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Effects of a Self-Advocacy Intervention on the Abilities of College Students with Intellectual and Developmental Disabilities to Request Academic Accommodations

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EFFECTS OF A SELF-ADVOCACY INTERVENTION ON THE ABILITIES OF COLLEGE STUDENTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES TO REQUEST ACADEMIC ACCOMMODATIONS

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University

by

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Dedication

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Table of Contents

List of Tables ........................................................................................................... xi
List of Figures .......................................................................................................... xii
Abstract ................................................................................................................ xiii

I. INTRODUCTION ................................................................................................. 1
    Historical Landscape of the Self-Advocacy Movement ..................................... 3
    Normalization ....................................................................................................... 4
    Legislative Change ............................................................................................... 4
    Legislation for Transition-Aged Youth with Disabilities ................................... 5
    Legislation During Covid-19 ............................................................................... 6
    Justification of the Problem ............................................................................. 7
    Theoretical Basis ................................................................................................. 8
    Test et al. (2005b) Conceptual Framework ................................................... 9
    Modification to Test et al. (2005b) Conceptual Framework ......................... 12
Purpose of the Study ............................................................................................. 15
Research Question ................................................................................................. 15
Definition of Terms ............................................................................................... 15
Conclusion ............................................................................................................... 17

II. REVIEW OF LITERATURE ............................................................................. 18
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeting Self-Determination</td>
<td>19</td>
</tr>
<tr>
<td>Findings of Self-Determination Literature Reviews</td>
<td>20</td>
</tr>
<tr>
<td>Purpose of the Review</td>
<td>21</td>
</tr>
<tr>
<td>Preferred Reporting Items for Systematic Review and Meta-Analysis</td>
<td>22</td>
</tr>
<tr>
<td>Search Strategy/Procedures</td>
<td>22</td>
</tr>
<tr>
<td>Databases</td>
<td>22</td>
</tr>
<tr>
<td>Search Terms</td>
<td>22</td>
</tr>
<tr>
<td>Search Dates</td>
<td>23</td>
</tr>
<tr>
<td>Inclusion of Self-Determination in Search</td>
<td>23</td>
</tr>
<tr>
<td>Exclusion Criteria</td>
<td>24</td>
</tr>
<tr>
<td>Inclusion Criteria</td>
<td>24</td>
</tr>
<tr>
<td>Manual Search</td>
<td>24</td>
</tr>
<tr>
<td>Coding Terms/Definitions</td>
<td>26</td>
</tr>
<tr>
<td>Identified Literature</td>
<td>27</td>
</tr>
<tr>
<td>Content Analysis</td>
<td>28</td>
</tr>
<tr>
<td>Self-Advocacy Components</td>
<td>28</td>
</tr>
<tr>
<td>Purpose</td>
<td>29</td>
</tr>
<tr>
<td>Settings/Participants</td>
<td>30</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>36</td>
</tr>
<tr>
<td>Practical Significance</td>
<td>37</td>
</tr>
<tr>
<td>Limitations</td>
<td>38</td>
</tr>
<tr>
<td>Methodological Rigor</td>
<td>40</td>
</tr>
<tr>
<td>Qualitative</td>
<td>40</td>
</tr>
<tr>
<td>Single Case</td>
<td>42</td>
</tr>
</tbody>
</table>
Group Experimental…………………………………………………………………….42
Discussion of Identified Literature…………………………………………………49
Content Implications…………………………………………………………………….49
  Personal and Contextual Cultures……………………………………………………49
  Academic Accommodations…………………………………………………………52
  Self-Advocacy Components…………………………………………………………54
Methodological Implications…………………………………………………………55
Limitations and Further Directions…………………………………………………..57
Conclusion……………………………………………………………………………….57

III. METHODOLOGY ..................................................................................59
  Experimental Design………………………………………………………………..59
  Virtual Implementation..................................................................................60
  Participants………………………………………………………………………….61
    Program Description……………………………………………………………..61
    Positionality..............................................................................................62
  Recruitment and Consent Process..............................................................63
  Inclusion Criterion.......................................................................................66
  Demographic Information...........................................................................68
  Other involved individuals...........................................................................69
  Interventionist/Researcher and Data Collection Observers..........................70
  Materials and Equipment............................................................................70
  Measures.....................................................................................................70
  Compensation/Honorarium..........................................................................71
  Data Collection Procedures.......................................................................72
Dependent Variable (DV)................................................................. 72
Interobserver Agreement............................................................ 73
Social Validity............................................................................. 75
General Procedures..................................................................... 77
Pre-baseline................................................................................ 77
Baseline.................................................................................... 77
Intervention................................................................................ 78
Modification of SACR................................................................. 78
Intervention Schedule................................................................. 79
Intervention Description........................................................... 83
Module One (Modified).............................................................. 83
Generalization........................................................................... 86
Maintenance............................................................................... 87
Procedural Fidelity..................................................................... 88
Setting(s) and Arrangement(s)..................................................... 88
Data Analysis............................................................................ 88

IV. RESULTS ............................................................................. 90
Primary Measure of the DV......................................................... 90
Secondary Measure of the DV.................................................... 93
Procedural Fidelity.................................................................... 95
Interobserver Agreement (IOA).................................................. 95
Social Validity............................................................................ 96

V. DISCUSSION........................................................................... 99
Appendix O........................................................................................................ 181
Appendix P........................................................................................................... 182
VITA.................................................................................................................... 183
List of Tables

1. Self-Advocacy Components........................................................................................................29
2. Participant General Information...............................................................................................33
3. Quality Indicators for Qualitative Research.............................................................................41
4. Quality Indicators for Single-Subject Research .................................................................43
5. Quality Indicators for Group Experimental Research.......................................................46
6. Student Participant Demographic Information.........................................................................68
7. Operation Definitions of SACR Behaviors...............................................................................72
8. Skills and Corresponding Self-Advocacy & Conflict Resolution (SACR) Trainings Lessons...............................................................................................................................................86
9. Student Participant Social Validity Survey Likert-Scale Responses.........................................97
10. Staff Participant Social Validity Survey Likert-Scale Responses..................................................97
List of Figures

1. Conceptual Framework of Self-Advocacy (Test et al., 2005b) ........................................... 11
2. Modified Self-Advocacy Conceptual Framework ............................................................. 14
3. PRISMA Flow Chart Diagram ....................................................................................... 27
4. Sample Schedule ............................................................................................................. 80
5. Sample Graphic Figure ................................................................................................. 81
6. SACR Intervention: Module 1 (Modified) ................................................................. 84
7. Responses to 10 Structured Questions on Accommodation Requests ......................... 93
8. Responses to Role Play Probes ..................................................................................... 94
Abstract

EFFECTS OF A SELF-ADVOCACY INTERVENTION ON THE ABILITIES OF COLLEGE STUDENTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES TO REQUEST ACADEMIC ACCOMMODATIONS
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Students with intellectual and developmental disabilities (IDD) are pursuing college at higher rates than ever before. However, many of these students experience barriers to success in college and need to self-advocate for their needs, such as requesting academic accommodations. This study examined the effects of a virtually delivered self-advocacy intervention package on the abilities of college students with IDD to request their academic accommodations. This is the first study to virtually implement a modified version of the Self-Advocacy and Conflict Resolution strategy with college students with IDD. Using a single-subject multiple-probe across participants design, this study was implemented with three student participants attending an inclusive higher education program for students with IDD at an urban, four-year university in the south-east region of the United States. Findings reveal moderate to strong evidence of a functional relation between the intervention and the students’ abilities to request academic accommodations.
accommodations. Future research can replicate this study to enhance its external validity and help more college students with IDD gain further self-advocacy skills, particularly to enhance their knowledge of self, knowledge of rights, communication, and leadership; components of self-advocacy addressed in the current research. Inclusive higher education staff members can also adopt this study’s procedures to help ease their students’ with IDD transitions from high school to college and enhance their abilities to independently ask for what they need in inclusive environments. Finally, this study has implications for policy, including the need for continued federal support encouraging youth with IDD to be included in college, which has been shown to positively influence their skills for self-advocacy and overall quality of life.
Chapter I

INTRODUCTION

Low participation rates in postsecondary education (PSE) are consistently reported in research for individuals with disabilities (Plotner & Marshall, 2015). However, in recent decades, societal and legislative changes have facilitated greater access to PSE. In particular, people with intellectual and developmental disabilities (IDD; those with an intellectual disability (ID) and other disabilities present; AAIDD, 2019) are pursuing college at higher rates than ever before, with over 5,500 students with IDD being served in 295 PSE programs across the country (Think College, 2020). Although this number of students with IDD in college lags substantially behind peers with other disabilities and those without disabilities (Newman et al., 2011), the more universities/colleges serving students with IDD fosters greater post-school outcomes, especially in the areas of employment, community living, and social engagement (Butler et al., 2016; Grigal et al., 2016; Moore & Schelling, 2015; National Coordinating Center Accreditation Workgroup, 2016).

This transition to PSE for students with IDD is often accompanied with increased demands (e.g., self-disclosing with disability support services) and stressors (e.g., requesting and managing accommodations; Finn et al., 2008; Newman & Madaus, 2015) that can hinder their success during and after college (Getzel, 2017; Ju et al., 2017). In recent months, the health and safety concerns caused by COVID-19, a novel coronavirus (i.e., a respiratory illness that can
spread from person to person; Centers for Disease Control and Prevention, 2020), has presented additional concerns for college students. For example, these students must also now have the skills to effectively communicate using virtual formats due to social distancing mandates enforced across different states—a unique experience for students given the novelty of the virus.

One method for overcoming these barriers is engaging in self-advocacy (Field et al., 2003; Ju et al., 2017; Newman & Madaus, 2015). Self-advocacy is defined as the ability to articulate one’s needs through demonstrating (a) knowledge of self, (b) knowledge of rights, (c) communication, and (d) leadership (Shogren et al., 2018; Test et al., 2005). Recent literature conceptualizes self-advocacy as a subcomponent of self-determination (i.e., Causal Agency Theory; Shogren et al., 2015), which refers to the ability to engage in “volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life” (Wehmeyer, 2005, p.117). Given that young adults with IDD have been found to demonstrate lower levels of self-advocacy and self-determination when compared to youth in other disability categories (Shogren et al., 2012), it is critical to investigate the impact of increasing their self-advocacy during college (Ju et al., 2017).

**Historical Landscape of the Self-Advocacy Movement**

In past decades, supporting people with IDD and their advocacy efforts in inclusive environments has not always been valued by societies. In fact, prior to the mid-twentieth century, people with IDD were largely segregated from the community and often placed in institutions, with their personal rights stricken and their sense of advocacy never given the opportunity to shed light. It was not until Scandinavian scholars (e.g., Bengt Nirje) grew interested in increasing the amount of reasonable risk experienced by people with IDD did this perception for many change. These scholars reasoned that normal risk-taking experiences are essential for growth and
development (Perske, 1972). Further, over-protecting persons with IDD was believed to eliminate their human dignity. For example, reasonable risk-taking experiences included forming organized leisure clubs that involved people with and without IDD and taking outings together in the community. Per club rules, members without IDD were encouraged not to speak for members with IDD (Perske, 1972).

Such actions sparked an international movement favoring increased independence and social integration for people with IDD (Minnesota’s Governor's Council on Developmental Disabilities, 2019). As this movement grew, so did the number of people with IDD, and other disabilities, who began advocating for their rights. *People First* originated in 1974 as the first self-advocacy organization formed in the United States, and eight years later, Williams and Shoultz (1982) published the first comprehensive work on self-advocacy describing actions of individuals with IDD who sought to improve quality of life for themselves and others.

**Normalization**

Williams and Shoultz’s (1982) work was largely inspired by the principle of normalization (Wolfensberger, 1972), later renamed social role valorization to enhance the social image and competencies experienced by individuals at risk for social devaluation; a notion that changed the way society responded to people with IDD (Wolfensberger, 1983). In particular, this principle has been a major instigator for the acceptance of individual differences and the social integration and inclusion of persons with IDD with the general population (Nirje, 1985). Further, research has associated normalization and quality of life with one’s ability to make choices for diverse living options (Blatt, 1987; Kishi et al., 1988; Smith et al., 2005). As argued by Schloss, Alper, and Jayne (1993), even “the most capable person, restricted from exercising free choice in critical areas, may not have a fulfilled life” (p. 215). Thus, in addition to promoting social
inclusion and integration, the notion of normalization promotes the most central self-determined principles for enhanced quality of life.

**Legislative Change**

Since the 1990s, many of the self-advocacy movement’s core values became law and were largely influenced by the growing number of self-advocates (people with disabilities speaking up for themselves) and advocates (people without disabilities speaking up for people with disabilities). However, legislation focused on increasing the rights of people with disabilities began in the mid-1970s. For instance, the Rehabilitation Act of 1973 mandated that programs conducted or financed by the federal government cannot discriminate based on one’s disability. Specifically, Section 504 of the Rehabilitation Act safeguards reasonable accommodations and accessibility for persons with disabilities.

This was further established for children who are eligible for special education supports and services in the Education for All Handicapped Children Act (EAHCA) of 1975—the first piece of legislation to support free and appropriate public education for children with disabilities in their least restrictive environments. EAHCA, reauthorized as the Individuals with Disabilities Education Act (IDEA) in 1990, provides students with disabilities the opportunity to be fully included with non-disabled peers depending on their diverse, individualized needs.

While IDEA encouraged equitable public-school experiences for eligible students, the Americans with Disabilities Act (ADA, 1990) is a civil rights law prohibiting discrimination based on disability. In particular, this law expanded upon the Rehabilitation Act of 1973 by broadening its anti-discrimination provisions to public entities, including public education, employment settings, and other agencies.
Legislation for Transition-Aged Youth with Disabilities

The most recent reauthorization of IDEA (2004) requires that the individualized education programs (IEPs) of eligible children with disabilities receiving special education supports/services include transition services by the age of 16. Transition services refers to a coordinated set of activities “designed to be a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including PSE, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation” (IDEA, 2004). However, once students graduate from secondary education, they are no longer eligible to receive supports and services covered under IDEA (an entitlement law), or subpart D (preschool, elementary, and secondary education) of Section 504 of the Rehabilitation Act of 1973 (a civil rights law). Instead, postsecondary students’ rights are protected under ADA as well as subpart E (PSE) of Section 504 of the Rehabilitation Act of 1973. This shift in services often presents challenges (e.g., requesting and managing accommodations) for students with IDD transitioning from secondary to PSE (Getzel, 2017).

The most recent federal legislation which emphasizes enrollment in PSE is the Higher Education Opportunity Act (HEOA, 2008). This policy now supports students with IDD in college by extending eligibility for federal financial aid (i.e., grants and work assistance) for students enrolled in recognized Comprehensive Transition and Postsecondary Programs (CTPs). In addition, the law mandates that the United States Department of Education (U.S. DOE) allocate grant funds to institutions of higher education for the development and expansion of Transition and Postsecondary Programs for Students with Intellectual Disability (TPSIDs),
which seek to provide academic, career and technical, and independent living education to
prepare students for competitive integrated employment (HEOA, 2008, SEC. 760). In addition,
the Workforce Innovation and Opportunity Act (WIOA) of 2014 provides funding for students
enrolled in CTPs to receive vocational training and supports from states’ vocational
rehabilitation (VR) agencies. Vocational training services includes coordinating services,
administering federal financial aid, and training related personnel with strategies and procedures
to encourage effective transitions to PSE.

**Legislation During COVID-19**

It is important to note that each of the aforementioned laws has continued to apply during
the COVID-19 pandemic. Yet, the movement to online and virtual learning resulted in teachers,
families, and related stakeholders arguing over waiving students’ rights under the IDEA (2004).
Those in favor of IDEA waivers expressed concerns about meeting deadlines (e.g., for IEP
reviews) and not having the capacity to support students virtually (especially those with complex
support needs). However, opponents of the waivers argued that students with disabilities were
entitled to receive a free and appropriate public education not to lose valuable instructional time
and continue making educational progress. As a result, the U.S. DOE (2020) addressed the
public’s uncertainty by mandating that when schools and districts make decisions to protect the
health, safety, and wellbeing of their students, while also providing a free and appropriate public
education for children and youth with disabilities as mandated by IDEA (2004), whether that be
provided via computer, internet, or phone.

