Speak Up: Teaching Self-Advocacy Skills at the Communication Center to Students with Disabilities

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Changes in legislature have resulted in increasing numbers of students with disabilities, including hidden disabilities (e.g., attention deficit hyperactivity disorder [ADHD], autism spectrum disorder [ASD], and intellectual and developmental disabilities [IDD]) attending postsecondary education (PSE) institutions (Madaus et al., 2012; Sanford et al., 2011; Wagner et al., 2005). For example, according to data from the National Longitudinal Transition Study – 2 (2005), no students with IDD attended PSE programs. However, in 2011, data indicated 6.7% of students with IDD attended PSE programs (NLTS-2, 2011). The same studies (i.e., NLTS – 2, 2005 & 2011) indicated 0.9% of students with ASD (more specifically "high-functioning" ASD) attended PSE programs in 2005. That number increased to 17.4% in 2011. This is due in large part to the comprehensive transition and postsecondary (CTP) programs that were created after the passage of the Higher Education Opportunity Act (2008). CTP programs are designed to support students with IDD in courses focusing on academics, career and technical education, and independent living with the goal of competitive employment upon program completion (Grigal & Papay, 2018). Further, inclusive CTP programs offer students with IDD the opportunity to participate in postsecondary educational experiences including clubs, activities, sports, and internships.

Earning potential is positively correlated to education level. According to the Bureau of Labor Statistics (BLS; 2017), individuals who did not graduate from high school earn an average of $520 per week while individuals with some college (but no degree) earn $774 per week – a difference of over $13,000 per year. Matriculating students who complete their degree had weekly median earnings of $1,173 (U.S. Department of Labor, BLS, 2017). Therefore, the benefits of participation in PSE and CTP programs are evident - not only fiscally, but in facilitating independence for individuals with disabilities. Access to PSE and CTP programs for students with disabilities was, until 2008, a formidable challenge.

Barriers in place prior to the reauthorization of Higher Education Opportunities Act in 2008 precluded students from accessing Title IV student aid which required a high-school diploma or its equivalent and matriculation (i.e., working towards a degree). The passage of the Higher Education Opportunity Act (2008) enabled students with IDD to access federal financial aid upon enrollment in a CTP Program.

Financial barriers are not the only barriers students with disabilities may face in PSE. Additional obstacles include access to instructional content.

In other words, students may have difficulty with academic tasks including reading, note-taking, assessments (e.g., tests and/or quizzes), and in-class assignments. Academic accommodations, guaranteed through the Americans with Disabilities Act (1990), are designed to facilitate access to course content. The use of academic accommodations has been positively correlated with improved grade point average (GPA; Kim & Lee, 2015; Mamiseishvili & Koch, 2011) and increased persistence rates (Mamiseishvili & Koch, 2011).

In order to access academic accommodations, students must provide documentation of their disability to their college or university's Office of Disability Services. This process is a significant change for students who may have received accommodations in high school which were provided through either the student's individualized education program or through Section 504 of the Rehabilitation Act (1973; Holzberg et al., 2019). Additionally, students transitioning from high school to PSE may not be aware of available accommodations, may not recognize the continued need for accommodations, and may not be aware they qualify for accommodations (Cole & Cawthon, 2015). Understanding their rights and responsibilities (i.e., requesting accommodations) is crucial if students with disabilities (SWD) are to succeed given the increased rigors of PSE settings. One approach to ensure students access the accommodations to which they are entitled is by using self-advocacy skills.

Self-Advocacy

Based on a literature review on self-advocacy studies, Test et al. (2005) developed a conceptual framework for self-advocacy. A modified version is presented in Figure 1 and includes the component and subcomponents relevant to the current study .

Although many students enrolled in CTP programs receive accommodations through their respective programs, removing them from the process of actively requesting accommodations through disability services denies them the experience of learning to advocate and articulate their needs – thus, undermining the opportunity to engage in self-determined behaviors (Shogren et al., 2018). Further, students enrolled in CTP programs may also attend classes with matriculating peers. In order to access their accommodations in non-CTP courses, they need to request accommodations from their instructors. Shogren et al. (2018) evaluated the self-determination status of first-year students in inclusive PSE programs. The authors evaluated data from 251 students who provided information in the first year of their program related to a self-reported measure of self-determination (i.e., *The Arc's Self-Determination Scale – Postsecondary Version* (Wehmeyer et al., 2014). Interestingly, data indicated students in the first year of their program scored similar to participants when the instrument was initially developed. This suggests first-year students in CTP programs have the potential to develop these crucial skills (Shogren et al., 2018). Because students have the potential to develop these skills, it is imperative they be provided with instruction to effectively advocate for their accommodations. Shogren et al. (2018) found that only 6% of the students in their study received accommodations from disability services at their respective universities demonstrating the need for explicit instruction in self-advocacy. Although the literature demonstrates the need for

and efficacy of teaching self-advocacy skills to SWD in PSE settings (e.g., Holzberg et al., 2019; Roessler et al., 1998; Walker & Test, 2011) there is a paucity of research on the use of self-advocacy instruction for students with IDD and/or ASD in PSE settings.

