1037/bdb0000057

Bakker, T., Krabbendam, L., Bhulai, S., & Begeer, S. (2019). Background and enrollment characteristics of students with autism in higher education. *Research in Autism Spectrum Disorders, 67,* 101424. https://doi.org/10.1016/j.rasd.2019.101424

Botha, M., & Frost, D. M. (2020). Extending the minority stress model to understand mental health problems experienced by the autistic population. *Society & Mental Health*, *10*(1), 20-34. https://doi.org/10.1177/2156869318804297

Brenneise, A. (2020). Presuming competence: Troubling the ideal student. *Communication Education*, *69*(3), 317-334. https://doi.org/10.1080/03634523.2020.1770307

Cox, B. E. (2017). *Autism coming to college* (Issue Brief). Center for Postsecondary Success.

de Boer, A., & Pijl, S. J. (2016). The acceptance and rejection of peers with ADHD and ASD in general secondary education. *The Journal of Educational Research, 109*(3), 325-332. https://doi.org/10.1080/00220671.2014.958812

Dinishak, J. (2016). The deficit view and its critics. *Disability Studies Quarterly*, *36*(4). https://doi.org/10.18061/dsq.v36i4.5236

Dwyer, K. K., Bingham, S. G., Carlson, R. E., & Prisbell, M. (2004). Communication and connectedness in the classroom: Development of the connected classroom climate inventory. *Communication Research Reports*, *21*(3), 264 – 273. https://doi.org/10.1080/08824090409359988

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes.* Harcourt Brace Jovanovich College Publishers.

Elias, R., & White, S. W. (2017). Autism goes to college: Understanding the needs of a student population on the rise. *Journal of Autism & Developmental Disabilities, 48*(3), 1-15. https://doi.org/10.1007/s10803-017-3075-7

Fishbein, M. (2000). The role of theory in HIV prevention. *AIDS Care*, *12*(3), 273 – 278. https://doi.org/10.1080/09540120050042918

Fishbein, M. (2008). A reasoned action approach to health promotion. *Medical Decision Making, 28*(6), 834-844. https://doi.org/10.1177/0272989X08326092

Gerhardt, P. F., & Holmes, D. L. (2005). Employment: Options and issues for adolescents and adults with autism spectrum disorders. In F. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders* (3rd ed., pp. 1087–1101). Wiley.

Gibbons, M. M., Cihak, D. F., Mynatt, B., & Wilholt, B. E. (2015). Faculty and student attitudes toward postsecondary education for students with intellectual disabilities and autism. *Journal of Postsecondary Education and Disability, 28*(2), 149-162. Retrieved from https://eric.ed.gov/?id=EJ1074661

Gillespie-Lynch, K., Brooks, P. J., Someki, F., Obeid, R., Shane-Simpson, C., Kapp, S. K., Daou, N., & Smith, D. S. (2015). Changing college students' conceptions of autism: An online training to increase knowledge and decrease stigma. J*ournal of Autism and Developmental Disorders, 45*(8), 2553-2566. https://doi.org/10.1007/s10803-015-2422-9

Gillespie-Lynch, K., Daou, N., Obeid, R., Reardon, S., Khan, S., & Goldknopf, E. J., (2020). What contributes to stigma toward autistic university students and students with other diagnoses? *Journal of Autism & Developmental Disorders.* https://doi.org/10.1007/s10803-020-04556-7

Higher Education Opportunity Act of 2008, Pub. L. No. 110–315 § 122 STAT. 3078. (2008).

Huws, J., & Jones, R. (2010). 'They just seem to live their lives in their own little world': Lay perceptions of autism. *Disability & Society*, *25*(3), 331-344. https://doi.org/10.1080/09687591003701231

Jackson, S. L. J., Hart, L., Brown, J. T., & Volkmar, F. R. (2018). Brief report: Self reported academic, social, and mental health experiences of post-secondary students with Autism Spectrum Disorder. *Journal of Autism & Developmental Disorders, 48*(3), 643-650. https://doi.org/10.1007/s10803-017-3315-x

Joyce, J., Kritselis, A., Dunn, S., Simonds, C. J., & Lynn, B. (2019). Synthesizing the current state of the Basic Communication Course Annual: Furthering the research of effective pedagogy. *Basic Communication Course Annual, 31*, Article 5. https://ecommons.udayton.edu/bcca/vol31/iss1/5

Kenny, L., Hattersley, C., Molins, B., Buckley, C., Povey, C., & Pellicano, E. (2016). Which terms should be used to describe autism? Perspectives from the UK autism community. *Autism*, 20(4), 442-462. https://doi.org/10.1177/1362361315588200

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.

Lindlof, T. R., & Taylor, B. C. (2011). *Qualitative communication research methods* (3rd Ed). Sage Publications.