Several COVID-19 relief packages (e.g., S.3548 - CARES [Coronavirus Aid, Relief, and
Economic Security Act] Act, 2020) have been approved through Congress to help fund the cost
of virtual instruction and distance learning in school districts across the United States and
colleges/universities to provide services to students. Thus, as many K-12 schools and colleges/universities continue instruction using virtual formats and need to provide services mandated by federal policies, students with IDD must effectively communicate their needs with course instructors virtually throughout the academic calendar year to ensure their success in the virtual classroom.

**Justification of the Problem**

Policy initiatives and societal and academic transformations have led to an increase in the number of individuals with IDD enrolled in PSE (Lynch & Getzel, 2013); students continue to face challenges (e.g., requesting and managing accommodations; effectively communicating their needs in virtual formats) that hinder their college or university program completion (Getzel, 2017; Ju et al., 2017). Currently, there are 295 PSE programs supporting college students with IDD across the nation, with 48 financially affiliated with TPSID projects (Think College, 2020). According to the fourth annual report of the TPSID model demonstration project (2018-2019), 969 of the 981 students in these TPSID programs were enrolled in 6,762 (inclusive or specialized) total courses, with students at two-year inclusive higher education (IHE) programs taking six courses, on average, within the year, and students at four-year IHEs taking seven courses, on average, within the year (Grigal et al., 2019).

Yet, since federal legislation encourages special education teachers and related service personnel to advocate on behalf of their students throughout K-12 education (IDEA, 2004), it is assumed that students with disabilities, including those with IDD, entering college have different levels of exposure with advocating for their needs in classroom environments (Daly-Cano et al., 2015). Although advocating on behalf of students is necessary to ensure appropriate supports and services are provided in K-12 education, school personnel often lack an understanding of student
self-advocacy and how to teach it (Mason et al., 2004; Test et al., 2005a; Wehmeyer et al., 2000); thus, inadequately preparing students with IDD for facing the many challenges related to seeking and attaining accommodations at the college level.

As a result, students are not prepared with the necessary prerequisite abilities to adequately express their wants/needs in PSE environments (Daly-Cano et al., 2015). However, because self-advocacy is a predictor and facilitator for students’ academic success (Daly-Cano et al., 2015; Fleming et al., 2017; Getzel & Thoma, 2008; Ju et al., 2017; Lindsay et al., 2018; Newman & Madaus, 2015), researchers recommend PSE personnel implement and modify self-advocacy strategies for students (Ju et al., 2017). Implementing these strategies would also assist students in understanding how their disability impacts them (Petchu et al., 2015).

**Theoretical Basis**

Test et al.’s (2005b) examination of self-advocacy definitions in education literature, in combination with relevant stakeholder input (i.e., 30 researchers, teachers, parents, adults with disabilities, and curriculum developers in self-determination and self-advocacy), led to the development of a self-advocacy conceptual framework, which has been adopted and modified for this research. As Test et al. (2005b) recognized, researchers, policymakers, family members, and practitioners offer a wide array of conceptualizations for self-advocacy in education, thus signaling the need for the development of a conceptual framework that merges these definitions into one.

Through developing a single conceptualization of such a complex phenomenon, researchers argue that this can (a) increase overall stakeholder understanding of self-advocacy—one which aligns with understandings found in the literature, (b) foster a greater number of self-advocacy goals set by students in secondary and PSE, and (c) encourage dialogue among family
members, students, educators, researchers, policy-makers, and other support personnel on the benefits of self-advocacy for all individuals, particularly those with disabilities (Test et al., 2005a, 2005b). Given that federal legislation supporting students with IDD in college (HEOA, 2008) fails to offer a definition for self-advocacy—only mentioning the concept as a skill related to independent living—the importance of developing a single conceptualization within PSE research, policy, and practice is necessary.

**Test et al. (2005b) Conceptual Framework**

Test et al.’s (2005b) framework identifies four main components of self-advocacy: knowledge of self, knowledge of rights, communication, and leadership. According to this framework, one must be able to know themselves (knowledge of self) and their rights (knowledge of rights) prior to being able to communicate them (communication) and stand up for others (leadership; Test et al., 2005b). Subcomponents of knowledge of self, knowledge of rights, communication, and leadership are embedded within the framework (see Figure 1). For example, knowing one’s strengths, preferences, goals, and dreams are subcomponents of knowledge of self, whereas knowing one’s resources and advocating for others or causes are subcomponents of leadership.

This study postulates that college students with IDD must be able to use these four components and their subcomponents to self-advocate for academic accommodations. This includes college-students with IDD knowing and understanding their disability status and what they need to be successful in academic environments (knowledge of self). They must also know and understand that they have the right to appropriate accommodations in PSE according to federal law (knowledge of rights). They must communicate their accommodations with their course instructors effectively (communication) and know what resources are available to help
them succeed (leadership). Given that this study focuses on enhancing students’ abilities to request academic accommodations in PSE, students will need to acquire all four self-advocacy components. In this study, “ability” is task-analyzed into key steps for requesting academic accommodations in role-play scenarios.

Although this framework has been used frequently in more recent literature (Kinney & Eakman, 2017), it is important to note the limitations of the literature review (2005a), which impacted the framework’s development and influenced its future implementation. For instance, most studies included in the literature review targeted only two of the four primary components within the developed framework (i.e., knowledge of self and communication, rather than knowledge of rights and leadership). Interestingly, Roberts et al.’s (2016) subsequent review, from 2004 to 2012, identified only one out of 19 empirical research studies addressed all four of the original framework’s components, having also adopted Test et al.’s (2005b) conceptual framework. However, Test et al.’s careful consideration of relevant stakeholder input, as formerly referenced, supports their argument for including knowledge of rights and leadership as the remaining two components characterizing self-advocacy. This study also supports including all four components within self-advocacy’s conceptualization to effectively prepare students with IDD to request their academic accommodations appropriately.
Figure 1

Conceptual Framework of Self-Advocacy (Test et al., 2005b)
Modification to Test et al. (2005b) Conceptual Framework

In addition to conceptualizing self-advocacy into four primary components within a single framework, this research aligns with recent literature (e.g., Causal Agency Theory; Shogren et al., 2015a) by perceiving self-advocacy as a subcomponent of self-determination. According to Causal Agency Theory, and as referenced in earlier literature (e.g., Wehmeyer et al., 1996), self-determination involves several subcomponents (e.g., goal setting, choice-making, self-advocating; Shogren et al., 2015a). It also recognizes that self-determination is “(a) self-caused action from philosophy, (b) a central process of an organism in the movement toward autonomous determination, from personality psychology, and (c) motivated by the basic psychological needs of competence, autonomy, and relatedness from Self-Determination Theory” (Shogren et al., 2015a, p. 258).

Further, Causal Agency Theory largely aligns with earlier conceptualizations and models of self-determination (e.g., Wehmeyer 1992; Wehmeyer et al., 1996). For instance, Wehmeyer’s (1992) functional model of self-determination "refers to the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (p. 305). This conceptualization involves "autonomy (acting according to one's own priorities or principles), self-actualization (the full development of one's unique talents and potentials), and self-regulation (cognitive or self-controlled mediation of one's behavior)” (Wehmeyer, 1992, p. 395). In 1996, Wehmeyer, Kelchner, and Ricards altered the original model (i.e., Wehmeyer, 1992) to make self-determination more action focused. Self-determination now refers to “acting” as the primary causal agent in one’s life by describing “how” one becomes self-determined, which includes engaging in self-advocacy, among other behaviors (Shogren et al., 2015a).
Given this understanding of self-determination, the modified framework (Figure 2) for the current research similarly understands that the phenomenon involves several subcomponents, or related-behaviors, such as choice-making, self-awareness, self-regulation, problem-solving, and goal setting and attainment (Wehmeyer et al., 1996). The dashed (rather than solid) lines in Figure 2 separating these behaviors represent the flexibility to emphasize certain behaviors over others due to the supportive literature suggesting that students and their families value and perceive self-determined behaviors differently according to their diverse cultural identities (Shogren, 2011; Trainor, 2002). For example, individualistic cultures (i.e., Anglo-European) typically emphasize self-determined skills related to independence, whereas collectivistic cultures (i.e., Asian, Latino, Native American) emphasize self-determined skills related to relationships (Browder et al., 2001). Although these behaviors are emphasized differently, this does not lessen the need to self-advocate for one’s accommodations in college.

Rather, this modified conceptual framework allows students with disabilities, including those with IDD, to take on a flexible perception of self-determination (Shogren, 2011) while understanding that its components, including self-advocacy, can be further broken down to increase understanding. This modified framework now defines self-advocacy as a subcomponent of self-determination that refers to one’s ability to articulate their wants, supports, and needs while demonstrating Test et al.’s (2005b) four self-advocacy components: knowledge of self, knowledge of rights, communication, and leadership. Students requesting their academic accommodations in college need each of the aforementioned components to build their self-advocacy and their overall self-determination.
Figure 2

Modified Self-Advocacy Conceptual Framework

Purpose of the Study

Legislative differences between secondary and postsecondary education stress the critical need for increased self-advocacy in PSE. However, while federal legislation (e.g., HEOA, 2008) supports self-determination for college students with IDD, differences between PSE program features make it difficult to pinpoint the extent to which students with IDD are receiving opportunities to advocate (whether in-person or virtually) for their accommodations in inclusive
college settings. Thus, the purpose of this study is to examine the impact of a self-advocacy intervention on the abilities of college students with IDD to request their academic accommodations. This research was implemented virtually during the COVID-19 pandemic to increase participants’ self-advocacy skills in role-play scenarios, with the goal of preparing these students for future conversations with university course instructors in the upcoming fall semester.

**Research Question**

Using a single-subject multiple-probe across participants design, the following research question was addressed in this study:

What are the effects of a self-advocacy intervention on abilities of students with IDD to appropriately request college academic accommodations?

**Definition of Terms**

*Academic Accommodations*

The term *academic accommodations* is defined as “modifications provided so that a student with a disability can participate in class, complete assignments, and share knowledge and idea” (Think College, 2020, para. 1). *Reasonable accommodations* are “changes in an environment to meet the access needs of an individual in accordance with the Americans with Disabilities Act” (Think College, 2020, para. 33).

*Disability Support Office*

The term *disability support office* is defined as an “office responsible for supporting students with disabilities enrolled at a college” (Think College, 2020, para. 9).
Comprehensive Transition and Postsecondary Program for Students with Intellectual Disability

The term comprehensive transition and postsecondary program (CTP) for students with intellectual disability is defined as “a degree, certificate, or nondegree program that is offered by an institution of higher education (IHE) [and] is designed to support students with intellectual disabilities seeking to continue academic, career and technical, and independent living instruction in order to prepare for gainful employment…” (HEOA, 2008).

Intellectual Disability

The term intellectual disability is defined as “a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18” (AAIDD, 2019).

Intellectual and Developmental Disabilities

The term intellectual and developmental disabilities is defined as “[a term] often used to describe situations in which an ID and other disabilities are present” (AAIDD, 2019).

Postsecondary Education

The term postsecondary education is defined as “any type of school or training beyond the high school level (e.g., community college, four-year university, vocational training program)” (Think College, 2020, para. 32).

Self-Advocacy

The term self-advocacy is defined as the ability to articulate one’s needs through demonstrating (a) knowledge of self, (b) knowledge of rights, (c) communication, and (d) leadership (Shogren et al., 2018; Test et al., 2005).
**Self-Determination**

The term *self-determination* is defined as the ability to engage in “volitional actions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life” (Wehmeyer, 2005, p.117).

**Conclusion**

To gather a more comprehensive understanding of self-advocacy in PSE, this chapter began with a brief description of the historical underpinnings of the self-advocacy movement and the advancement of self-determination in education. In doing so, this chapter offered an overview of influential federal policies supporting self-advocacy for children and adults with IDD. Finally, this chapter provided the theoretical framework that guides this research before detailing this study’s purpose and research question.
Chapter II

Chapter one offered a comprehensive historical depiction of the self-advocacy movement. This depiction led to the identification of several challenges and barriers experienced by college students with IDD as well as the purpose of the current research. Chapter two presents a review of self-advocacy intervention research targeting college students with disabilities. Findings from this review identify gaps in the self-advocacy literature that warrant future research.

Review of the Literature

To date, no comprehensive literature review has been found that specifically addresses self-advocacy intervention studies for college students with disabilities. There have only been three reviews on self-advocacy interventions for students with disabilities (Merchant & Gajar, 1997; Roberts et al., 2016; Test et al., 2005a). The first literature review included studies targeting self-advocacy for secondary students with learning disabilities (LD) transitioning to PSE (Merchant & Gajar, 1997). Although Merchant and Gajar (1997) identified seven diverse programs designed to improve the self-advocacy skills of secondary students with LD transitioning to college, only three of them were published as peer-reviewed journal articles.

The limited scope of Merchant and Gajar (1997) influenced Test et al. (2005a) to conduct a more comprehensive literature review that targeted students with varying ages and disabilities
from 1972 to 2004. This broader analysis allowed Test et al. (2005a) to identify three self-advocacy intervention studies targeting adults with disabilities on college campuses (Balcazar et al., 1991; Roessler et al., 1998; Roffman et al., 1994). However, none of these studies included college students with IDD, which is congruent with federally reported statistics indicating that the prevalence of college students with IDD was virtually nonexistent (Wagner et al., 2005). The limited literature on self-advocacy for college students with IDD can be partly attributed to the population’s historically low attendance rate in two-year and four-year colleges and universities (Grigal et al., 2011; Shogren et al., 2018).

Also, since 2004, there have been over 10 times more PSE programs serving students with IDD developed across the country (National Coordinating Center Accreditation Workgroup, 2016) largely due to changing policies and increased federal financial support (e.g., from the HEOA [2008]). This dramatic increase in college students with IDD has influenced a greater body of research targeting this population (Papay & Grigal, 2019); however, further research is needed to understand their ability to self-advocate in PSE settings, especially since the only self-advocacy literature review to follow Test et al. (2005a) excluded college students with disabilities when defining its participants (i.e., Roberts et al., 2016).

Targeting Self-Determination

Given that this study conceptualizes self-advocacy as a subcomponent to self-determination, it is valuable to consider previously conducted literature reviews targeting self-determination interventions for students with disabilities and the extent to which these reviews consider self-advocacy, as well as the college student population. Specifically, three reviews on self-determination intervention studies within education have been conducted (Algozzine et al., 2001; Burke et al., 2018; Ju et al., 2017). Similar to Merchant and Gajar (1997), the first
literature review on self-determination started in 1972, when its earliest definition was found in
the literature (Algozzine et al., 2001). Following this systematic literature review, Burke and co-
authors (2018) conducted a meta-analysis of self-determination interventions from 2000 to 2015,
with the adoption of Causal Agency Theory—a framework frequently exercised in education that
outlines the following skills related to self-determination: choice-making, decision-making,
problem-solving, goal setting and attainment, planning, self-management, self-advocacy, self-
awareness, and self-knowledge (Shogren et al., 2015a).

Findings of Self-Determination Literature Reviews

Algozzine et al. (2001) identified two self-advocacy intervention studies targeting college
students with disabilities that Test et al. (2005a) later identified (i.e., Balcazar et al., 1991;
Roffman et al., 1994). One other study found by Algozzine et al. (2001) demonstrated enhanced
self-advocacy skills (related to assessing one’s needs/resources) for the college-aged population
(i.e., Bowman & Marzouk, 1992); this study was implemented separately from the university,
similar to the remaining self-advocacy intervention studies found. It is important to note that Test
et al. (2005a) identified one study that Algozzine (2001) did not (i.e., Roessler et al., 1998),
although this study was also conducted in the year range of Algozzine et al.’s (2001) review.

In 2018, Burke and co-authors identified 34 total studies with 27 targeting multiple self-
determination components, and only two singularly targeted self-advocacy (Cuenca-Sanchez et
al., 2012; Lancaster et al., 2002); yet, neither of these studies targeted college-aged students.
Lastly, although Ju et al. (2017) did not exclusively target intervention studies for students with
disabilities in PSE, the review identified 10 studies that included students with disabilities in
college. However, Ju et al. (2017) described a major limitation of the review as they did not
evaluate their included studies using the quality indicators identified in the Council for
Findings from relevant literature, as indicated above, highlight the need for further exploration of self-advocacy interventions targeting students with disabilities in PSE. Specifically, the two self-advocacy reviews pinpoint the necessity to examine self-advocacy interventions in college. Since (a) Test et al. (2005a) includes dated literature, (b) Roberts et al. (2016) excluded college students in its participant inclusion criteria, and (c) the three broader scale literature reviews on self-determination placed emphasis on self-advocacy as a subcomponent of self-determination, an updated and more inclusive review is needed.