One method used to teach self-advocacy skills to SWD to access accommodations in PSE is the *Self-Advocacy and Conflict Resolution (SACR) Training* (Rumrill et al., 1999). *SACR Training* includes two modules. *Module I*: Self-Advocacy Skills includes 19 targeted self-advocacy behaviors such as greeting, disclosure, and agreement. Skills are taught using scripted lesson plans and explicit instruction (i.e., model, lead, test). *Module II*: Conflict Resolution Skills includes nine target behaviors including specifying, mutualizing, and inventing which facilitate the development of conflict resolution skills.

Research has demonstrated *SACR* instruction has resulted in students' improved ability to request academic accommodations. For example, Palmer and Roessler (2000) used a quasi-experimental, posttest-only control group design to evaluate the effects of *SACR* instruction on 50 SWD attending postsecondary institutions. Results indicated self-advocacy and conflict resolution behavior scores for the treatment group were statistically significantly higher than the control group. For example, the *p*-values for both self-advocacy and conflict resolution behaviors were both $p<0.0001$. The authors suggested using "role play" as a way to assess the effectiveness of the intervention as a limitation and recommended using *in-situ* generalization measures with the students' instructors in future research.

Next, Holzberg et al. (2019) used a multiple probe across participants design to determine the efficacy of *SACR* instruction on the ability of four high school students with mild disabilities (e.g., ADHD, ASD – level 1, specific learning disabilities) to request and negotiate academic accommodations in a PSE setting. The authors used scripted lesson plans, explicit instruction, and role-play to teach the target behaviors across four lessons. Results indicated a functional relation between *SACR* instruction and all four students' ability to request and negotiate academic accommodations in a role-play scenario as well as with university professors (i.e., *in-situ* condition). Social validity measures indicated students believed *SACR* instruction had a positive impact on their ability to articulate their accommodation needs. The authors suggested using recorded role-play probes to document the acquisition of target behaviors. Additionally, they suggested allowing students to utilize a notecard to help prompt them when meeting with their instructor.

Walker and Test (2011) used a multiple probe across participants design to evaluate the effects of *SACR* instruction on the ability of three African American male students with LD and/or ADHD to request academic accommodations at a historically Black college and university. The authors used *Module I* of the *SACR* to teach seven self-advocacy target skills across seven lessons. Results indicated a functional relation between *SACR* instruction and the students' ability to request accommodations in a role-play scenario. Additionally, skills generalized to an *in-situ* condition (i.e., meeting with students' professors). Social validity measures from the participants indicated *SACR* instruction was an effective way to learn self-

advocacy skills to facilitate access to their accommodations from their instructors.

Peer Mentors

There is an abundance of literature describing the efficacy of peer mentoring for SWD to facilitate the development of a range of skills including improved academic skills (Campbell-Whatley, 2001) and social skills (O'Brien et al., 2009). Giust and Valle-Riestra (2017) evaluated skills and activities mentors working with students with IDD in an inclusive PSE program engaged in and identified areas for further training. Using a mixed methods design (i.e., survey and qualitative data), data from 31 mentors were evaluated resulting in three major themes: inclusion, self-determination, and adaptive behavior skills. Mentors described ways in which they encouraged self-determined behaviors in their mentees. Furthermore, mentors reported they served as role models, advocates, and friends (Giust & Valle-Riestra, 2017). Given the access to and efficacy of peer mentors to deliver instruction to SWD in PSE programs, it is likely peer mentors could help create a sustainable program to help students learn self-advocacy skills to ensure access to accommodations.

Speaking Centers

The University Speaking Center (SC) provides a safe space while offering support to help individuals further develop their communication skills. Individuals who come to the SC may request help with preparing for a speech or an interview. Additionally, speakers may visit the SC to "get feedback, ask questions, and have conversations about their own public, interpersonal, and group communication" (deidentified citation). Support services are offered to students, faculty, employees, and members in the surrounding community and are delivered by trained consultants. The overarching goal of a university SC is to foster the growth, including confidence, of individuals and to help them become more competent, confident speakers. This goal and the skill-set of the consultants make SC's an excellent resource for teaching self-advocacy skills.