Mac Cárthaigh, S. & López, B. (2020). Factually based autism awareness campaigns may not always be effective in changing attitudes toward autism: Evidence from British and South Korean nursing students. *Autism, 24*(5), 1170-1190. https://doi.org/10.1177/1362361319898362

Montaño, D. E. & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior: Theory, research, and practice* (5th ed., 95-124). Wiley. https://psycnet.apa.org/record/2015-35837-006

Morrison, K. E., DeBrabander, K. M., Faso, D. J., & Sasson, N. J. (2019). Variability in first impression of autistic adults made by neurotypical raters is driven more by characteristics of the rater than characteristics of autistic adults. *Autism, 23*(7), 1817-1829. https://doi.org/10.1177/1362361318824104

Müller, E., Schuler, A., & Yates, G. B. (2008). Social challenges and supports from the perspective of individuals with Asperger syndrome and other autism spectrum disabilities. *Autism, 12*(2), 173–190. https://doi.org/10.1177/1362361307086664

Myles, B. S., Trautman, M. L. & Schelvan, R. S. (2004). *The hidden curriculum: Practical* solutions for understanding unstated rules in social situations. Autism Asperger Publishing Company.

National Communication Association, Task Force on Core Competencies (2013). *Report of the NCA Task Force on Core Competencies*. https://www.natcom.org/sites/default/files/pages/Basic_Course_and_Gen_Ed_NCA_Core_Competencies_Report_December_2013.pdf

Nevill, R. E., & White, S. W. (2011). College students' openness towards Autism Spectrum Disorders: Improving peer acceptance. *Journal of Autism and Developmental Disorders, 41*(12), 1619-1628. https://doi.org/10.1007/s10803-011-1189-x

Obeid, R., Daou, N., DeNigris, D., Shane-Simpson, C., Brooks, P. J., & Gillespie-Lynch, K. (2015). A cross-cultural comparison of knowledge and stigma associated with autism spectrum disorder among college students in Lebanon and the United States. *Journal of Autism and Developmental Disorders, 45*(11), 3520-3636. https://doi.org/10.1007/s10803-015-2499-1

Paetzold, R. L., García, M. F., Colella, A., Ren, L. R., del Carmen Triana, M., & Ziebro, M. (2008). Perceptions of people with disabilities: When is accommodation fair. *Basic and Applied Social Psychology, 30*, 27-35. https://doi.org/10.1080/01973530701665280

Prisbell, M., Dwyer, K. K., Carlson, R. E., Bingham, S. G., & Cruz, A. M. (2009). Connected classroom climate and communication in the basic course: Associations with learning. *Basic Communication Course Annual, 21*, Article 11. 151-172. http://ecommons.udayton.bcca/vol21/iss1/11.

Rudick, C. K., & Dannels, D. P. (2018). Yes, and*…: Continuing the scholarly conversation about mental health stigma in higher education. *Communication Education, 67*(3), 404–408. https://doi.org/10.1080/03634523.2018.1467563

Sasson, N. J., Faso, D. J., Nugent, J., Lovell, S., Kennedy, D. P., & Grossman, R. B. (2017). Neurotypical peers are less willing to interact with those with Autism based on thin-sliced judgments. *Scientific Reports, 7*(1), 40700. https://doi.org/10.1038/srep40700

Sasson, N. J. & Morrison, K. E. (2019). First impression of adults with autism improve with diagnostic disclosure and increased autism knowledge of peers. *Autism, 23*(1), 50-59. https://doi.org/10.1177/1362361317729526

Sidelinger, R. & Frisby, B. N. (2019). Social integration and student proactivity: Precursors to improved academic outcomes in a first-year experience basic communication course. *Basic Communication Course Annual*, *31*, 95-122. https://ecommons.udayton.edu/bcca/vol31/iss1/8

Sollitto, M., Johnson, Z. D., & Myers, S. A. (2013). Students' perceptions of college classroom connectedness, assimilation, and peer relationships. *Communication Education, 62*(3), 318 – 331. https://doi.org/10.1080/03634523.2013.788726

Someki, F., Torii, M., Brooks, P. J., Koeda, T., & Gillespie-Lynch, K. (2018). Stigma associated with autism among college students in Japan and the United States: An online training study. *Research in Developmental Disabilities*, *76*, 88–98. https://doi.org/10.1016/j.ridd.2018.02.016

Strawser, M. G., Frisby, B. N., & Kaufmann, R. (2017). Universal adaptation: The need to enhance accessibility in the basic course. *Basic Communication Course Annual, 29*, Article 10. http://ecommons.udayton.edu/bcca/vol29/iss1/10

Treweek, C., Wood, C., Martin, J., & Freeth, M. (2019). Autistic people's perspectives on stereotypes: An interpretive phenomenological analysis. *The International Journal of Research and Practice, 23*(3), 759-769. https://doi.org/10.1177/1362361318778286

Underhill, J. C., Ledford, V., & Adams, H. (2019). Autism stigma in the communication classroom: Exploring peer attitudes and motivations toward interacting with atypical students. *Communication Education, 68*(2), 175-192. https://doi.org/10.1080/03634523.2019.1569247

Wood, C. & Freeth, M. (2016). Students' stereotypes of autism. *Journal of Educational Issues, 2*(2), 131-140. https://doi.org/10.5296/jei.v2i2.9975

Yzer, M. (2011). The integrative model of behavioral prediction as a tool for designing health messages. In H. Cho's (Ed.) *Health communication message design* (pp. 21-40). Sage Publications.