**Purpose of the Review**

This review focuses on interventions designed to enhance the self-advocacy skills of college students with disabilities. To differentiate from Ju et al. (2017), this review (a) implements diverse search criteria (see Search Strategy/Procedures section) to align with Test et al. (2005a), (b) solely targets intervention studies focused on self-advocacy as it is defined using the conceptualization offered in the aforementioned section, and (c) evaluated the methodological rigor of these studies using the quality indicator standards in *Exceptional Children*’s 2005 special issue and *Council of Exceptional Children* (CEC) *Standards for Evidence-Based Practices in Special Education* in 2014. This review aims to identify whether the literature (a) addressed components of this study’s conceptual framework, (b) included a greater number of self-advocacy interventions targeting college students with disabilities from 2004 to present-day than from 1972 to 2004 (the year range for Test et al., 2005a), (c) implemented interventions successfully in virtual or in-person settings, and (d) included studies specifically targeting self-advocacy for college students with IDD.
Preferred Reporting Items for Systematic Review and Meta-Analysis

This literature review followed the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines to enhance transparency, accuracy, and completeness. The flow chart diagram was adapted from Moher et al. (2009) and categorized into four phases: identification, screening, eligibility, and included. This diagram visually displays each of the procedural steps conducted in this review. The process for article identification, screening, eligibility, and inclusion are described below, with a summary of the information provided in Figure 3.

Search Strategy/Procedures

Databases

Similar to Test et al. (2005a), articles were identified based on pre-determined search terms in the following electronic databases: Educational Resources Information Center (ERIC), Ovid Database's PsycINFO, and Education Research Complete (EBSCO; not used in the original 2005a review). This review expanded upon Test et al.’s (2005a) search by incorporating the third electronic database to obtain a more holistic representation of the current educational literature.

Search Terms

Rather than match Test et al.’s (2005a) search terms (self-advocacy, assertiveness, self-awareness, empowerment, disabilities, intervention, and teaching), search terms were expanded upon by including the following: self-advocacy OR assertive* OR self-aware* OR empowerment OR self-determination; disab*; intervention OR teaching. Given that federal policy, diverse disability organizations, and extensive research identify self-advocacy as a subcomponent to self-
determination—and that the concepts are frequently used interchangeably in education (Field, 1996)—self-determination was added to this review’s search criteria.

**Search Dates**

In alignment with this study’s purpose, the review’s start date began in 1972, when the original literature review, conducted by Test et al. (2005a), also started. Interestingly, Test et al. (2005a) began their search in alignment with the introduction of the first self-determination literature; specifically, Nirje's contributions in Wolfensberger’s (1972) book, entitled *Normalisation*, rather than with the publication of the first comprehensive work on self-advocacy published 10 years later by Williams and Shoultz (1982). Beginning their search in alignment with the first comprehensive work on self-determination further supports the incorporation of self-determination in the present study’s search criteria. Using the aforementioned search criteria, 1,740 articles were identified in the initial electronic database search.

**Inclusion of Self-Determination in Search.** Test et al. (2005a) reported they did not include self-determination as one of their search terms because they had used Algozzine et al.’s (2001) reference list as part of their manual search. Although Burke et al. (2018) offers an updated review of self-determination intervention studies, the current review purposely continues to include self-determination as one of its search items for several reasons. First, Burke et al. (2018) included studies with participants in K-12 or 18-21 school-affiliated programs, without defining “school-affiliated programs” or detailing the extent to which these programs were conducted in PSE. Second, Burke et al. (2018) examined self-determination literature from 2000 to 2015. Thus, articles published within more recent years must be examined. Third, Burke et al. (2018) used fewer search terms compared to Algozzine et al. (2001), and finally, the present
review expanded the database search, through incorporating an additional database (EBSCO), which had not been included in prior reviews of the literature.

**Exclusion Criteria**

Given that self-advocacy intervention studies for college students with disabilities are the focus of this review, students who are still accessing special education supports and services, under IDEA (2004), were excluded from the search. This included dual enrollment students, who were still in high school but take classes on college campuses. As an example, Roberts et al. (2016) included one study that took place on a community college campus, and two on university campuses; however, these students still received special education supports and services as secondary students. As a result, 1,373 studies were excluded from the current review.

**Inclusion Criteria**

Studies included in the current review were written in English and were empirical (quantitative and qualitative) research. The studies must target self-advocacy for college students with disabilities by including one or more of its four components (i.e., knowledge of self, knowledge of rights, communication, and/or leadership) as either the dependent variable(s) for quantitative studies or in the question(s) addressed in qualitative studies.

**Manual Search**

Additional records were identified through scanning the reference list of three relevant literature reviews to seek any pertinent studies that did not emerge from the electronic database search (i.e., Burke et al., 2018; Ju et al., 2017; Test et al., 2005a). Test et al. (2005a) reviewed the two other relevant literature reviews for self-advocacy intervention studies (Algozzine et al., 2001; Merchant & Gajar, 1997), these studies were accounted for in the current manual search. This led to the inclusion of three self-advocacy intervention studies found to be conducted at the
PSE level (Balcazar et al., 1991; Roessler et al., 1998; Roffman et al., 1994). Further, a manual search of Merchant and Gajar's (1997) review resulted in no additional studies being identified due to methodological limitations, and Burke et al. (2018) review had no studies with participants that met inclusion criteria.

A hand search of articles included in the self-determination literature review of Ju et al. (2017) lead to the inclusion of seven additional articles (Farmer et al., 2015; Finn et al., 2008; Parker & Boutelle, 2009; Richman et al., 2014; Walker & Test, 2011; White et al., 2014; White & Vo, 2006). Although not all of these self-determination intervention/training studies were explicit about increasing students’ self-advocacy, these studies demonstrated improved skills related to self-advocacy, as the concept is defined in the present review’s conceptual framework (i.e., through demonstrating one or more of its four components: knowledge of self, knowledge of rights, communication, and/or leadership). Interestingly, the self-advocacy intervention/training studies that met inclusion criteria in Ju et al.’s (2017) review were dissimilar to the studies included by Test et al. (2005a), although both conducted their reviews with identical start dates; further highlighting the need to conduct the current review to address inconsistencies.

Given the information above, 10 additional articles were identified through a manual search, which means that 1,750 articles were identified across the three databases and hand searches prior to duplicate removal. However, two additional articles (i.e., Lamb, 2004; Palmer & Roessler, 2000) that did not appear in the database or reference list searches were identified, bringing the total to 1,752. After duplicate removal, the total number of studies was 1,475. Next, the titles/abstracts of all 1,475 were screened for inclusion/exclusion criteria, resulting in a full-text screening of 102 remaining studies. Among the 102 studies screened, all 102 were written in
English, and 92 were published as peer-reviewed journal articles, and five were non-peer-reviewed dissertations. Upon completion of full-text reviews, 17 peer-reviewed studies and five non-peer-reviewed literature met inclusion criteria.

**Coding Terms/Definitions**

Study participants are defined as follows: students with disabilities enrolled in a two or four-year college/university, including affiliated PSE programs designed for students with IDD. According to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2019), ID refers to “a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18” (p. 1). As for an IDD, AAIDD (2019) provides the following definition “[a term] often used to describe situations in which an ID and other disabilities are present” (p. 1). Figure 3 summarizes the information provided in a four-phase PRISMA flow chart diagram below.
Figure 3

*PRISMA Flow Chart Diagram*

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**Identified Literature**

Twenty-two total studies (17 peer-reviewed and five non-peer-reviewed) were identified for this review. Similar to Test et al. (2005a), the studies are reported in terms of content analysis and methodological rigor. In the content analysis, the following are investigated across all included studies: (a) self-advocacy components and purpose, (b) setting/participants, and (c)
effectiveness. In terms of methodological rigor, studies are categorized by experimental design and examined using quality indicators in special education research (CEC, 2014).

**Content Analysis**

**Self-Advocacy Components**

In alignment with this review’s conceptual framework, each of the included studies are categorized by the self-advocacy component(s) targeted (see Table 1) and/or outcomes experienced. As demonstrated in Table 1, all 22 studies addressed at least one self-advocacy component, with one of the most popular components addressed being “knowledge of self” (77%). Examples of this component found in the studies include knowledge of accommodation needs (White & Vo, 2006); understanding and accepting one’s disability (Roffman et al., 1994); and understanding one’s strengths, learning styles, responsibilities, and more (Lamb, 2004).

The other most popular component addressed was communication. Examples of this component across studies include demonstrating assertiveness (Mytkowicz & Goss, 2012; O’Mally & Antonelli, 2016; Walker & Test, 2011) and use of assistive technology (Izzo et al., 2011). It is important to note that several studies addressed both knowledge of rights and leadership specifically referencing the use of different resources (i.e., Palmer & Roessler, 2000; Richman et al., 2014; White & Vo, 2006); this is because both knowledge of rights and leadership include “knowledge of resources” as one of their sub-skills in the conceptual framework. Interestingly, four of the five non-peer-reviewed dissertations targeted all four subcomponents of this review’s theoretical framework; Simmons-Reed (2015), however, only targeted knowledge of self and communication.
Table 1

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<th>Communication</th>
<th>Leadership</th>
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**Totals**: 17 14 17 14

*Note.* Y = yes. *Indicates non-peer-reviewed literature

**Purpose.** While all studies included at least one self-advocacy component as part of this review’s inclusion criteria, it is important to note what exactly these studies examined and implemented. The process of seeking and attaining accommodations was the most studied purpose, 41% \((n=9)\) of included studies (e.g., Chambers, 2016; Holzberg, 2018; Palmer & Roessler, 2000; Roessler et al., 1998; Roffman et al., 1994; Roper, 2018; Walker & Test, 2011; White et al., 2014; White & Vo, 2006). For the 13 peer-reviewed articles that did not indicate seeking accommodations as their primary purpose, over half \((53\%, n=7)\) included this skill as one of the variables (or the only variable) targeted; if not targeted, this skill had been at least
referenced in the introductions or literature reviews (31%, n = 4). Similar to the most targeted purpose (e.g., seeking accommodations), self-determination skill development had been targeted, or at minimum referenced, in 81% (n = 18) of the included studies. Thirteen of these studies categorized self-advocacy as a subcomponent to self-determination, which aligns with this review’s conceptual framework.

The second most targeted purpose of the studies (23%, n = 5) was focused on increasing participants’ self-determination (Bomar, 2018; Farmer et al., 2015; Lamb, 2004; Richman et al., 2014; Simmons-Reed, 2015). However, two other studies (Balcazar et al., 1991; Finn et al., 2008) could additionally be included in this category, given this review’s conceptual understanding of “self-determination.” Specifically, these studies targeted self-determination skills, such as goal attainment and help-seeking (Balcazar et al., 1991) and increasing students’ problem-solving abilities to overcome barriers and challenges in PSE (Finn et al., 2008).

Two studies sought to increase participation, recruitment, and/or retention of students with disabilities in STEM education programs (Gregg et al., 2016; Izzo et al., 2011), while two other studies sought to increase participant outcomes (Mytkowicz & Goss, 2012; O’Mally & Antonelli, 2016). For example, O’Mally and Antonelli (2016) aimed to enhance employment outcomes for students with visual impairments. Finally, one study aimed at increasing participants’ participation in Person-Centered Planning meetings; this study was also the only peer-reviewed journal article to focus on college students with IDD (Mazzotti et al., 2015).

**Setting/Participants**

Among the studies included, 14 were conducted in-person, three conducted online (i.e., Bomar, 2018; Gregg et al., 2016; O’Mally & Antonelli, 2016), and two conducted both in-person and online (i.e., Parker & Boutelle, 2009; Richman et al., 2014). Each of the three studies
conducted online implemented online coaching or mentoring (i.e., academic coaching [Bomar, 2018], electronic mentoring [Gregg et al., 2016], and career mentoring [O’Mally & Antonelli, 2016]). None of these studies specifically targeted supporting students seeking or attaining accommodations, although this was the most commonly targeted purpose. However, one study targeted self-determination (Bomar, 2018), the second most targeted purpose of studies included in this review.

In terms of participants, Table 2 provides a general summary of participant information by study, including the number of participants, an indication of whether the study exclusively included individuals with disabilities, targeted disability types, and participants’ level of education, gender, and race/ethnicity. There was a total of 479 participants in the 22 included studies. All but one study (Gregg et al., 2016) exclusively targeted individuals with disabilities (i.e., four mentors without disabilities, each of whom were paired with a mentee with disabilities). While some studies indicated that many of their participants had more than one disability (e.g., Farmer et al., 2015; Mazzotti et al., 2015), 18 of the 22 studies included individuals with LD, specific learning disabilities (SLD), or other related learning disorders. Interestingly, only two studies targeted individuals with IDD (Mazzotti et al., 2015; Simmons-Reed, 2015).

Participants’ current educational environment (e.g., graduate, undergraduate, community college, and/or high school) was indicated for 18 of the 22 studies. Ten of these studies indicated a specific grade level for each participant (Bomar, 2018; Chambers, 2016; Finn et al., 2008; Holzberg, 2018; Mazzotti et al., 2015; Mytkowicz & Goss, 2012; Roper, 2018; Simmons-Reed, 2015; Walker & Test, 2011; White et al., 2014; White & Vo, 2006). One additional study (Parker & Boutelle, 2009) only reported the grade levels for seven of their 54 participants; these seven
students also participated in qualitative interviews after completing the quantitative survey. Two studies (Izzo et al., 2011; Lamb, 2004) targeted students currently attending PSE and also high school students. Specifically, Izzo et al. (2011) indicated that their high school participants were transitioning out of high school and had already been accepted into institutions of higher education.

All but four studies (Bomar, 2018; Finn et al., 2008; Lamb, 2004; Parker & Boutelle, 2009) referenced their participants’ gender, with 186 male and 194 female participants identified out of 380 participants, excluding the five participants from Bomar (2018), 20 from Lamb (2004), 17 from Finn et al. (2008), and 54 from Parker and Boutelle (2009). Although Parker and Boutelle (2009) did not provide gender-specific information, this study did detail its efforts to increase gender diversity by engaging in purposeful sampling.