There is a demonstrable need for self-advocacy skills to facilitate access to academic accommodations in PSE settings. Thus, it is imperative to identify sustainable, cost-effective ways to deliver instruction to students. One campus resource with the potential to utilize available staff (i.e., peer mentors) to teach these valuable communication skills is the Speaking Center. The purpose of this study was to examine the effects of self-advocacy instruction (*SACR*; Rumrill et al., 1999) conducted by a Speaking Center peer consultant on the ability of three college SWD to request accommodations in both role-play and *in-situ* (i.e., authentic) conditions. Specifically, four research questions were addressed:

1. What are the effects of a modified self-advocacy instruction (i.e., *SACR*; Rumrill et al., 1999) on the ability of college students with disabilities to request academic accommodations in a role-play condition?
2. What are the effects of a modified self-advocacy instruction (i.e., *SACR*; Rumrill et al., 1999) on the ability of college students with disabilities to request academic accommodations in an *in-situ* (i.e., generalization) condition?
3. What are the university instructors' perspectives of the usefulness of using the self-advocacy intervention to

facilitate students' acquisition of self-advocacy behaviors to request accommodations?
4. What are the students' perspectives about the effects of the intervention on their ability to request accommodations?

Method

In order to determine the effects of self-advocacy instruction on the ability of college SWD to access academic accommodations, we used single-case design. This approach offers continuous measurement and is a direct assessment of performance where participants serve as their own control and allows the researcher to measure the effect of the intervention and helps control for threats to validity (Cooper et al., 2007). Data are collected and graphed before (baseline), during (intervention), and after the study (maintenance). Graphs are analyzed to determine if there is a relationship between the dependent variable and the independent variable. That is, visual inspection of the graphs enables researchers to determine the existence of the degree to which, if any, an intervention resulted in the desired or targeted behavioral change.
If a relationship exists, the change in behavior can be attributed to the intervention and not to chance.

Participants

Data collection began in fall 2019 and continued through early spring 2020. Participants self-nominated and were purposefully selected based on the following inclusion criteria: (a) identified as having any of the following documented disabilities including: ADHD; ASD, emotional disorder (e.g., anxiety, bipolar disorder, depression), IDD, specific learning disability (SLD); (b) enrolled at the University; (c) documentation validating the student's eligibility for academic accommodations based on the University's Office of Accessibility Resources and Services requirements (i.e., psychoeducational testing, Summary of Performance, Section 504 Plan); (d) were eligible for, but who had not yet utilized accommodations; and (e) signed student participant consent. Participants who did not meet the inclusion criteria were excluded from the study. Student participants were compensated with a $20 gift card upon completion of the study. Faculty participants were eligible for inclusion upon signing the faculty consent.

The University's CTP admission criteria require students have an IDD according to the definition by the American Association on Intellectual and Developmental Disabilities; be their own legal guardian, be at least 18 years old prior to August 1st of the fall semester; have exited secondary education with either a diploma, certificate of completion, or the equivalent prior to enrollment; possess basic safety skills in an unsupervised setting; and have the desire and support from family to gain skills in self-determination, independent living, and career development (R. Milligan, personal communication, March 16, 2020).

Three participants met inclusion criteria and consented to participate. Two of the three participants, Kristen and Matthew, were enrolled in the University's CTP and were non-matriculating students. The third participant, Seth, was a matriculating student. Participant descriptions are below.

Kristen

Kristen was a 22-year-old, White female with an IDD. She participated in the University's CTP and was in her senior

year. She had a poor history of requesting accommodations in her inclusive courses. Her requested accommodation was extended time for quizzes and tests in her CTP senior seminar. Because Kristen was not a matriculating student, neither SAT nor ACT tests were required for admission.

Matthew

Matthew was an 18-year-old, White male with ASD and IDD. He was a first year (i.e., freshman) and participated in the University's CTP. His requested accommodations were extended time and the use of a stress item (e.g., stress ball, fidget cube) during his First Year Experience Class. As a student in the CTP program, neither SAT nor ACT tests were required for admission.

Seth

Seth was a 21-year-old White male identified with the following: social pragmatic communication disorder, anxiety, and processing disorder. Seth was a matriculating senior majoring in Political Science, who scored an 1120 on his SAT. His requested accommodations were extended time and the use of a computer to type quizzes and tests in his Communication Studies class.

University Instructors

Each participant selected one instructor/class from whom they wished to receive accommodations. Information on the participants and their respective instructors can be found in Table 1.

Interventionist/Researcher

The interventionist (i.e., second author) was a 21-year-old, junior special education/elementary education major (i.e., a peer) with a minor in communication studies. She was a consultant with the University Speaking Center from Fall of 2018 to Spring of 2019 until she was promoted to a managing consultant in the Fall of 2019. The interventionist: (a) worked with participants on creating their scripted notecards, (b) instructed participants on *SACR* curriculum, (c) administered baseline and intervention sessions, (d) collected all data (i.e., baseline, intervention, generalization, and maintenance), and (e) collected social validity data from all participants. The researcher (i.e., first author) (a) designed the study, (b) conducted procedural fidelity, (c) conducted inter-observer agreement, (d) and graphed and analyzed the data.