Slightly over half the peer-reviewed studies failed to report their participants’ race/ethnicity (53%, n = 9), whereas all but one non-peer-reviewed dissertation (Roper, 2018) reported race-ethnicity. Among the studies where race/ethnicity was reported, the predominant race/ethnicity was white. A few of the studies that did report race/ethnicity, however, indicated taking different approaches to maximize diversity in their sample (Richman et al., 2014; White et al., 2014).
### Table 2

**Participant General Information**

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>All with disabilities</th>
<th>Disability Types</th>
<th>Level</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balcazar et al. (1991)</td>
<td>4</td>
<td>Y</td>
<td>Physical disability</td>
<td>N/A</td>
<td>2 M; 2 F</td>
<td>N/A</td>
</tr>
<tr>
<td>*Bomar (2018)</td>
<td>5</td>
<td>Y</td>
<td>LD; ADHD</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>*Chambers (2017)</td>
<td>3</td>
<td>Y</td>
<td>LD or attention challenge that is impacting academic abilities</td>
<td>3 Freshman</td>
<td>3 M</td>
<td>Latino</td>
</tr>
<tr>
<td>Farmer et al. (2015)</td>
<td>7</td>
<td>Y</td>
<td>LD, ADHD</td>
<td>5 undergraduates; 2 graduate students</td>
<td>3 M; 4 F</td>
<td>N/A</td>
</tr>
<tr>
<td>Finn et al. (2008)</td>
<td>17</td>
<td>Y</td>
<td>SLD, ED, OHI, Deafness, Orthopedic disability</td>
<td>17 undergraduates (5 freshman, 3 sophomores, 7 transfers, plus 2 peer mentors, who were juniors/seniors)</td>
<td>N/A</td>
<td>9 White, 3 Black, 1 Asian, 1 Native American, 1 Hispanic (information for 2 peer mentors N/A)</td>
</tr>
<tr>
<td>Gregg et al. (2016)</td>
<td>8</td>
<td>N</td>
<td>LD, visual impairment, physical disability</td>
<td>4 community college students (mentees); 4 working adult professionals (mentors)</td>
<td>3 M; 5 F</td>
<td>3 White, 5 Black</td>
</tr>
<tr>
<td>*Holzberg (2018)</td>
<td>4</td>
<td>Y</td>
<td>ASD, and/or ADHD, and/or EBD; e.g., anxiety, depression</td>
<td>2 Junior; 1 Freshman; 1 Senior</td>
<td>2 F, 2 M</td>
<td>1 Mexican American; 1 African American; 1 Asian American; 1 Caucasian</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Sample Type</td>
<td>Diagnosis/Impairment</td>
<td>Sample Details</td>
<td>Gender</td>
<td>Race/Ethnicity</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>----------------</td>
<td>--------</td>
<td>----------------</td>
</tr>
<tr>
<td>Izzo et al. (2011)</td>
<td>83</td>
<td>Y</td>
<td>SLD, ADHD, sensory impairment, ASD</td>
<td>High school, community college, undergraduate, and graduate students</td>
<td>66 M; 17 F</td>
<td>N/A</td>
</tr>
<tr>
<td>Lamb (2004)</td>
<td>20</td>
<td>Y</td>
<td>LD, ADHD, emotional impairment, autistic impairment, hearing impairment, visually impairment, TBI</td>
<td>High school and community college students</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Mazzotti et al. (2015)</td>
<td>3</td>
<td>Y</td>
<td>IDD (i.e., cerebral palsy and mild or moderate ID)</td>
<td>Second-years in a two-year inclusive higher education program</td>
<td>2 M; 1 F</td>
<td>3 Caucasian</td>
</tr>
<tr>
<td>Mytkowicz, &amp; Goss (2012)</td>
<td>14</td>
<td>Y</td>
<td>LD, ADHD</td>
<td>14 undergraduates; 5 seniors, 9 juniors</td>
<td>8 M; 6 F</td>
<td>N/A</td>
</tr>
<tr>
<td>O’Mally &amp; Antonelli (2016)</td>
<td>77</td>
<td>Y</td>
<td>Visual impairment</td>
<td>37 undergraduates (mentees and comparison group participants); 14 graduate students (mentees and comparison group participants); mentors were either employed (21) or recently retired (5)</td>
<td>28 M; 49 F</td>
<td>36 White (mentees and comparison group participants); 21 White (mentors)</td>
</tr>
<tr>
<td>Palmer &amp; Roessler (2000)</td>
<td>50</td>
<td>Y</td>
<td>LD, orthopedic impairment</td>
<td>N/A</td>
<td>17 M; 33 F</td>
<td>34 European American; 8 Native</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Gender</td>
<td>Diagnosis</td>
<td>Setting</td>
<td>Race Information</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Parker &amp; Boutelle (2009)</td>
<td>54</td>
<td>Y</td>
<td>ADHD, LD, and related learning disorders</td>
<td>2-year PSE institution students</td>
<td>American; other races N/A</td>
<td></td>
</tr>
<tr>
<td>Richman et al. (2014)</td>
<td>24</td>
<td>Y</td>
<td>LD, ADHD</td>
<td>17 undergraduates; 7 graduate students</td>
<td>18 White, 3 Black, 2 Asian/Pacific Islander, 1 Other</td>
<td></td>
</tr>
<tr>
<td>Roessler et al. (1998)</td>
<td>3</td>
<td>Y</td>
<td>LD, visual impairment, physical disability</td>
<td>3 undergraduate students (attending 4-year university)</td>
<td>1 M; 2 F</td>
<td></td>
</tr>
<tr>
<td>Roffman et al. (1994)</td>
<td>36</td>
<td>Y</td>
<td>LD</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>*Roper (2018)</td>
<td>6</td>
<td>Y</td>
<td>LD and/or ADHD</td>
<td>5 Freshman; 1 Junior</td>
<td>3 F; 3 M</td>
<td>6 Caucasian</td>
</tr>
<tr>
<td>*Simmons-Reed (2015)</td>
<td>3</td>
<td>Y</td>
<td>Mild IDD</td>
<td>2 first-years; 1 second-year</td>
<td>3 M</td>
<td>2 Caucasian; 1 African American</td>
</tr>
<tr>
<td>White et al. (2014)</td>
<td>52</td>
<td>Y</td>
<td>LD, physical disability, sensory disability, mental health issues</td>
<td>52 undergraduates (15 freshman, 13 sophomores, 11 juniors, 13 seniors)</td>
<td>21 M; 31 F</td>
<td>N/A</td>
</tr>
<tr>
<td>White &amp; Vo (2006)</td>
<td>3</td>
<td>Y</td>
<td>LD, CP, VI</td>
<td>2 undergraduates (1 sophomore, 1 freshman); 1 graduate student</td>
<td>3 M</td>
<td>3 White</td>
</tr>
</tbody>
</table>

Note. *Indicates non-peer-reviewed literature.
Effectiveness

Most studies demonstrated positive effects in each of their studies’ diverse outcomes. Four peer-reviewed journal articles and one dissertation did not demonstrate overall positive effects (Farmer et al., 2015; Finn et al., 2008; O’Mally & Antonelli, 2016; Palmer & Roessler, 2000; Roper, 2018); these studies found mixed-results across multiple measures. For example, Farmer et al. (2015) found little to no intervention effects on their visual analysis or their time-series data; however, participants’ interpretations of the data revealed intervention benefits in increasing their self-determination behaviors. The authors offer a potential explanation for this inconsistency, suggesting that collecting self-reported time-series data was not the most convenient data collection method due to its insensitivity to the schedule of the participants’ academic semester (Farmer et al., 2015).

O’Mally and Antonelli (2016) also found mixed-results, finding that mentorship experiences increased mentees’ assertiveness in job hunting and improved job-seeking, self-efficacy, and career adaptability. However, at the same time, mentorship relationships did not significantly impact employment rates or job satisfaction (O’Mally & Antonelli, 2016). Finn et al. (2008) found that less than half of the participants who completed the self-assessments reported changes in understanding their disabilities post-intervention. Over half reported the intervention had positive impacts on their ability to deal with varying issues. In addition, many of those who participated in the post-intervention evaluation reported increased empowerment, self-confidence, and goal setting. On the other hand, Palmer and Roessler (2000) did not find statistically significant results in their quantitative analyses, with authors indicating that their small sample size contributed to insignificant findings.
Finally, although Roper’s (2018) participants reported that some aspects of the intervention were beneficial, the study indicated mixed results. In particular, this research was unable to provide enough evidence to determine whether the intervention had a positive impact on the participant’s ability to self-advocate due to the participants’ pre-existing self-advocacy skills prior to intervention implementation. Despite that none of the participants had similar educational backgrounds, they all reported that their strong self-advocacy skills derived from their parent’s involvement during their K-12 education.

It is also considerable to note that although findings from Simmons-Reed (2015) revealed increased academic and social behaviors as a result of the Self-Determined Learning Model of Instruction intervention, participants did not show specific improvements in the targeted subcategory called “advocating for self.” Interestingly, this subcategory had been separated from “communication,” which the current review identifies as a component of self-advocacy in accordance with this review’s theoretical framework.

**Practical Significance.** All single-subject design studies explicitly collected social validity data, whereas about 67% (n = 6) group experimental design studies did not indicate effect sizes, an indication of practical significance (see methodological rigor section for details). All qualitative studies reported practical significance by collecting data related to participant perceptions on intervention effectiveness, given the nature of these studies’ designs (i.e., qualitative case studies and interviews). Although most studies reported average or above-average practical significance, Balcazar et al.’s (1991) mean ratings of the judge’s social validity data were not statistically significant. However, participants’ average satisfaction with the training procedures was high (i.e., 6.7 on a 7-point scale). White et al. (2014) found higher satisfaction ratings for the workshop training, than the online tutorial. Overall, though,
participants were satisfied with the intervention and would recommend it to others (White et al., 2014).

Among the dissertations, results from the student perception survey in Bomar (2018) supported a positive intervention effect, similar to Chambers (2016) and Holzberg (2018), which collected social validity data from students, course instructors, and/or support specialists. In particular, participants from Chambers (2016) and Holzberg (2018) highlighted the importance of the Self-Advocacy and Conflict Resolution (SACR) intervention for enhancing students’ abilities to request academic accommodations from course instructors. Further information regarding social validity is offered in the methodological rigor section.

Limitations. The studies’ limitations also impact the significance of their findings, including the extent to which interventions can be generalized to different populations and settings. Several of the studies reported different factors limiting their generalizability (Balcazar et al., 1991; Bomar, 2018; Chambers, 2016; Gregg et al., 2016; Holzberg, 2018; Mazzotti et al., 2015; O’Mally & Antonelli, 2016; Parker & Boutelle, 2009; Roessler et al., 1998; Richman et al., 2014; Roper, 2018; Simmons-Reed, 2015; Walker & Test, 2011; White & Vo, 2006). For example, Richman et al. (2014) and Parker and Boutelle (2009) indicated that their data could not be generalized due to their methodology (i.e., qualitative interviews). Over half the included studies (57%) referenced small samples as a limitation (Bomar, 2018; Chambers, 2016; Farmer et al., 2015; Holzberg, 2018; Izzo et al., 2011; Lamb, 2004; Mazzotti et al., 2015; Mytkowicz & Goss, 2012; O’Mally & Antonelli, 2016; Richman et al., 2014; Roper 2018; Simmons-Reed, 2015; White et al., 2014). The need for further research to be conducted with larger numbers of students with disabilities and different PSE environments was also cited (e.g., Finn et al., 2008).
Maintenance data was needed to further support intervention effectiveness for several of the studies (Farmer et al., 2015; Finn et al., 2008; Mazzotti et al., 2015; O’Mally & Antonelli, 2016; Parker & Boutelle, 2009; Roffman et al., 1994; White & Vo, 2006). Given that approximately 18% \( (n = 4) \) of all the included studies were pilot studies, this impacts whether maintenance or longitudinal data were collected or highlighted as an implication for future research. Another limitation includes a lack of random sampling and/or the self-selection of participants was identified in eight studies (Finn et al., 2008; Gregg et al., 2016; Izzo et al., 2011; Lamb, 2004; Mytkowicz & Goss, 2012; Parker & Boutelle, 2009; Richman et al., 2014, Roffman et al., 1994). Another was a lack of participant diversity only being indicated in two studies (Roffman et al., 1994; White & Vo, 2006) despite the overall lack of diversity across the included research, particularly within the peer-reviewed journal articles.

A common limitation of the dissertation studies suggested the need for further audio recordings to confirm the accuracy and reliability of data collected (Chambers, 2016; Holzberg, 2018; Roper, 2018). Two dissertations (Chambers, 2016; Holzberg, 2018) also indicated compensation may have also incentivized student participation in their studies, thus presenting as a limitation to their research. However, one student from Holzberg (2018) reported that he would have completed the intervention without compensation, while another student from the same study demonstrated reluctance in even accepting the compensation for her participation. Having implemented the same intervention (SACR), these two dissertations additionally reported that the sequence of the 11 targeted behaviors for requesting academic accommodations could be unnatural in different generalized situations.
Methodological Rigor

Similar to Test et al. (2005a), this review also analyzed the methodological rigor of the included studies by summarizing the quality indicators for qualitative (Bratlinger et al., 2005; Trainor & Graue, 2014), single case (Horner et al., 2005; Kratochwill et al., 2010), and group experimental (Gersten et al., 2005) special education research. This review used CEC Standards for Evidence-Based Practices in Special Education (2014) criteria to determine the methodological soundness and trustworthiness of the 17 included peer-reviewed and five non-peer-reviewed intervention studies.

Qualitative

Table 3 includes the components adapted from the Quality Indicator Checklist for Qualitative Studies (National Technical Assistance Center on Transition [NTACT], 2017). This checklist was originally adapted from Bratlinger et al. (2005) and Trainor and Graue (2014) and includes whether the author(s) indicated the types of research designs, the extent to which triangulation had been utilized in each qualitative study, and if member checks were or were not implemented. This same coding system was used to identify disconfirming evidence (i.e., negative or discrepant case analysis), researcher reflexivity (i.e., being forthright about position/perspective), particularizability (i.e., thick, detailed descriptions), data analysis (i.e., whether data was coded in a meaningful and systematic manner), and the data collection method indicated (i.e., either an interview study, observation study, or document analysis). Lastly, it is reported whether studies achieved an acceptable quality status, given the information provided above.

To reach an acceptable quality status, the studies must have met the first seven previously identified credibility measures. If an interview study, step 8 (i.e., appropriate participants were
selected; interview questions are reasonable) must be met. If an observation study, the study must meet step 9 (i.e., appropriate settings and/or people selected; role of researcher as observer is adequately explained; field notes systematically collected). Finally, if a document review, the study must meet step 10, document analysis. Overall acceptable quality for each study is provided in the last column (NTACT, 2017).

As indicated in Table 3, only one qualitative study (Mytkowicz & Goss, 2012) met the criterion for high-quality special education research; this study was a peer-reviewed journal article. Similar to all four of the peer-reviewed qualitative studies, the dissertation (Roper, 2018) correctly identified an appropriate research design and included triangulation and particularizability.

Table 3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Design</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Triangulation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Member Checks</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Disconfirming Evidence</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Researcher Reflectivity</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Particularizability</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Data Collection</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Acceptable Quality</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

*Note. This table reports “Y” for “yes” or “N” for “no” for the fulfillment or non-fulfillment of each checklist item. *Indicates non-peer-reviewed literature
**Single Case**

Table 4 includes the components adapted from the Quality Indicator Checklist for Single-Case Studies (NTACT, 2016a). This checklist was originally adapted from Horner et al. (2005) and Kratochwill et al. (2010). Using this checklist, Table 4 reports the quality for peer-reviewed and non-peer-reviewed, single-subject design research studies included in this review. Three of the five peer-reviewed studies (Mazzotti et al., 2015; Walker & Test, 2011; White & Vos, 2006), and all three dissertations (Chambers, 2016; Holzberg, 2018; Simmons-Reed, 2015) met criteria to be considered high-quality special education research. Interestingly, four of the eight peer-reviewed and non-peer-reviewed studies that met criteria had implemented the same intervention (SACR) for requesting academic accommodations.