Setting

The study was implemented on the campus of an urban public research university in the Southern United States. The University holds two classifications from the Carnegie Foundation – high research activity and "community engagement" in curriculum, outreach, and partnerships. At the time of the study, the school's undergraduate enrollment was 16,500 students. The faculty to student ratio was 20:1 and the average class size was 25. Baseline, intervention, and maintenance sessions were conducted in a private office at the University Speaking Center. The SC offers services for students, faculty, employees, and community members in an inclusive setting. In order to determine if a behavior change "lasts over time, appears in environments other than the one in which the intervention that initially produced it was implemented, and/or spreads to other behaviors not directly treated by the intervention" (Cooper et al., 2007, p. 18) generalization data were collected. Generalization probes were

collected at the participating University instructors' offices.

Materials

Materials included the following: (a) the *Self-Advocacy and Conflict Resolution* (*SACR*) Curriculum (modified; *Module I* - Rumrill, et al., 1999); (b) scripted notecards with the script); (c) an audio recording device (i.e., iPhone or audio recorder) to record role-play sessions and to record sessions for interobserver agreement (IOA) and procedural fidelity; and (d) data collection sheets for probe sessions, procedural fidelity, and IOA.

Data Collection Procedures

Dependent Variables

The purpose of this study was to determine the effect of a self-advocacy intervention (the independent variable) on the ability of college students with disabilities to request accommodations (the dependent variable). In the current study, there were two dependent variables, the primary dependent variable was the number of target behaviors correctly demonstrated during the role-play in *Module I* of *SACR* instruction to request accommodations. Probe sessions were audio recorded and event recording (i.e., a paper/pencil checklist) was used to document correctly demonstrated target behaviors. A plus [+] sign indicated a correctly demonstrated target behavior, and a [-] sign was used to indicate incorrectly demonstrated target behaviors. The number of correctly demonstrated target behaviors were divided by the total number of target behaviors and a percentage was recorded. For example, if the participant's response included an appropriate greeting such as, "Hi Dr. Brown, I'm Lee Smith from your Tuesday Biology class" the participant received a plus sign for each corresponding behavior (e.g., greeting). If a participant demonstrated three out of 12 target behaviors, 25% of the target behaviors were demonstrated in that session.

The participants' ability to generalize target behaviors to an *in-situ* condition (i.e., meeting with their course instructor) was the second dependent variable. Meetings were audio-recorded; responses were recorded on the data collection sheet and results were graphed.

Interobserver Reliability

In order to obtain IOA data, operational definitions and the list of target behaviors were used. This was the researcher's fourth study using *SACR* instruction; therefore, due to previous experience, no additional training was necessary. However, the as this was interventionist's first study, the researcher listened to all 39 of the audio-recorded sessions to confirm the participant achieved the target behavior. To derive IOA, an item-by-item analysis based on the operational definitions and list of target behaviors was utilized. The number of agreements between the observers was divided by the total number of agreements plus disagreements; next, the number was multiplied by 100 to calculate the percentage of agreement (Cooper et al., 2007); IOA was 100% meaning the interventionist and the researcher agreed 100% of the time that the participants achieved the target behaviors.

Social Validity

Social validity data were collected to determine the social importance of the behavioral change. The questionnaire used a 4-point Likert-type scale (i.e., 1 = *strongly disagree* to 4 = *strongly agree*) to measure participants' perception of the intervention. Examples of questionnaire

items were as follows: (a) the steps of *SACR* were easy to use; (b) the role-playing sessions were helpful; (c) I have the confidence to ask my instructors for my accommodations; and (d) during instruction, the notecards helped me learn the steps. Participants were also given space to write additional comments.

Social validity data were also collected from the instructors. The instructor questionnaire included five questions and one open-ended question. For example, using the rating scale described previously, instructors were asked to rate the degree to which: (a) teaching students with disabilities how to independently request academic accommodations is important and necessary, (b) the participants explained their learning/accommodation needs clearly, and (c) the participants identified the specific accommodation(s) needed.

Procedures

General Procedures

Intervention sessions consisted of four, 15-20 min sessions. Each session included three target behaviors which followed scripted lesson plans: (a) explicit instruction of the target behavior, (b) creation of the notecard and role-play using the notecard (see Figure 2 for sample notecards), and (c) review of the target behaviors. Correct responses were acknowledged with continuation of the conversation; no other form of reinforcement was offered. If the participant missed a step necessary to continue the conversation (e.g., disclosure), the interventionist would have prompted the student by reminding the student to look at the notecard. In the event the step was not necessary to continue the conversation (e.g., greeting), the interventionist did not intervene and allowed the participant to continue uninterrupted. However, because participants had access to and used their notecards throughout the intervention, no prompting was required. Prior to each intervention session, participants completed an audio-recorded probe to determine the target behaviors maintained from the previous session. The instructional session began after probe data were collected.

Baseline

The interventionist met with each participant at an office in the University Speaking Center to role-play the process of requesting accommodations from their instructor. The interventionist instructed the participants to ask for accommodations as if they were meeting with their instructor. For example, the interventionist prompted the participant, “Let’s say I am your instructor and you’re asking for your accommodations, what would you say?” The conversation flowed naturally after the initial prompt and the interventionist did not offer any further prompting. According to Ledford and Gast (2018), “experimental control is demonstrated when adequate internal validity is present and when behavior changes occurs when and only when the intervention is introduced to each target tier, for at least three tiers with concurrent start points” (p. 241). Thus, three baseline data points were collected and the student with the lowest and/or most stable baseline was the first to enter intervention. Participants were not given any instruction during baseline. All sessions were audio-recorded for interobserver reliability and procedural fidelity.

Experimental Condition

The current study used *Module I* of *SACR* instruction and scripted

notecards taught over four lessons – each of which included three target behaviors – sessions lasted approximately 15 to 20 mins in length. Sessions were conducted in an office at the University Speaking Center. Each *SACR* lesson (i.e., three target behaviors) was taught in one session. Throughout intervention, maintenance, and the post-intervention generalization probe, participants were permitted to use their notecard which facilitated acquisition of the target behaviors. The last part of the intervention was the generalization probe (i.e., the *in-situ* condition). Data were collected and graphed according to the correctly demonstrated target behaviors during the data collection probe.

Lesson 1. Prior to beginning the first lesson, a final baseline probe was conducted to ensure the students had not acquired any of the target behaviors as well as to strengthen experimental control (i.e., threats to internal validity [e.g., maturation]). Lesson 1 included three target behaviors. See Table 2 for the lesson name, the target behavior, an example, and the instructor's response.

Lesson 2. Lesson 2 began with a probe to determine the extent to which the participant retained the target behaviors from Lesson 1. After the probe was collected, the interventionist began Lesson 2 (see Table 2).

Lesson 3. Prior to beginning Lesson 3, the interventionist collected a probe to determine if the participant maintained the target behaviors from Lessons 1 and 2. Lesson 3 included three target behaviors (see Table 2).

Lesson 4. Before beginning Lesson 4, a probe was collected to determine if the participant maintained the target behaviors from the first three lessons. The final lesson (i.e., Lesson 4) included three target behaviors (see Table 2).

Maintenance. Maintenance data were collected for all three participants between 2 weeks and 2 months (2 weeks for Seth, 3 weeks for Kristen, and 2 months for Matthew [due to Winter Break]) after the intervention condition to ascertain if students maintained skills taught using *SACR* instruction.

Generalization. In order to determine the extent to which the students' performed with their instructor (i.e., an *in-situ* condition), generalization data were collected. Each student met with their selected instructor before and after intervention sessions began. Prior to the meeting, instructors were told they would meet with one of their students who was there to request academic accommodations. They were not given any additional information. The meetings were audio-recorded and reviewed by the researcher.

Procedural Reliability. To ensure the intervention was conducted with fidelity, a procedural reliability checklist was used. A 13-item checklist included statements such as "The recording device is charged and working properly" and, "The student practiced the target behaviors with the interventionist using role-play." Procedural reliability data were collected by the researcher who listened to one randomly selected audio-recorded session from each lesson and from each participant; therefore, a total of 30% of instructional sessions were examined for procedural fidelity. The researcher used the scripted lesson plans to ensure the intervention was conducted accurately. Fidelity was calculated by dividing the smallest number of item-by-item agreement by the total number of lesson plan steps and multiplied by 100 (Cooper et al., 2007). Procedural reliability was 100%.

Experimental Design

In order to examine the effects of *SACR* instruction on three college students with disabilities in inclusive postsecondary educational settings, a multiple probe across participants design was used. A multiple probe design enables the experimenter to intermittently collect data until a stable baseline is established (Ledford & Gast, 2018) and helps decrease baseline fatigue caused by continuous data collection (i.e., multiple baseline) on skills participants may have yet to acquire.

Three baseline data points were collected for each participant, the participant with the lowest and most stable baseline entered intervention first. There were 12 target behaviors; each of the four sessions included three target behaviors. Mastery criteria for the intervention were set at 83% of correctly demonstrated target behaviors. Lessons built upon one another, so mastery was cumulative. In order to progress through the lessons, the participant had to achieve 67% mastery for Lesson 1 (2 out of 3 target behaviors, 83% mastery for Lesson 2 (5 out of 5 target behaviors), 89% mastery for Lesson 3 (8 out of 9 target behaviors), and 83% mastery for Lesson 4 (10 out of 12 target behaviors).