**Group Experimental**

Table 5 includes the components adapted from the Quality Indicator Checklist for Group Experimental Studies (NTACT, 2016b). This checklist was originally adapted from Gersten et al. (2005). The overall quality for each study is provided in the final row. Table 5 reports the methodological rigor of peer-reviewed journal articles and non-peer reviewed dissertations using group experimental design. None of these (peer-reviewed and non-peer reviewed) studies met criterion to be considered high-quality special education research.
Table 4

*Quality Indicators for Single-Subject Research*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Participants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Described sufficiently</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Selection process described with replicable precision</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td><strong>Setting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Described with sufficient precision</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<td>Y</td>
<td>Y</td>
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<tr>
<td><strong>Dependent Variable/Measure</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Described with operational precision</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Measured with a procedure that generates a quantifiable index</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Measurement process described with replicable precision</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Measured repeatedly over time</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>
Reliability data collected; IOA levels met minimal standards (e.g., 80% IOA; 60% Kappa)  

<table>
<thead>
<tr>
<th>Independent Variable/ Intervention</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
</tr>
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<tbody>
<tr>
<td>Described with replicable precision</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Systematically manipulated and under experimental control</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Overt measurement of fidelity</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Procedures  

Baseline provided repeated measurement of DV and pattern established  

| Baseline conditions procedural characteristics described with replicable precision | Y | Y | N | Y | Y | Y | Y | Y | Y | Y |

Design/ Graph/ Results  

At least three demonstration of experimental effect at different time points  

<p>| Design/ Graph/ Results | N | Y | N | Y | Y | Y | Y | Y | Y | Y |</p>
<table>
<thead>
<tr>
<th>Design controls for internal validity threats</th>
<th>Y</th>
<th>Y</th>
<th>N</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>External validity established through experimental effect demonstrated</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Social Validity**

<table>
<thead>
<tr>
<th>DV is socially important</th>
<th>Y</th>
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<tr>
<td>Magnitude of change is socially important</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
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<th>IV implementation is practical and cost effective</th>
<th>N</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
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<th>Y</th>
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<tr>
<td>Enhanced by implementation of IV over extended time periods, by typical intervention agents, and in typical physical/social contexts</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
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**Overall Quality Indication**

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<th>N</th>
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*Note. This table reports “Y” for “yes” or “N” for “no” for the fulfillment or non-fulfillment of each checklist item. *Indicates non-peer-reviewed literature.*
<table>
<thead>
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<th>Quality Indicators for Group Experimental Research</th>
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<tr>
<td><strong>Participants</strong></td>
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<tr>
<td>Disabilities/ difficulties presented</td>
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<tr>
<td>Appropriate procedures used to increase participant comparability across conditions</td>
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<tr>
<td>Intervention characteristics comparable across conditions</td>
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<tr>
<td>Attrition rates at or less than 30%</td>
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<tr>
<td><strong>Intervention and Comparison Conditions</strong></td>
</tr>
<tr>
<td>Intervention described and specified</td>
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<tr>
<td>Fidelity of implementation assessed (i.e., surface features)</td>
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<tr>
<td>Fidelity of implementation assessed (i.e., quality)</td>
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<tr>
<td>Nature of services provided in comparison conditions described and documented</td>
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<tr>
<td><strong>Outcome Measures</strong></td>
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<tr>
<td>Multiple measures used</td>
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<td>Intervention effect measured at appropriate times</td>
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<td>Test-retest reliability, internal consistency, and inter-rater reliability</td>
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<td>Inter-rater reliability documented</td>
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<td>Data collectors blind</td>
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<tr>
<td>Outcomes measured beyond immediate posttest</td>
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<td>Criterion and construct validity measures provided</td>
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<tr>
<td><strong>Data Analysis</strong></td>
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<tr>
<td>Techniques were appropriate and linked to key research questions</td>
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<tr>
<td>Effect size calculations reported</td>
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<tr>
<td>Clear, coherent results</td>
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<tr>
<td>Actual audio or videotape experts included (suggested but not required)</td>
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<td><strong>Overall Quality Determination</strong></td>
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*Note. This table reports “Y” for “yes” or “N” for “no” for the fulfillment or non-fulfillment of each checklist item. *Indicates non-peer-reviewed literature.*
Discussion of Identified Literature

The purpose of Chapter II was to conduct a literature review of interventions designed to enhance the self-advocacy skills of college students with disabilities, with a particular focus on students with IDD. In addition to verifying the findings on self-advocacy intervention studies in PSE reported by Test et al. (2005a), this review offered an update of the literature from 1972 to 2019, with its unique emphasis on the IDD population and its inclusion of non-peer reviewed literature. This review identified more than double the amount of peer-reviewed intervention studies conducted after 2005 \((n = 12)\) compared to before 2005 \((n = 5)\), when Test et al. (2005a) was published. This increase in intervention studies conducted for students with disabilities at the PSE level aligns with the increasing number of students with disabilities attending colleges or universities (Lynch & Getzel, 2013). In this discussion, the review’s findings in terms of content and methodological implications are described.

Content Implications

Personal and Contextual Cultures

Test et al.’s (2005a) original review indicated that future research should consider the influence on and association between cultural diversity and self-advocacy since its included studies failed to examine such relationships. Given that self-determined behaviors (which include self-advocacy) have been, more recently, found to vary according to diverse cultural identities (Shogren, 2011), one would suspect that greater attempts would have been made at considering cultural differences when conducting self-advocacy intervention research. However, in this review, that is not necessarily the case because (a) very few peer-reviewed studies in the present review reported engaging in different approaches to maximize their sample diversity \((12\%, n = 2)\) and (b) several of the peer-reviewed studies failed to report diverse personal factors related to culture, such as, race/ethnicity \((53\%, n = 9)\), and gender \((18\%, n = 3)\). With over half
the sample failing to report their participants’ racial/ethnic identities, along with predominantly White samples targeted, this review similarly reflected the need for greater research to target more racially diverse participants. Interestingly, the non-peer reviewed literature had greater cultural diversity among its participants.

Furthermore, although this review targeted intervention studies for students with disabilities, it is still surprising that only one study (among both peer-reviewed and non-peer reviewed literature) included participants without disabilities in its sample (Gregg et al., 2016) given the (a) inclusive nature of most PSE environments and, (b) in the case of students with IDD, the push for inclusion under Title IV of HEOA (2008). Under this legislation, CTPs must have, at minimum, 50% of their program time in inclusive environments with nondisabled peers, which includes not only academic courses but also campus activities (Grigal et al., 2012b).

Consistent with previous literature, this review identified that the majority of peer-reviewed and non-peer reviewed intervention studies in PSE targeted students with LD (Roberts et al., 2016; Test et al., 2005a). This is regardless of the increasing number of college students with IDD in the United States (National Coordinating Center Accreditation Workgroup, 2016) and the growing body research conducted on college students with IDD in PSE (Papay & Grigal, 2019). In fact, only one peer-reviewed journal article (Mazzotti et al., 2015) and one non-peer reviewed dissertation (Simmons-Reed, 2015) were found in this review targeting students with IDD in higher education. Interestingly, both studies were published in the same year as the second round of TPSID appropriations administered by HEOA in 2015, suggesting that the studies’ PSE programs could have been financially, academically, and/or socially influenced by the federal law or funded as a TPSID.

Although this review is confined to the search terms and inclusion criteria used in its data collection process, it comes as a surprise that there has not been a surge of literature on this
specific topic since HEOA (2008), which went into effect in 2010. However, the lack of literature on self-advocacy interventions for students with IDD in college could be the consequence of the nature of PSE programs across the country. As Neubert, Moon, and Grigal (2002) concluded in their review of special education literature on students with severe disabilities, PSE programs have varied substantially over time, with trends in the literature shifting from exclusively segregated models to more inclusive and individualized support programs due to federal legislative and philosophical shifts across North America.

Nearly a decade later after Neubert et al.’s (2002) review, Thoma et al. (2011) similarly reviewed research, program, and policy literature in PSE. This updated review was conducted because of the increasing number of options and federal funds available to college students with ID in the early twenty-first century, especially after the HEOA (2008) extended financial aid to college students with ID. Although the more recent review reported greater improvements in the literature, in terms of reporting the implementation, development, and evaluation of PSE programs and its students’ experiences, both reviews support categorizing PSE models based on their level of inclusivity with the general student population (Neubert et al., 2002; Thoma et al., 2011). More specifically, Hart et al. (2004) identified three main PSE model types based on a national survey of PSE programs serving students with ID: substantially separate, mixed, and inclusive.

It can be assumed that model type, or level of inclusivity, likely impacts the probability of intervention implementation with general education students and in generalized settings. For instance, an inclusive, individual support model, one that tailors “individualized services and supports… to ensure access to and progress in college courses, certificate programs, internships, and/or degree programs… and [is] inclusive of those available to the general student body,” (Hart et al., 2004, p. 57) would likely refrain from conducting external interventions that
separate students with disabilities from their non-disabled peers (Hart et al., 2004). On the contrary, it can be assumed that a substantially separate model, one whose students’ do not engage in the general student body’s coursework or engage in “ongoing, sustained interaction[s]” with nondisabled peers, would be more likely to implement such an intervention, given the nature of the model (Hart et al., 2004, p. 57).

Of the three program model types, Hart et al. (2004) reported that the mixed/hybrid option was the most common PSE program offered, with the substantially separate model coming second, and only a few providing an inclusive individual support model. Despite model type, research supports that all students can improve their self-advocacy skills, including speaking on the behalf of themselves and others. A variety of opportunities, experiences, and instruction are beneficial for students when designed to increase one’s knowledge of self, knowledge of rights, communication, and leadership (Test et al., 2005b). Therefore, it is recommended that colleges/universities offer greater opportunities and experiences for all students to practice self-advocacy skill-building.

**Academic Accommodations**

Although there is insufficient data on the extent to which college students with IDD use accommodations, this review’s findings suggest that learning to appropriately disclose one’s disability and request academic accommodations is considered a critical skill for achieving success while attending university/college. This may be because, unlike in K-12 education, college students with disabilities are tasked with the increased responsibility of acquiring academic accommodations from their course instructors due to differences in federal legislation post-high school. Specifically, the IDEA (2004) only provides special education services to students whose disabilities adversely impact their Pre-K to 12 education. Thus, once students graduate 12th grade, they are no longer eligible for these services, and instead, can acquire
accommodations in college, since they cannot be discriminated against based on their disability, as mandated under the ADA (1990) and Section 504 of the Rehabilitation Act (1973).

To proactively encourage students’ accommodation seeking abilities in college, some studies have implemented self-advocacy interventions at the secondary level (e.g., SACR; Bethune, 2015; Holzberg et al., 2019). For example, similar to several studies included in the current review, Bethune (2015) and Holzberg, Test, and Rusher (2019) found functional relations between the SACR intervention and participants’ abilities to request academic accommodations. Although Bethune (2015) targeted high school students with ASD, and Holzberg, Test, and Rusher (2019) targeted high school seniors with mild disabilities, both studies indicated that their participants successfully generalized learned behaviors with university instructors (e.g., college classrooms).

However, upon entering college, many students with disabilities continue to refrain from disclosing their disability and consequently do not receive the supports they need (Cawthon & Cole, 2010; White et al., 2014). In a survey of 110 college students with disabilities, Cawthon and Cole (2010) found that only about a third (32%) of participants disclosed their disability and sought accommodations from university faculty. For students with ID, a national survey of 149 PSE programs in 39 states found that only 14% of students reported having independently requested academic accommodations from course instructors, although approximately 88% reported that these accommodations were requested (Grigal et al., 2012a). This means that 74% of students received some type of support when requesting their accommodations (Grigal et al., 2012a). Yet, none of the studies that targeted accommodations were conducted online, although meeting virtually could be more convenient for researchers and students because students are not always on campus and some may not have transportation.
Self-Advocacy Components

In order to increase the percentage of students who independently ask for what they need, students must first know what they need, and also know that they have the legal right to access what they need, before they can communicate their needs and advocate on the behalf of others. Thus, students must first know their rights and responsibilities at the PSE level before they can effectively acquire academic accommodations (Baele, 2005; Walker & Test, 2011). As one of the four self-advocacy components identified by Test et al. (2005b), knowledge of rights includes understanding that a college student with a disability has the legal right to access accommodations under Section 504 (1973) and ADA (1990). Among the 11 peer-reviewed studies that targeted knowledge of rights, several took appropriate measures for students to understand these rights by administering handouts on personal rights (White & Vo, 2006), offering instruction on disability-related legislation (White et al., 2014), and teaching educational rights, involving disability disclosure and the accommodation seeking process (Izzo et al., 2011).

Another example of knowledge of rights, and leadership, is knowing and using resources on campus. Not knowing about how, where, or who to contact about available campus resources can present serious barriers to one’s success in PSE. For example, in the same survey of 110 college students conducted by Cawthon and Cole (2010), approximately half of its participants (48%) reported not having been guided on how to access appropriate supports on campus, particularly accommodations. This likely could have contributed to the low percentage of students who reported having requested accommodations from their course faculty (32%). Other leadership skills demonstrated within this review’s studies included leading meetings (Mazzotti et al., 2015) and advocating for others and/or for causes, such as getting leverage to influence others (Balcazar et al., 1991).
Prior to advocating on the behalf of others, it can be argued that an individual must know their personal needs and how to communicate them. In this review, examples of demonstrating knowledge of self included knowing one’s accommodation needs (White & Vo, 2006), perceiving one’s strengths and learning styles (Mytktowicz & Goss, 2012), and understanding and accepting one’s disability (Roffman et al., 1994). Further, examples of communication across studies included demonstrating assertiveness (O’Mally & Antonelli, 2016), using verbal language skills (Walker & Test, 2011), sharing needs with course instructors (Palmer & Roessler, 2000), and negotiating when accommodations are denied (White & Vo, 2006).

Interestingly, the amount of peer-reviewed and non-peer reviewed studies that targeted knowledge of self was the same as the number of peer-reviewed studies that targeted communication \( (n = 17) \), and the number of studies that targeted knowledge of rights was the same as those that targeted leadership \( (n = 14) \). Although exact numbers differ, the fact that knowledge of self and communication were more commonly addressed in this review is congruent with findings from previous literature (Test et al., 2005a). Future research should examine possible explanations for why studies more often target these components compared to knowledge of rights and leadership. Research should also address all four components in alignment with the theoretical framework adopted and modified for the current review. In practice, educators should continue to implement self-advocacy interventions/instruction that best aligns with their students’ individualized needs.

**Methodological Implications**

This review examined the methodological rigor of the 17 included peer-reviewed journal articles and five non-peer reviewed dissertations as well. In an era where education research is held to similar scientific standards as fields like chemistry and physics (Gersten et al., 2005; NRC, 2002), it is critical to analyze this literature by level of scientific rigor to evaluate each
study’s credibility and capacity for replication. As indicated by Horner et al. (2005), diverse study’s “features will be met with differing levels of precision” (p. 173); however, it is this review’s intent to identify which features meet minimum acceptable standards and which studies overall would constitute as high-quality educational research. Although each study possessed different methodological strengths, only 24% \((n = 4)\) of peer-reviewed studies provided enough detail for replication and conducted at least the minimum number of appropriate steps to constitute high-quality education research. In comparison, 80% of non-peer reviewed literature constituted high-quality education research. It should be noted that certain studies’ features may have been exempt from needing particular components, due to aspects of their design (Horner et al., 2005), and thus, these instances have been accounted for in this review’s analysis.

The majority of studies that met acceptable standards for high-quality research used a single-subject design methodology. Further, four out of the eight (peer reviewed and non-peer reviewed) single-subject design studies (50%) that met acceptable criterion had implemented the SACR intervention to support their students’ accommodation seeking abilities at the postsecondary level.

All five single-subject design, peer-reviewed studies included in the current review described their participants sufficiently; operationally defined their dependent variables; identified the dependent variable as socially important; and collected reliability data. However, not all studies provided information related to treatment fidelity, similar to the group experimental design studies. Thus, it is strongly recommended that future research appropriately document and report measures taken to ensure the fidelity of a given intervention to increase methodological rigor.

As for the qualitative studies, all peer-reviewed journal articles and non-peer-reviewed dissertations used triangulation and particularizability; however, not all reported having
conducted member checks, researcher reflectivity, or disconfirming evidence, three other ways to enhance credibility and validity in qualitative research (Maxwell, 2013). Future research should conduct all these procedures, as it is appropriate, to eliminate or control for alternative explanations to a given study’s findings.

**Limitations and Further Directions**

Like all research, this review possesses several limitations that must be accounted for when interpreting the results and their implications. Foremost, findings are constrained to this review’s procedure for data collection and analysis. It is likely that other articles implement self-advocacy interventions in college, but they had not been captured by this review’s search terms, were not located in the electronic databases, or hand-picked in the selected reference lists. Secondly, more recent studies have likely been published since this review was conducted; thus, this study may not include the most recent articles published.

As a final recommendation, based on these limitations, future research should consider scanning research articles as well as policy papers located in the resource guide on the Think College website. Think College is the federally funded, national organization, that oversees all 295 PSE programs and is responsible for conducting “research related to transition and dual enrollment, employment, and higher education for students with ID, and uses these findings to create resources for expanding college access and improving student outcomes” (Think College, 2020, para. 1).

**Conclusion**

Although analyzing educational literature across nearly half a century, this literature review only identified one peer-reviewed article and one dissertation as having addressed self-advocacy for students with IDD in college. Yet, out of all students with disabilities, research has repeatedly shown that students with IDD are the least likely to achieve positive PSE and
employment outcomes (Baer et al., 2011; Grigal et al., 2011; Mazzotti et al., 2015). Correlational research identifies self-determination and self-advocacy as predictors of such outcomes (Test et al., 2009). Thus, there is an immense need for more trainings and interventions in institutions of higher education to be implemented in-person and virtually, that will encourage students with IDD to acquire the necessary skills to advocate for their needs and improve overall quality of life after high school.
Chapter III

METHODOLOGY

Chapter two established the need for the current research through conducting a literature review of self-advocacy intervention studies targeting college students with disabilities, with a particular focus on college students with IDD. Chapter three is a description of the current study’s methodology, including the virtually implemented self-advocacy intervention focused on increasing college students’ with IDD self-advocacy skills by targeting their abilities to request academic accommodations. After IRB approval, a modified version of the Self Advocacy and Conflict Resolution (SACR) intervention (Rumrill et al., 1999) was used virtually to answer the following research question:

What are the effects of a self-advocacy intervention on the abilities of students with IDD to appropriately request college academic accommodations?