Results

The purpose of the study was to evaluate the effects of *SACR* instruction, conducted by a SC peer consultant, on the ability of three college students with disabilities to request academic accommodations. Results are presented in Figure 1. Visual inspection of the graphs indicated a functional relation between *SACR* instruction and students' ability to request academic accommodations from their instructors. Additionally, effect size and *p*-value were calculated to determine the strength of the intervention. Tau-*U* is used to measure non-overlapping data between two phases (Vannest et al., 2016). Because the current study included fewer than five data points per phase (e.g., three data points in baseline and four data points in intervention), Tau-*U* was an appropriate measure to report effect size (Rowe et al., 2021). The combined Tau-*U* for all three participants was .778, which is considered a medium to high effect size (Cumming & Rodriguez, 2017). The *p*-value for the combined participants was $p<0.0006$ suggesting the effects of the intervention were statistically significant and not due to chance. (See Figure 2).

Kristen

During baseline, Kristen's scores ranged from 0 – 1 with a mean of 0.5 of 12 target behaviors correct. Kristen reached mastery criterion in four sessions. Maintenance data collected three weeks after intervention concluded indicated Kristen maintained all 12 target behaviors (100%). Further, Kristen demonstrated 100% of the target behaviors in the post-intervention generalization measure.

Matthew

Matthew's scores ranged from 1 to 2 during baseline with a mean of 1.50 of 12 target behaviors correct. Matthew reached mastery criterion in four sessions. Due to Winter Break, maintenance data could not be collected until approximately 2 months post-intervention. However, Matthew maintained all 12 target behaviors (100%). Generalization data were collected approximately 1 week after intervention concluded; Matthew demonstrated 12 out of 12 target behaviors (100%).

Seth

Seth's baseline data scores ranged from 1 to 4 with a mean of 2.0 of 12 target behaviors correct. Seth reached mastery criterion in four sessions. After the first session of intervention, he demonstrated three target behaviors; however, after the second session, he only demonstrated a total of three target behaviors (out of a possible six) – in spite of using the notecard. This may be attributed to the fact that due the first intervention session was held before winter break, and the remaining sessions occurred after winter break. The interventionist reviewed the target behaviors from the first and second sessions and administered an additional probe to ensure Seth mastered the first six target behaviors before moving on to the third session (see Figure 1). After the third session, he exhibited nine of the 12 target behaviors, and after the fourth session, Seth demonstrated all 12 target behaviors. Maintenance data were collected 2 weeks after the intervention concluded and Seth performed 12 out of 12 (100%) of the target behaviors. Approximately 2 weeks after the conclusion of intervention, Seth met with his instructor for a generalization measure – he demonstrated 12 out of 12 (100%) of the target behaviors.

Social Validity Data

Results from student questionnaires indicated students felt *SACR* instruction was effective and resulted in improved skills to request accommodations. All students *Strongly Agreed* (4) on all questions. Similarly, the instructors rated all questions with *Strongly Agree* (4). One instructor noted, "I feel that this tool made it easy for the student to learn the process of using accommodation requesting skills."

Discussion

The purpose of this study was to evaluate the effects of self-advocacy instruction (*SACR*; Rumrill et al., 1999) delivered by a SC peer consultant on the ability of three college SWD to request accommodations in both role-play and *in-situ* conditions. Findings from this study indicated a functional relation between *SACR* instruction and students' ability to request academic accommodations from their instructors. Moreover, data indicated all students maintained and generalized the self-advocacy target behaviors. *SACR* instruction required a minimal outlay of time - each instructional session was approximately 15 – 20 mins; all three participants mastered the target behaviors in four instructional sessions. Therefore, the intervention is cost effective both fiscally and temporally. Social validity data suggested students felt the lessons were helpful and improved their ability to self-advocate for their accommodations.

These findings are consistent with findings of previous studies that examined the effect of *SACR* instruction on the ability of SWD to request academic accommodations (Holzberg et al., 2019; Walker & Test, 2011). Walker and Test (2011) demonstrated a functional relation between *SACR* instruction and three college students with disabilities' ability to request accommodations. Next, Holzberg et al. (2019) examined the effect of *SACR* instruction on the ability of four high school students with disabilities; results indicated a functional relation between *SACR* instruction and students' ability to request academic accommodations in a college setting. This study extends the literature by evaluating the effect of *SACR* instruction conducted in a university SC by a peer consultant on the ability

of college students with IDD (i.e., Kristen and Matthew) and social pragmatic communication disorder (i.e., Seth) to request accommodations.

Implications for Practice

Results from the current study indicated there are several ways in which *SACR* instruction can be used by practitioners. First, in order to ensure a smoother transition to PSE, it is imperative students learn self-advocacy skills during secondary school. A 2002 survey conducted by Janiga and Costenbader noted the need to teach self-advocacy skills to SWD prior to college matriculation in order for students to be better equipped to access accommodations. In their survey, they found that 66.7% of college disability services coordinators reported the need to improve students' self-advocacy skills in high school. More recently, studies (e.g., Rowe et al., 2015 and Test et al,. 2009) identified self-advocacy as a predictor of success in postsecondary education.