Experimental Design

This study employed a single-subject, multiple-probe across participants design (Gast & Ledford, 2010) to evaluate the effects of a self-advocacy intervention on the abilities of students with IDD to appropriately request college academic accommodations. According to Horner and Baer (1978), the multiple probe technique “provides a procedure for collecting data that will permit a thorough functional analysis of the variables related to the acquisition of behavior
across the components of a chain or successive approximation sequence” (p. 196). The multiple probe design was selected because of the feasibility of data collection, and the single-subject design allows for intervention studies with a small sample size without losing rigor. The multiple probe design enables intermittent measurement in the baseline condition until participants achieve relative stability, rather than continuous measurement used in the traditional multiple baseline design (Gast & Ledford, 2010).

Given that single-subject research design controls for most internal validity threats, a functional relation between the independent and dependent variables was established because the treatment was effective (Horner et al., 2005; Kratochwill et al., 2010). Furthermore, the staggered introduction of intervention implementation in a multiple probe across participants design helped this study reduce validity threats, such as history and maturation, and the multiple probe design controlled for the threat of testing.

**Virtual Implementation**

All study procedures were conducted virtually using Virginia Commonwealth University’s (VCU) virtual online platform, Zoom. Zoom allowed for video conferencing and live chat messaging and was accessed on the student participants’ laptops and mobile devices. Zoom includes multiple collaboration tools, including screen sharing features which enabled the laptop monitor screen to be shared with participants. It also uses streamlined calendaring to schedule and start meetings with participants from Google calendar. Participants must have been comfortable and competent with using Zoom to control for internal validity threats in this research. Therefore, in the initial email/phone messages during recruitment, student participants were first informed that the intervention was to be implemented virtually using Zoom; information regarding virtual implementation was also added to the consent/assent forms. Student participants confirmed their comfort and competence with using Zoom when completing
the consent form evaluation with the research assistant. Questions were added to the evaluation form; responses to these questions included “yes,” “no,” or “I don’t know.”

(a) Do you understand that you will be using Zoom, an online video conferencing platform, to complete this study?

(b) Do you feel comfortable and confident in your abilities to use Zoom for this study?

Upon receipt of consent forms, Zoom features were reviewed with participants during the pre-baseline condition and the first four baseline sessions, including screen sharing, live messaging, and video recording, since each of these tools were used throughout the course of the intervention.

Participants

Participants included three students currently attending an inclusive PSE program, called Program X (pseudonym), for students with IDD at an urban, four-year university in the southeast region of the United States. A letter of support from the director of this PSE program was previously obtained (see Appendix A. Program staff (i.e., academic advisors) and the program director were also recruited as participants for social validity data collection, after the generalization condition with the final student participant.

Program Description

Program X offers young adults with IDD the ability to attend an urban, four-year university in the Southeast region of the United States as part-time students. Program X was selected for this intervention over other PSE programs for college students with IDD for the following reasons: (a) Program X does not currently offer self-advocacy instruction to currently enrolled students, as reported by the program director; (b) Program X offers inclusive classroom experiences with college student peers without disabilities; [and] (c) its convenience for myself and participants.
Utilizing a person-centered approach, Program X guarantees student participation in inclusive college courses with nondisabled peers, part-time employment, and an internship that best aligns with their wants, preferences, interests, and needs. Program X also places a strong emphasis on competitive, integrated employment and values self-determination and self-advocacy for positive PSE experiences and post-school outcomes. Upon graduation from Program X, students receive a School of Education certificate for completion of the college program.

This study was conducted as part of the “bridge in” process for Program X, which supports Program X students transitioning from high school to college. Thus, it provided Program X with a new instructional focus that can be implemented by program staff in future semesters, if desired. Participation in the study was offered as an option for students interested in learning more about self-advocating for their accommodations.

**Positionality.** I, as the lead researcher, understand that my positionality can impact the research process. Therefore, it is important for me to reflect on the continued support I provide for Program X. To begin, I have been involved with Program X since the beginning of my doctoral career. I interacted with former students as a peer mentor and education coach, where I tutored students outside of class, provided social support, and assisted students in their inclusive college courses. I also interned for Program X during the summer of my second year as a doctoral student and have since volunteered my time with the program, meaning I am familiar with program staff.

I continued to be reflective of this positionality throughout this research, and I reduced possible biases by regularly checking operational definitions of the dependent variable (DV; which also reduces observer drift, a threat to interobserver agreement) and having a second observer check treatment fidelity (Horner et al., 2005; Sidman, 1988). Also, since the
relationship between study personnel, Program X personnel, and potential student participants would have likely posed undue influence during the consent process, any persons who had a close relationship with potential subjects did not conduct consent with the subjects. Instead, study personnel who did not know potential subjects conducted the consenting process (National Institutes of Health, 2009).

**Recruitment and Consent Process**

First, I met with Program X’s director and two program staff members (e.g., academic advisors) over Zoom to review the recruitment process and to identify an email listserv of potential student participants who met inclusion criteria. The program staff members expressed that only five of seven enrolled students reported that their emails could be shared with other VCU community members. Thus, one of the academic advisors emailed the recruitment email to these five students, copying myself and all the students’ caregivers on each email. The program staff recommended they send out the initial email to (a) introduce myself to the students; (b) inform students of the previous work I have done with the program; (c) ensure students did not feel obligated to participate; and (d) ensure that students did not feel the program would be endorsing this study without prior careful review. One of the academic advisors sent out a separate message along with recruitment materials (see Appendix B for recruitment materials and the staff member’s copied [and modified to protect confidentiality] message).

Program staff encouraged that follow up with the students and their caregivers. Caregivers were copied on the emails because the program staff suggested that (a) they would be more likely to respond than the students, or they would likely prompt the students to respond, and (b) it was unclear at the time which students had guardianship and which did not. Thus, students and their caregivers were emailed after the initial program staff email was sent. This included the recruitment email and flyer, which explained the purpose of the project and clarified
that participation was voluntary and would be kept confidential. Email recipients were prompted with questions or for those who were interested in participating to email or call to get more information to determine their eligibility and to review the informed consent/assent to ensure that the individual and their guardian(s) understood the purpose, benefits, and potential risks of the study. One participant, Shane (pseudonym), asked two questions over email prior to proceeding with the consenting process: “I would just have a few questions who would this study be shared with and can you tell me more about the study?” Questions were answered in a reply email to just the student. Another participant (Omar; pseudonym) asked to hear more about the study over the phone.

Since the relationship between study personnel, Program X personnel, and potential student participants would likely pose undue influence during consent process, any of these persons, who have close relationship with potential subjects did not conduct consent with the potential subjects. Instead, a research assistant (i.e., a third-year doctoral student) who does not know potential subjects, conducted the consenting process to mitigate undue influence. I facilitated an email conversation between the research assistant and each potential participant to help confirm dates/times that work for both parties to meet virtually to conduct the consenting process. The research assistant met with each potential participant using Zoom on the confirmed date/time. The research assistant shared her screen with participants to review the consent form (see Appendix C for student participant consent form, student participant assent form, and the program staff consent form), and completed the checklist for consent/assent understanding, also known as the Consent Evaluation Form (see Appendix D).

The Consent Evaluation Form was designed to ensure that participants fully understood the purpose of this study and their responsibilities as a participant (National Institutes of Health, 2009). It was also designed to ensure that participants were not inappropriately taken advantage
of and that ethical practice was maintained throughout this research. The participants were asked to respond verbally “yes” in agreement, “no” in disagreement, or “not sure” for each question on the checklist. The research assistant recorded participants’ responses with an “X” on the checklist for “yes,” “no,” or “not sure.”

No participants expressed uncertainty with their responses to the questions. However, one participant had limited experience with using Zoom, although was interested in participating in the study. Given that having comfort and competence with using Zoom was one of the inclusion criterion for this study, the participant was asked if she would be willing to meet with the research assistant again the following day to review the different Zoom features, giving her ample opportunity to practice using Zoom, and was also asked to wait to sign the consent form until she felt comfortable using Zoom. The participant agreed, and she and the research assistant met the following business day to review the different online platform features for approximately one hour. The research assistant gave the participant multiple opportunities to practice using these features during their meeting. At the end of the meeting, the research assistant asked the following question from the Consent Evaluation Form again: “Do you feel comfortable and confident in your abilities to use Zoom for this study?” This participant confirmed her comfort and confidence in using Zoom after the information practice session.

After completing the Consent Evaluation Forms, the research assistant informed potential participants they could review the consent form on their own and decide whether to participate over the next 48-hours. Student participants were individually e-mailed after 48 hours to inquire about their interest in the study. All participants expressed their interest in participating within 48 hours and electronically sent their signed consent forms. Participants were given the option to either sign with an e-signature; print, sign, scan, and return over email; or print, sign, take a picture of the signed form, and email the picture. Consent (not assent) forms were obtained from
all participants, because all student participants expressed they were their own guardians and did not have court appointed guardians. Study procedures began at the start of the following week (Monday) after all signed consent forms were obtained. All participants were verbally informed in every session/meeting that they should feel free to stop participating any time with or without any reason. The study began once consent forms were collected and lasted from June 22\textsuperscript{nd} to July 16\textsuperscript{th}.

Each potential participant for the program director and academic advisor(s) were emailed individually after the generalization condition for the final student participant. In this email, program staff were asked if they would be willing to complete a social validity form to help me better understand the practical significance of this study from their perspective (See Appendix B for the staff participant recruitment email). A link was provided to access the survey, to be completed through VCU Google Forms, as later discussed under the “Social Validity” subheading. The consent information was displayed as the first screen of the online survey form, and participants clicked agree if they were willing to participate.

\textit{Inclusion Criterion}

Student participants were selected based on whether they met the following inclusion criteria:

(a) participants must be currently enrolled students in Program X;

(b) participants must be ages 18 to 26, as required by the program, and meet all other program specific requirements to be eligible;

(c) participants must be high school graduates and thus, will no longer be eligible for receiving special education supports and services under IDEA (2004) in order to be considered “college-aged;”

66
(d) participants must not have previously received a self-advocacy intervention for the targeted skill in college to ensure there is a need for this intervention and in order to control for internal validity;

(e) participants must be able to virtually attend pre-scheduled lessons coordinated with the students to confirm appropriate dates/times that align with the intervention schedule (detailed in “Intervention schedule” section). Attending all virtual scheduled sessions is critical because of the treatment components and procedure;

(f) participants are comfortable with using the university approved online platform, Zoom, prior to participating in the intervention; to control for internal validity threats;

(g) participants must have a documented intellectual disability or have a documented intellectual disability with other disabilities present (i.e., have intellectual and developmental disabilities). According to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2018), an intellectual disability is “a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. This disability originates before the age of 18” (AAIDD, 2018, p. 1). Program X requires that students provide evidence for their disability in the admissions process through documentation of their received diploma type in secondary education (meaning that participants must have received either an applied studies diploma or special certificate); thus, this inclusion criterion will be met as long as students are currently enrolled in Program X (another criterion).

Program staff participants needed to meet the following inclusion criteria: they were either (a) the director of Program X or (b) an academic advisor within the program supporting at least one of the student participants completing the intervention.
Demographic Information

Demographic information (i.e., disability status, race/ethnicity, gender, grade level, and accommodations) were collected on student participants during pre-baseline procedures and reported in Table 6, with identifiers removed (e.g., pseudonyms replace students’ names to ensure confidentiality). This information was collected using the Demographic Information sheet provided in Appendix E.

Table 6
Student Participant Demographic Information

<table>
<thead>
<tr>
<th>Participant</th>
<th>Additional Disability(ies)</th>
<th>Race/Ethnicity</th>
<th>Gender</th>
<th>Grade Level</th>
<th>Accommodations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloe</td>
<td>Epilepsy</td>
<td>Native American and Caucasian</td>
<td>F</td>
<td>First-year</td>
<td>Copy of presentation notes</td>
</tr>
<tr>
<td>Omar</td>
<td>LD</td>
<td>African American</td>
<td>M</td>
<td>Second-year</td>
<td>Extended time on tests; read aloud; coaching</td>
</tr>
<tr>
<td>Shane</td>
<td>Mental illness (bi-polar and depression), LD, Autism, PPD-NOS</td>
<td>African American/Biracial</td>
<td>M</td>
<td>First-year</td>
<td>Back-up copy of notes; extended time on tests/quizzes and assignments; extra time allotted for frequent absences; take a walk (due to anxiety/antsy nature); tests/quizzes read aloud; separate location for tests/quizzes</td>
</tr>
</tbody>
</table>

Note. LD = learning disabilities; PPD-NOS = Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS)

Disability status information was collected because student participants must be identified as having an ID (and other disabilities present, if applicable) as part of this study’s inclusion criteria. Program X requires that participants have an ID to participate in their college program. However, participants also reported one or several additional disabilities (e.g., epilepsy, LD, autism, etc.). Shane reported another concern when asked about his disability,
which was that he sometimes has trouble making friends. Next, race/ethnicity and gender were reported to ascertain whether these participant demographics reflect that of the larger population of students with IDD enrolled in PSE programs across the country, which includes a predominantly Caucasian student population nationwide (73%; Grigal et al., 2016). Among the participants, only one identified as Caucasian, in addition to being Native American (Chloe). There was one female and two male participants in this study, as well as, two first-year students and one second year student (there are two years total in the students’ academic program).

Finally, students’ accommodation(s) (e.g., note-taking, use of a calculator, etc.) are reported because the students needed to identify one of their accommodations to advocate for in the role-play scenarios intervention package. Since two of the three participants (i.e., Chloe and Shane) had yet to identify their accommodations with the university’s disability support services office at the start of the study, Chloe, Shane, and I reviewed previously used accommodations which they felt were beneficial to them and their academic success and could also be beneficial to them in a college academic setting. Chloe reported she did not know of her accommodations in high school, so we selected an accommodation which she identified would be helpful for her in college. Shane, the other first-year student, listed several of his accommodations from high school, then selected the one he wished to focus on for the purpose of this intervention. The second-year student, Omar, knew he was registered with the disability support services office; however, he could not recall his accommodations until examples were provided. He selected one of his current accommodations for the purpose of this intervention.

Other Involved Individuals

In addition to the student and program staff participants, the following individuals were involved in this study: the research assistant and a mock university course instructor. The research assistant conducted the consenting process and was responsible for inter-observer
agreement data collection. The mock university course instructor, another student enrolled in the VCU doctoral program, was responsible for reading the mock university course instructor’s script for the video simulation in the generalization condition.

**Interventionist/Researcher and Data Collection Observers**

Throughout the duration of this research study, I was a PhD candidate studying Special Education and Disability Leadership at VCU. I was the interventionist/researcher for this study, responsible for implementing the modified SACR intervention with the participants and collecting observational and IOA data as the first observer for the baseline, intervention, generalization, and maintenance conditions. The second observer (i.e., the research assistant) for the baseline, intervention, generalization, and maintenance conditions was a third-year doctoral student also studying Special Education and Disability Leadership at VCU.

**Materials and Equipment**

The following equipment was used in this study: (a) the researcher’s Dell-Laptop computer screen to display video; (b) Zoom online platform with a video recording feature to record sessions; and (c) a VCU password-protected server for data storage. All scheduled sessions were video recorded to accurately collect observational and interobserver agreement data. The following materials were used to implement the intervention: (a) the Center on Transition Innovations (CTI) online video entitled “High School vs. College: Understanding the Differences” (see transcript in Appendix F); (b) the SACR Curriculum scripted lessons (Appendix G); and (c) SACR scripted and blank notecards (Appendix H).

**Measures**

Data were collected throughout this study using the following measures: (a) 10 structured questions corresponding to skills taught in the intervention package (Appendix I); (b) Behavior Checklist (Appendix J); (c) the interobserver agreement form (Appendix K); and (d) procedural
fidelity checklists for baseline, intervention, generalization, and maintenance data (Appendix L). Social validity data were also collected after the generalization condition (see Appendix M).

Although the other measures, such as the checklists and questionnaires, have been developed and applied for other studies (e.g., Bethune, 2015; Holzberg & Besaw, 2018; Walker & Test, 2011), no direct measure was previously designed to collect data for the observed variable in a single subject study. Thus, 10 structured questions were developed with answers found directly in the intervention to document the participants’ abilities to request academic accommodations.

**Compensation/Honorarium**

Participants were provided with compensation in the form of a $25.00 gift card stipend, which was mailed to participants or delivered via electronic gift card. Compensation was contingent upon participants’ completion of the SACR intervention; however, participation in the intervention was entirely voluntary. Honorarium was also provided to the research assistant for IOA and procedural fidelity data collection. Further, any Program X staff members that offered their assistance in this research received $150 each for their time spent in overseeing/observing intervention implementation, assisting with participant recruitment, and student scheduling. Compensation for participants and staff, and other expenses (e.g., printing of intervention materials), were funded through a doctoral training grant.