As previously noted, a plethora of research has indicated (e.g., Holzberg et al., 2019; Roessler et al., 1998; Walker & Test, 2011) the need for self-advocacy skills in PSE settings, yet many matriculating students lack these important skills. Further, the use of academic accommodations in PSE leads to increased persistence, shorter time to degree completion, and high GPA (Mamiseishvili & Koch, 2011); therefore, it is imperative SWD learn these skills as early in their college careers as possible. While SWD may seek accommodations upon arriving to campus, many offices of disability services are working at capacity and lack the resources to offer self-advocacy instruction to their students. Given the efficacy of peer supports demonstrated in the current study, we suggest university SC collaborate with their university's offices of disability services (or accessibility resources) to establish a program to deliver this instruction. Collaboration with the SC offers a sustainable, symbiotic relationship for all involved. In this way, offices of disability services would refer students to the SC; peer consultants in the SC would provide instruction in self-advocacy and conflict resolution.

Next, video modeling has demonstrated efficacy in teaching a wide range of skills including academic skills (Kellams & Edwards, 2016) and conversation skills (Kellams et al., 2020). Speaking Center consultants could create video models of *SACR* instruction to teach these important skills. Once the videos are created, additional SC peer consultants could be trained to deliver this instruction to SWD who already use the SC for other communication tasks (e.g., help preparing for speeches or interviews). In this model, trained SC consultants could work with SWD using *SACR* instruction to help teach students to request accommodations in school and in the workplace.

Limitations and Suggestions for Future Research

While the results of the current study were positive, there were several limitations to consider. First, all student participants were the same race (i.e., White); therefore, results may not be generalizable to other populations. Subsequently, future research should include more diverse populations. Second, students were purposefully selected and responded to a request for participants suggesting they were open to learning a strategy to increase access to their accommodations. Third, students were compensated with a $20 gift card for their participation which may have impacted their motivation to participate

in the study. Fourth, there were only three participants, two of whom were seniors. While that is enough to provide a demonstration of effect, future studies should seek to recruit more participants and participants who are earlier in their academic careers. Finally, the current study utilized *Module I* of *SACR* instruction; however, *Module II* includes conflict resolution demonstrate the efficacy of small group instruction. Given the importance of ensuring SWD possess the self-advocacy skills to ensure access to their accommodations in PSE, it is imperative research be conducted in secondary schools with SWD across disability categories and who represent schools' diverse student populations. One possibility includes conducting studies which could be conducted using the peer supports model (e.g., peer tutoring) to ensure sustainability (fiscally and temporally).

Conclusion

Students with disabilities are attending PSE at increasing rates. However, they often lack the skills necessary to access the accommodations to which they are entitled. This study utilized an extant, on-campus resource (i.e., the SC and peer consultant), to provide instruction to SWD to effectively advocate for their accommodations, thereby demonstrating the potential of a sustainable way to increase access to accommodations. As noted, collaboration between the SC and university offices of disability services could ensure SWD receive instruction in the communication skills necessary to facilitate access to their academic accomodations – accommodations shown to improve postsecondary educational outcomes for students with a range of disabilities skills; future research could evaluate the efficacy of conflict resolution instruction when requesting accommodations. Additional suggestions for future research include conducting the instruction in dyads with SC peer consultants and/or conducting the instruction in group settings. Examining this would

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Table 1
Participants, their Instructors, and their Instructors' Roles

Participant	Instructor	Instructor's Role
Kristen	Instructor A	Graduate assistant; working on a master's in social work; worked with the University CTP
Matthew	Instructor B	M.S. in Higher Education; First Year Experience instructor; supervised the University's First Year Program
Seth	Instructor C	M.A. in Communication Studies; Associate Director of the University Speaking Center

Figure 1

Self-Advocacy Components and Related Subcomponents Adapted from Test et al. (2005)

Components			
Knowledge of Self	**Knowledge of Rights**	**Communication**	**Leadership**
Related Subcomponents			
☐ Understanding one's learning styles	☐ Personal rights	☐ Assertiveness	☐ Advocating for others or for causes
☐ Support needs	☐ Educational rights	☐ Articulation	☐ Knowledge of resources
☐ Accommodation needs	☐ Knowledge of resources	☐ Listening	
☐ Responsibilities			

Figure 2

Number of Correctly Demonstrated Target Behaviors by Student

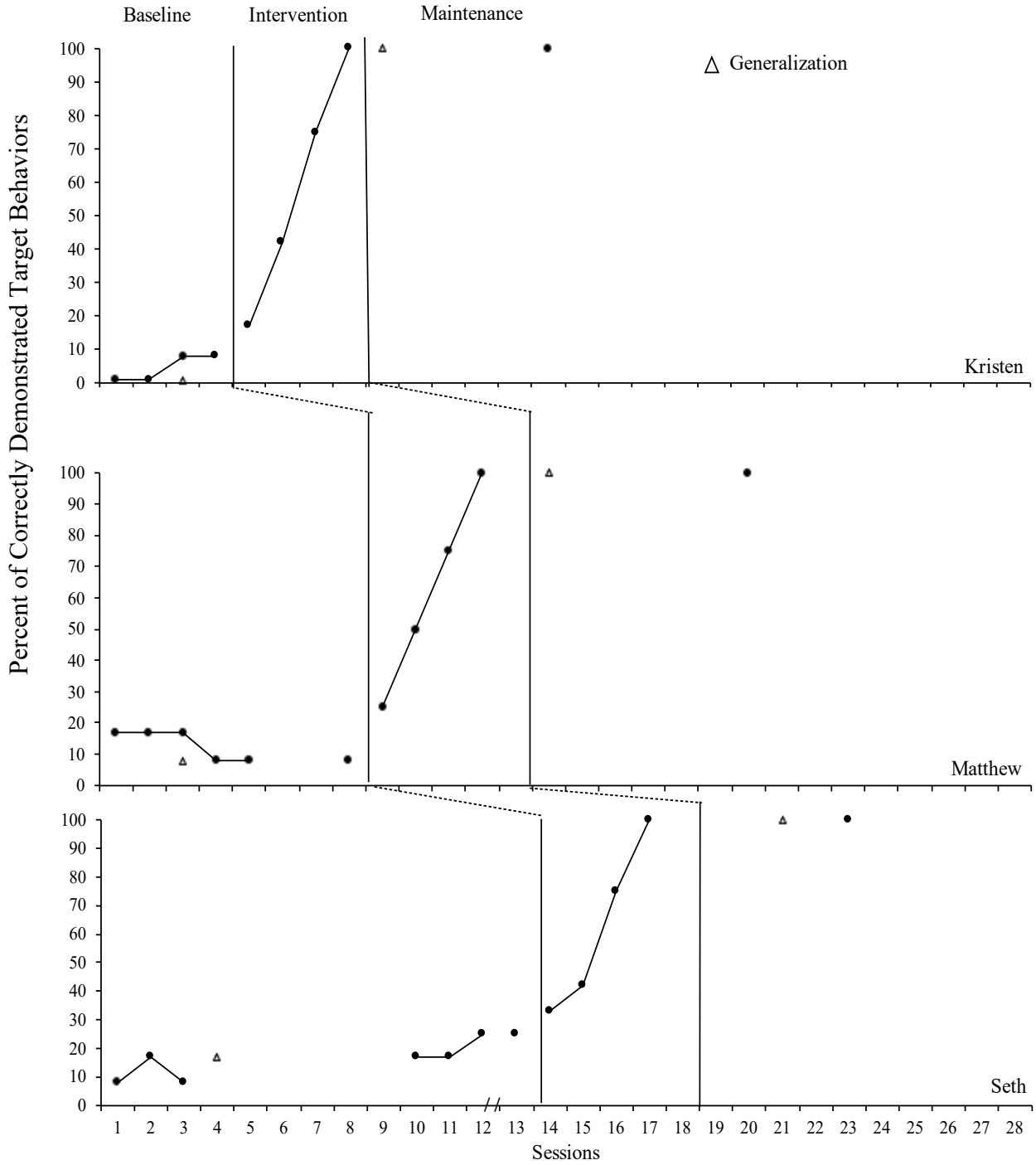

Table 2

Modified Self-Advocacy Lessons

Lesson	Lesson Name	Target Behavior	Example	Instructor Response
1	Introduction	Greet instructor	Hi Dr. Brown, I'm Lee Smith from your Tuesday Biology class.	Hi Lee, it's nice to see you.
1	Introduction	Identify disability status	I wanted to talk to you about my accommodations.	Ok.
1	Introduction	Explain disability in functional terms	I have difficulty listening and taking notes at the same time.	Nods or acknowledges the statement (e.g., "Ok").
2	Disclosure	Identification of previous accommodations	Last year I had extended time for my tests…	Nods or acknowledges the statement (e.g., "Ok").
2	Disclosure	Explanation of the benefit of previous accommodations	…which helped me answer the questions thoroughly.	Nods or acknowledges the statement (e.g., "Ok").
2	Solution	Request use of the accommodation	I think having extended time in your class would be helpful as well.	Nods or acknowledges the statement (e.g., "Ok").
3	Resources	Identify resources and how they help	Before the semester, I registered with disability services to get accommodations in my classes.	Nods or acknowledges the statement (e.g., "Ok").
3	Resources	Student explains their role	I will let you know I asked you for extended time.	Nods or acknowledges the statement (e.g., "Ok").
3	Agreement	Student asks for agreement from the instructor	Does that sound like a good plan?	Nods or acknowledges the statement (e.g., "Ok").
4	Summary	Summarizing	Great, I will use extended time in your class for quizzes and tests.	The instructor listens.
4	Summary	Clarify role	I will let the office of disability services know we made these arrangements.	The instructor listens.
4	Summary	Close with a positive statement	Thank you for working with me, I look forward to your class.	Sounds great.