**Data Collection Procedures**

**Dependent Variable (DV)**

The DV was the ability to request academic accommodations. Unlike previous literature, 10 structured questions were asked to document the participants’ abilities to request accommodations, serving as the primary measure for the DV. Some of the questions were worded differently for each participant, depending upon their individual needs and their accommodation. For example, “How do you know taking a test or quiz in a separate location is
working for you?” or “How do you request a read aloud?” looked differently from participant to participant depending upon their identified accommodation.

The skills needed to appropriately answer these structured questions were taught in the modified SACR intervention. These verbal questions were asked individually and promptly after each role play probe in the baseline, intervention, generalization, and maintenance conditions. Directions were read aloud and confirmed the participants’ understanding before reading aloud the questions and recording the responses to the questions on paper.

The secondary measure of the DV was documenting the participants’ number of demonstrated behaviors during role play probes. The skills “a, b, [and] c” found in Table 7 were considered precursors for requesting one’s accommodation; skills “1, 2, [and] 3” were the specific actions towards requesting one’s accommodation. Skills “1, 2, [and] 3” were examined explicitly during the probes.

**Table 7**

<table>
<thead>
<tr>
<th>Operation Definitions of SACR Behaviors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Greets Professor</td>
<td>Student verbally states a greeting, states name to the instructor, states the class he/she is taking with the instructor</td>
</tr>
<tr>
<td>b. Identifies Disability Status</td>
<td>Student makes a general statement about his/her disability or status with the accessibility office</td>
</tr>
<tr>
<td>c. Explains Disability in Functional Terms</td>
<td>Student makes a verbal statement that explains how the disability affects him/her.</td>
</tr>
<tr>
<td>1. Identification of Accommodation</td>
<td>Student makes a verbal statement identifying an accommodation used in school</td>
</tr>
<tr>
<td>2. Explains Benefits of Accommodation</td>
<td>Student explains the benefit of the past or hypothetical accommodation in class</td>
</tr>
<tr>
<td>3. Request Use of Accommodations</td>
<td>Student verbally states that he/she thinks the accommodation will be helpful once in college</td>
</tr>
</tbody>
</table>

*Note.* Definitions and example behaviors were adapted and modified from Holzberg & Besaw (2018).
**Interobserver Agreement (IOA)**

IOA data for the DV were collected by using participants’ (video recorded) responses to the 10 structured questions as a result of the intervention (primary measure for the DV) and the number of demonstrated behaviors in the role play probes (secondary measure for the DV). Data were analyzed by the research and myself, and for the participants’ responses to the 10 questions, we needed to obtain at least 80% agreement on whether we approve or disprove at least 8 out of 10 participants’ responses. The research assistant received training on how to collect reliability data using the structured questions by engaging in practice sessions, where video recordings were independently reviewed.

Recordings were labeled and saved with (a) the participants’ initials (pseudonym), (b) “b” for baseline, and (c) the video recording’s number in the sequence of the condition; for example, WS_B1 would indicate Walter Smith baseline 1st recording. Videos were then randomly selected through an online custom list generator for the research assistant and I to evaluate participants’ responses to the questions and then determined percentage agreement. We continued these practice sessions until we reached 100% agreement on at least three occasions. The research assistant and I engaged in three total practice sessions, where agreement ranged from 80% to 100%. The sessions used in the research assistant’s training were not used in the overall calculation of percentage of IOA. We calculated IOA with an item-by-item analysis using the following formula (Cooper et al., 2007):

\[
\frac{agreement}{agreement + disagreement} \times 100 = \%\ agreement
\]

For the number of demonstrated behaviors, this study collected IOA data for each participant using the (a) role play probes for the intervention, generalization, and maintenance conditions. Thus, the research assistant and I collected IOA data within one probe for the
following phases of the study (i.e., intervention, generalization, and maintenance). This study’s Behavior Checklist was adopted and modified from Holzberg & Besaw (2018), formerly adopted from Bethune (2015), and originally adopted by Rumrill et al. (1999). Since all role-play probes were video recorded, the research assistant and I analyzed recordings to collect IOA data to reduce experimenter bias.

The research assistant was trained on how to collect reliability data using the Interobserver Agreement Checklist. As part of this training, operational definitions of behaviors shown in Table 6 (also Appendix N) were provided. The research assistant verbally confirmed her comfort in identifying these behaviors as part of her training before we practiced reliability data collection using one of the baseline role-play scenarios. In this practice session, we independently reviewed the video recording of a baseline role-play scenario using the Behavior Checklist, then determined percent agreement. We continued these practice sessions until we reached 100% agreement on at least three occasions. We engaged in three total practice sessions, where agreement was 100% for each session. The role-play scenarios used in the research assistant’s training were not used in the overall percentage of IOA.

IOA data for the independent variable (IV) were collected using the Procedural Fidelity Checklists for the baseline and maintenance conditions, the intervention condition, and the generalization condition. Data were collected using the SACR lesson plans to determine the extent to which the instruction was administered accurately. Since instructional procedures were video recorded, we collected procedural fidelity for one randomly selected session for each participant. 80 percent agreement on at least 20% of the overall data, for each phase and participant, to ensure accurate implementation of instruction was obtained (CEC, 2014; Kratochwill et al., 2010).
**Social Validity**

In order to establish the social significance of changes to the DV, social validity data were collected from the student participants and Program X staff members (i.e., the program director and the student participants’ academic advisors, if applicable; Horner et al., 2005). Social validity data was provided by Program X’s director, since (a) the program director is responsible for determining whether such an intervention has the potential for future implementation at Program X. For instance, if the program director finds this intervention practically valuable, she possesses the authority to decide whether the intervention can and should be implemented in future semesters to support students’ self-advocacy skill development. Each participant’s academic advisor also participated to provide social validity data because they are responsible for helping students in the college program select their courses and track progress on their goals.

Next, after the generalization condition, students were administered a questionnaire with a 4-point Likert scale (strongly agree [4], agree [3], disagree [2] strongly disagree [1]), with a score of 4 indicating the student felt that the intervention positively impacted his/her ability to self-advocate through request for college academic accommodation in a generalized, academic environment. Student participants were provided assistance with survey completion (e.g., questions read aloud over Zoom), depending upon the participants’ individual needs directly after the generalization condition.

The program director and staff were administered a social validity survey using VCU Google Forms after completion of the generalization condition for all student participants, in which they rated the intervention’s effectiveness, also on a 4-point scale (strongly agree [4], agree [3], disagree [2] strongly disagree [1]). The link to access the survey was sent over e-mail and did not include any identifiable information; program staff participants were not asked to
include their names on the social validity forms. The forms only indicated whether these individuals were a staff member or the program director. Consent information was displayed as the first screen of the online survey form for program staff, and staff member participants clicked “Agree” if they were willing to participate. Directions indicated that participants could skip any questions that they do not feel comfortable answering; further, emphasizing that participation in the form completion was entirely voluntary.

There was one open-ended question at the end of the social validity surveys for student participants and a different open-ended question for program staff participants. The question for student participants was: “What do you like most about the SACR intervention?” This was added to further identify what students liked most about the intervention. Previously, there was no open-ended question at the end of this form for students, formerly including only a “comments” section. The social validity survey for program staff participants already included the following open-ended response question: “What do you feel was most useful about the SACR intervention as a tool to teach accommodation requesting skills to students with disabilities?”

Social validity measures are located in Appendices O through Q. Although adopted and modified from Holzberg & Besaw (2018), this research also administered social validity surveys to the program director and staff.

**General Procedures**

**Pre-Baseline**

At the beginning of the pre-baseline session, the following Zoom features that were used throughout the course of the intervention were reviewed; including screen sharing, live messaging, and video recording. Next, the demographic information section was completed, and information was recorded on the corresponding form. Finally, each student participant’s past
accommodations were reviewed, and the participants selected one for the intervention. Promptly after, the first baseline probe took place.

**Baseline**

The purpose of collecting baseline data was to demonstrate intervention effectiveness through comparing baseline to intervention conditions, and to determine whether a functional relation was established between the intervention and DV (Horner et al., 2005). In other words, baseline assisted this research in determining the extent to which students could appropriately advocate for their academic accommodations prior to receiving the intervention.

Each of the student participants were asked 10 structured questions, which corresponded to the skills that were later learned in the intervention package. Questions were asked verbally and showed visually during the virtual session, using the screen sharing feature on Zoom. Multiple data points were collected in baseline to document a predictable pattern, without a trend in the direction towards or away from the predicted intervention pattern, which would compromise the intervention (Horner et al., 2005). Baseline procedures were implemented daily until relative stability was achieved; thus, the intervention condition was not implemented until relative stability was achieved in baseline.

A minimum of four data points was collected for the student participants to demonstrate stability. Once stability was established, the modified SACR intervention was implemented with participant one (Chloe), as she demonstrated the greatest need for the intervention (i.e., had the lowest and most stable baseline score). During these first four days of data collection, the different Zoom features with participants at the start of our sessions were reviewed to ensure their confidence and comfort with these features.

The remaining participants continued with the baseline sessions while the intervention sessions were implemented with participant one, until she would have achieved the pre-
determined criterion by answering at least 8 out of 10 structured questions correctly for three consecutive days. The second participant would have entered the intervention condition on the following business day, if the first participant had achieved the pre-determined criterion. The same process continued for the third student participant.

**Intervention**

The SACR intervention was originally developed by Project Accommodations Planning Training (APT), within the Department of Rehabilitation at the University of Arkansas, as a training manual to assist students in understanding the meaning of accommodations and how they could be accessed. This initiative was developed as a result of a 3-year transition grant from the Office of Special Education Programs. More recently, Holzberg and Besaw (2018) used the materials from this training in a similar study conducted with college students with IDD attending an inclusive, PSE program affiliated with a four-year university. Dr. Debra Holzberg, the first author, granted permission to use each of these materials in the current study. Using adapted materials has helped control for instrumentation, a threat to internal validity, because they have already been shown effectiveness in other studies.

**Modification of SACR.** To differentiate from previous literature, the SACR strategy was modified to increase this study’s validity and to strengthen the overall design. In the original SACR strategy, all seven lessons are implemented only once across three sessions. Instead, I modified module 1 to include three lessons, all implemented each session/day for at least three consecutive days, allowing for repeated measure of the skills learned. The skills taught in lesson three included directly advocating for one’s academic accommodations, and those in lesson one and two rather set the context for requesting one’s accommodations.

Also, unlike previous literature, I included use of an abbreviated visual prompt (AVP), which students could use in role play scenarios during the intervention. Including the use of a
visual prompt was a suggestion from previous literature to improve future research (Holzberg & Besaw, 2018). The AVP added to the current literature through examination of the efficacy of an intervention, which facilitated acquisition of the target behaviors utilizing a visual prompt.

**Intervention Schedule.** First, students were individually shown CTI’s online video (see Appendix F for video transcript), which informs students on the legislative differences between high school and college, the need for increased self-advocacy, and examples of the types of accommodations provided, based on students’ needs. Because the literature supports that students must first know their rights before they can effectively acquire academic accommodations in PSE (Baele, 2005; Walker & Test, 2011), this video was implemented to help engage students’ knowledge of rights, which is also one of the four self-advocacy components developed by Test et al. (2005b) and recognized in this study’s conceptual framework. This video is approximately thirteen minutes long and was shown only once at the beginning of the first session of the intervention condition for each participant.

Students’ accommodations were then reviewed, which included the students’ academic learning needs, and how the students’ previous accommodations have assisted their academic success. The modified SACR intervention began thereafter. This intervention included three lessons targeting college students’ abilities to advocate for their academic accommodations. Thus, the participants learned skills across the three lessons in a chain or successive approximation sequence with assessment of performance in each step of the task analysis. Participants behaviors were in a role-play probe scenario at the end of each session. These behaviors represented the skills they learn directly from the intervention and provided the foundation for answering the 10 structured questions, which were asked after the role play probe.

A sample intervention schedule is provided below (Figure 4), followed by a graphic visual representation (Figure 5) showing the staggering conditions between baseline,
intervention, generalization, and maintenance across potential participants. The data points range from one to 10, in accordance with the 10 structured questions used as the primary measure for the DV. It is important to note that the number of initial baseline sessions could have ranged from 3-5, depending on when stability was achieved (three minimum and five maximum data points), whereas the number of intervention sessions for each participant depended on when the pre-determined criterion was met.

**Figure 4**

*Sample Schedule*

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-baseline</td>
<td>Baseline 2</td>
<td>Baseline 3</td>
<td>Baseline 4</td>
<td>Baseline 5</td>
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<tr>
<td></td>
<td>(P1-P5)</td>
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<td>(P2-P5)</td>
<td>(P2-P5)</td>
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<tr>
<td></td>
<td>Baseline 1</td>
<td>Intervention 1</td>
<td>Intervention 2</td>
<td>Intervention 3</td>
<td>Intervention 3</td>
</tr>
<tr>
<td></td>
<td>(P1-P5)</td>
<td>(P1)</td>
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<tr>
<td>Week 2</td>
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<td>Baseline 7</td>
<td>Baseline 8</td>
<td>Baseline 9</td>
<td>Baseline 10</td>
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<td></td>
<td>(P2-P5)</td>
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<td>(P3-P5)</td>
<td>(P3-P5)</td>
<td>(P4-P5)</td>
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<tr>
<td></td>
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<td>Intervention 1</td>
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<td></td>
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<td>Generalization 3</td>
<td>Generalization 1</td>
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<td>Week 3</td>
<td>Baseline 11</td>
<td>Baseline 12</td>
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<td>Week 4</td>
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</table>
Unlike the baseline condition, the intervention condition included consequences (e.g., general and specific verbal praise for correct responses and constructive verbal feedback for
incorrect responses, except during role-play probes). However, no tangible rewards were provided for correctly demonstrating behavior(s) in the role-play probes.

Since individuals with ID characteristically experience difficulties with working and long-term memory (Vicari et al., 2016), I assisted participants in developing scripted notecards that were used as visual supports to prompt the communication of target behaviors, based on participants’ selected accommodations. These notecards were developed before lessons, and sentence structures for these notecards were provided on an “as needed” basis. When helping participants create the notecards, the screen was shared with participants, and the notecards were completed together on a Word document. Using the screen share feature on Zoom, participants’ responses were typed onto the notecard. During role-play scenarios, when participants could use their notecards, the screen remain shared, so the participants could view their notecard.

Similar to Walker and Test (2011), multiple opportunities to practice learned skills were provided, and on each intervention day, students built upon their previous lessons by reviewing previously learned skills in role-play scenarios. Students were given opportunities to practice with scripted notecards to establish a natural conversational flow (i.e., until it sounded like a typical conversation). Natural conversational flow was based on the individual student, relative to the particular student and based on the participants’ typical conversational pace and their natural pace/prosody.

At the end of each session, students were given one opportunity to practice with a scripted notecard. I then gave them the option to switch to use of the abbreviated visual prompt (AVP; see Appendix O). If participants chose to use the AVP, they would only have the opportunity to use it once. If they did not achieve all three specific actions towards requesting one’s accommodation (skills 1, 2, and 3) with use of the AVP, they could return to use of the scripted notecard as a visual prompt for the final assessment for the secondary measure of the
DV. The level of comfort with the AVP depended on the individual, so if the participant preferred not to use the AVP, then they could have chosen to use of the scripted notecard or neither the scripted notecard nor AVP.

If the participant originally chose not to use the AVP, then they had a second and final opportunity to role play with or without the scripted notecard, depending on their individual preference. Thus, the maximum number of role play opportunities at the end of each session was two without the AVP (i.e., use of scripted notecards or no scripted notecards only) or three with the AVP (i.e., use of scripted notecard, AVP; then AVP, scripted notecard, or neither). The final practice opportunity in each session counted as their assessment for the secondary measure of the DV.

**Intervention Description.** The intervention included a modified version of SACR: Strategies for the Classroom Accommodation Request (Rumrill et al., 1999). SACR can be implemented individually or in group formats, and it consists of two modules: (a) self-advocacy and communication skills and (b) conflict resolution skills. Similar to Walker and Test (2011) and Holzberg and Besaw (2018), only module one was implemented for this study because it consists of instruction on how to request one’s academic accommodations, the focus of this study (which sought to evaluate whether the SACR intervention could improve students’ abilities to request their academic accommodations in role play scenarios, and in answering this study’s research question). Module two consists of instruction related to conflict resolution (e.g., how to respond and negotiate if an instructor does not agree with the students’ requested accommodation), and thus, was not needed for the purpose of this study and answering this study’s research question.

**Module One (Modified).** Module one (modified) consisted of three lessons within a single session, see Figure 6, which include: skill description, goal, examples, researcher
modeling, role-play scenarios, and summary of learned skills. The original version of module one consisted of seven lessons and 11 targeted behaviors, each behavior taught only once. While the same intervention schedule and materials were used, only the first three lessons were implemented repeatedly across several consecutive days.

**Figure 6**

*SACR Intervention: Module 1 (Modified)*

<table>
<thead>
<tr>
<th>Day</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session (45 min each)</td>
<td>First Session</td>
<td>Second Session</td>
<td>Third Session</td>
</tr>
<tr>
<td>Lesson # (15 min each)</td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

Each of the SACR lesson plans were scripted; utilized the same formats; and took place at the same time across at least three consecutive, business days to minimize variability threats. Lessons lasted less than 15 minutes each. At the start of each session, students were asked to practice role-playing skills learned from the previous session; however, these practice situations were not included in data collection. At the end of each lesson, students were asked again to role-play all the skills learned thus far in the intervention, including from their current lesson; these practice situations were not included in data collection. Role play probes (included in data collection) occurred at the end of each session, which took place during the last five minutes of the third lesson. There was only one assessment for the secondary measure of the DV at the end of each session, although participants had the opportunity to practice role playing 1-2 times after instruction in each session and before the assessment of the secondary measure of the DV, as previously discussed. Role-play behaviors were recorded using the Behavior Checklist for the secondary measure of the DV, adopted and modified from Holzberg & Besaw (2018).
following is an example script of the students’ verbiage for the role-play probe in the intervention condition [adopted and modified from Holzberg and Besaw (2018)]:

Hello, my name is Aaron Arthur, and I am taking EDUS 100 with you. I have accommodations from the Student Accessibility and Educational Opportunity (SAEO) office. I have difficulty with testing. I need extra time on exams to help me process the material. Having extra time on the exams allows for me to think through the questions more thoroughly. Can I use this accommodation in your course?

After each role play probe, participants were asked a series of 10 structured questions. Participants needed to answer at least 8 out of 10 structured questions correctly across at least three consecutive days to achieve the pre-determined criterion. If participants did not meet the pre-determined criterion after the first three sessions, the participants engaged in three more sessions, or until the participant reached the pre-determined criterion. The order in which the intervention was introduced followed the SACR strategy as it was implemented in Walker and Test (2011). The students were advised not to proceed with generalizing learned skills with course instructors until the pre-determined criterion was achieved.

To demonstrate experimental control, this research documented at least three experimental effects at three different time points for all participants. Since this research utilized a multiple probe design across participants (with intervention implementation staggered across participants), experimental effect was demonstrated within and across data series and illustrated in a visual analysis post-data collection. It was hypothesized that the IV would manipulate the DV in this study by increasing the number of correct responses to the 10 structured questions after each intervention session.

In Lesson 1 (Introduction), students learned how to engage in appropriate introductions with their course instructors. Specifically, students were instructed on how to effectively
communicate an introductory statement, such as stating a greeting, their name, and/or the name of their enrolled class. Lesson 2 (Disclosure) enabled students to specifically explain their disability and how it affects them in the classroom. For instance, “As a result of my intellectual disability, I have trouble remembering X.” In Lesson 3 (Solution), students were taught to explain their need for the accommodation, the benefit of the accommodation, and their request for the accommodation in the given course (Walker & Test, 2011, p. 138).

Table 8 provides a list of the skills and their corresponding lessons, adopted from Walker and Test (2011). These skills were operationally defined within each lesson. As shown in Table 8, the skills “a, b, [and] c” were considered precursors for requesting one’s accommodation; skills “1, 2, [and] 3” were the specific actions towards requesting one’s accommodation, and thus were examined explicitly during the probes.

**Table 8**

<table>
<thead>
<tr>
<th>Skills</th>
<th>SACR Lesson Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>*a. Greet Instructor</td>
<td>Lesson 1</td>
</tr>
<tr>
<td>*b. Identify disability status</td>
<td>Lesson 2</td>
</tr>
<tr>
<td>*c. Explain needs functionally</td>
<td>Lesson 2</td>
</tr>
<tr>
<td>1. Mention previous accommodations</td>
<td>Lesson 3</td>
</tr>
<tr>
<td>2. Explain benefits of past accommodations</td>
<td>Lesson 3</td>
</tr>
<tr>
<td>3. Request use of accommodations</td>
<td>Lesson 3</td>
</tr>
</tbody>
</table>

*Note. *Not required for data collection purposes on the Behavior Checklist

**Generalization**

Participants must have achieved the pre-determined criterion level (i.e., 80% accuracy for three consecutive sessions) in the intervention condition prior to entering the generalization condition. Since this intervention was implemented over the summer, participants were not able to generalize their learned skills directly with university course instructors. Therefore, a
generalization video simulation was created which closely aligned with the skills taught in the intervention condition. This video simulation was administered three times to participants to establish whether there was a trend in the data (Horner et al., 2005; Kratochwill et al., 2010). These sessions were video recorded, so observational and IOA data could be collected at a later date.

In the video simulation, a doctoral student (not the research assistant) read a script that closely imitates a typical conversation with a university course instructor and a student with disabilities requesting to use their academic accommodations in their class (see Appendix P for video simulation script). The doctoral student read the script from the perspective of a university course instructor; and thus, the script only included the university course instructor’s responses. This process was video recorded.

The script indicated where the mock course instructor should pause in speech, to allow participants time to respond during the allocated time. However, given that people with IDD can have slower processing speeds than people without disabilities (Haigh et al., 2018; Schuiringa et al., 2017), the video simulation was also paused as necessary, when participants need more time to respond.

Data were collected on participants’ responses to the mock university course instructor in the video simulation. As previously described, this interaction closely aligned to the skills taught in the intervention condition, specifically where the participants practiced role playing. Since the mock university course instructor in the video simulation was a different person; students were able to generalize their learned skills with another individual.

**Maintenance**

One-to-two weeks after students generalized the skill in the video simulation, maintenance data were collected based on the (a) behaviors demonstrated in the role play probe
and (b) the participants’ responses to the structured questions corresponding to the intervention lessons. Maintenance data were video recorded through the online Zoom platform for observational and IOA data collection purposes and were graphed, similar to the previous conditions.

**Procedural Fidelity**

Since this single-subject design research involved implementation of the IV over time, this led to the possible threat of implementation fidelity (Horner et al., 2005). To control for this potential threat, “continuous measurement of the independent variable” with the collection of procedural fidelity data (Gresham et al., 1993; Horner et al., 2005, p. 168) using the SACR lesson plans to determine the extent to which instruction was administered accurately was documented.

**Setting(s) and Arrangement(s)**

All research procedures were conducted online using VCU Zoom. There were no in-person interactions. This included the pre-baseline, baseline, intervention, generalization, and maintenance conditions. At the start of each session, student participants were reminded that their participation was voluntary. Meeting times were scheduled as consistently as possible each day (e.g., typically every day from 10-11AM for Shane, 11AM-12PM for Chloe, and 4-5PM for Omar), and the intervention was only implemented on business days, not weekends.

**Data Analysis**

Visual analysis was used to show experimental effect through identifying levels, trends, percentage of overlap, and variability/stability of the data on a graphic display for each student (Horner et al., 2005). These graphic displays include the treatment effectiveness (manipulation of the IV on the DV), specifically data from the participants’ responses to the structured questions to document their abilities to request accommodations and the maintenance of their
learned skills and will include data points from the baseline, intervention, generalization, and maintenance conditions.

A bar chart for each participant was developed to show the number of behaviors observed in the role-play scenarios using the Behavior Checklist. Thus, this bar chart includes data from the intervention, generalization, and maintenance conditions to also show whether the participants effectively generalized learned skills and maintained their learned skills from the intervention package. Further, descriptive statistics (e.g., mean, median) were also computed for social validity data analysis. Results of these descriptive analyses are displayed in tables in the results section of this dissertation research.
Chapter IV

RESULTS

Using a single-subject design methodology, this study sought to answer the following research question: “What are the effects of a self-advocacy intervention on the abilities of college students with IDD to appropriately request academic accommodations?” Results are reported below, starting with findings from the primary and secondary measures of the DV.

Primary Measure of the DV

Figure 7 shows the number of correct responses to the 10 structured questions for each participant in each condition. According to Chloe's visual analysis, she demonstrated the most stable (stability = 0.525, with no trend) and lowest (level = 3.5) baseline scores compared to Omar and Shane; thus, she began with intervention. A strong change in level (subtracting the last day of baseline from the first day of the IV; 3) from the baseline to the intervention condition was observed, with 0% overlap (total number of IV data points divided by the number of IV points that overlap baseline range; Kratochwill et al., 2010). In the intervention condition, Chloe demonstrated relatively stable scores, without an accelerating or decelerating trend, and a higher level (5.75) compared to baseline. Although Chloe did not achieve mastery (answering 8/10 structured questions correctly across three consecutive days) according to the primary measure of the DV, she experienced improvements in her responses from the baseline to the intervention condition, nearly doubling her scores (showing an immediate effect of the intervention on the outcome measure). She also showed an upward trend at the end of her intervention condition,
which could be an indication of the effectiveness of the intervention. No further data were collected for Chloe, as she withdrew from the study after the fourth intervention session.

Omar's visual analysis indicated that he demonstrated the next most stable (stability = 0.694 with no trend) and second lowest (level = 4.625) baseline scores compared to Shane. Omar began the intervention second and experienced a strong change in level (4) from the baseline to the intervention condition, with 0% overlap between the two conditions. Omar's increased number of correct responses from the baseline to the intervention condition demonstrated an immediate effect of the intervention on the outcome measure.

Omar's scores were also relatively stable in the intervention condition, with a level of 8.33, and without an accelerating or decelerating trend in the data. However, in the following conditions (generalization and maintenance), Omar's number of correct responses to the 10 structured questions lowered, with three out of the four data points overlapping with the baseline condition. There was a change in level (-1) with a decelerating trend in the generalization condition (level = 5.33; stability = 0.8) from the intervention to generalization condition. Omar did not achieve at least 8 out of 10 correct responses to the structured questions during generalization or maintenance conditions.

Shane was the third participant to enter the intervention condition and started the intervention with greater variability in his baseline scores (which resulted in a slight accelerating trend) compared to the other two participants. Shane participated in a total of 11 baseline sessions and maintained more stability in his last four baseline sessions, with a level equal to 5.364. While Shane's visual analysis similarly shows an accelerating trend from baseline to the intervention condition with 0% overlap, the change in level was only two. In the intervention condition, Shane's scores were stable, with no trend, and a level of 8, showing an immediate positive effect on the outcome measure. Unlike Omar, Shane's scores were slightly higher in the
generalization condition compared to the intervention condition (with an accelerating trend; level = 8.66), with some overlap between the intervention and generalization conditions (33%). Shane continued to answer at least 8 out of 10 structured questions accurately in the generalization and maintenance conditions and showed stability towards the end of the study.
Secondary Measure of the DV

Figure 8 shows the number of correct responses to role play probes for each participant in each condition. Prior to Chloe’s exit from the study, she completed four intervention sessions,
where she scored 100% (3/3) in the role play scenarios using her scripted notecard. During Omar’s first intervention session, he practiced once with the scripted notecard, then stated he chose to proceed with using the AVP. Omar scored 100% using the AVP. On the second intervention day, Omar chose to use the scripted notecard for his final role play, and he again scored 100%. On the third intervention day, Omar used self-developed notecards he created outside of scheduled sessions and scored 100%. Shane scored 100% in each of the role play scenarios using the AVP as well.

Figure 8

Responses to Role Play Probes

During the initial generalization condition with Omar, Omar could not hear sound on the video simulation; however, he read the mock course instructor’s lips and still scored 100% using scripted notecards. While multiple attempts were given to fix the sound, the technological difficulties appeared to cause Omar frustration, thus deciding to stop troubleshooting. While he scored 100%, the score did not count this session (both for the primary and secondary DV) due to the technical difficulties; hence, there is a break in the data on the graph in Figure 7 (i.e., the diamond-shaped marker). Technology support was received and the sound was fixed, thus
allowing the next meeting to count as the first generalization session for Omar, where he scored 100% for this role play and for following generalization role plays, as well as the maintenance role play. Omar did not use scripted notecards or the AVP during the role play scenarios for the third generalization session and the maintenance session.

Shane used the AVP during the first generalization role play and scored 100%. During the second role play in the generalization condition, Shane tried to engage in the role play without any prompts, then asked to stop the role play after realizing a mistake was made. The role play was then restarted, with use of the AVP, and Shane scored 100%.

**Procedural Fidelity**

Minimum standards specify that agreement needs to be greater than or equal to 80% for at least 20% of the overall data within each phase for each participant (CEC, 2014; Kratochwill et al., 2010). Thus, procedural fidelity data was calculated for at least 25% of each phase for each participant (i.e., baseline, intervention, generalization, and maintenance for Omar and Shane and baseline and intervention for Chloe). 100% agreement was obtained for each phase and participant after completion of the study. This indicates accurate implementation of instruction for the current research.

**Interobserver Agreement (IOA)**

Using similar criterion for Interobserver agreement (IOA) data were collected, using the same formula as above, for at least 25% of each phase for each participant and for both the primary and secondary measures of the DV. This is above the minimum standard for IOA, which is obtaining greater than or equal to 80% agreement on at least 20% of the overall data for each phase and each participant to ensure accurate implementation of instruction (CEC, 2014; Kratochwill et al., 2010). IOA for the primary measure for the DV ranged from 95% to 100%, with a mean of 98.33% in the baseline condition (i.e., 100% IOA for Chloe, 95% IOA for Omar,
and 100% IOA for Shane); 80% to 100%, with a mean of 90% in the intervention condition (i.e., 80% IOA for Chloe, 100% IOA for Omar, and 90% IOA for Shane); 100% in the generalization condition (100% IOA for Omar and Shane); and 100% in the maintenance condition (100% IOA for Omar and Shane). As for the secondary measure for the DV, we calculated 100% IOA for each participant across all conditions.

**Social Validity**

Social validity data were collected from two student participants (Omar and Shane) as well as three program staff participants (i.e., the program director and two program staff members). Student participants responded to eight questions, using a 4-point Likert-type scale, with one additional open-ended question. Table 9 shows the student participants’ individual and mean responses for Likert-scale survey items. Omar reported he either agreed (3) or strongly agreed (4) with each item asked on the survey ($M = 3.375; Mdn = 3$). On the other hand, Shane reported he strongly agreed (4) with each item asked on the survey ($M = 4; Mdn = 4$).

The open-ended question for the student participant social validity survey inquired: “What did you like most about the SACR intervention?” Omar responded to this question with the following statement: “I get to learn; I thought the role playing was nice to do. I learned a lot more than I expect. I learned a lot from the role playing.” Shane responded:

It gave me ways and ideas to understand how to disclose disability and accommodations to a professor. It also helped me become more independent by being able to advocate my needs, and the study was very beneficial for me. It has been awesome to help Katie out to get her doctorate. Every day, I always looked forward to meeting with Katie; helping people has always been a thing that I always like to do. It has been the highlight of my day!
Table 9

*Student Participant Social Validity Survey Likert-Scale Responses*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Omar</th>
<th>Shane</th>
</tr>
</thead>
<tbody>
<tr>
<td>The SACR lessons helps me to explain my needs</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>The steps of SACR were easy to use.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>The role-playing sessions were helpful.</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>I will have the confidence to ask my instructors for my accommodations.</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>When I ask for accommodations, I will follow the steps I was taught.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I am more aware of what I need to do well in my classes now.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I understand it is important to learn how ask for my accommodations in college.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>During instruction, the notecards helped me learn the steps.</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>Mean (M)</td>
<td>3.375</td>
<td>4</td>
</tr>
<tr>
<td>Median (Mdn)</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

*Note.* 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree

Table 10 shows the program staff members’ individual and mean responses for five Likert-scale survey items. All staff participants reported they strongly agreed (4) with each item asked on the survey, indicating that every data value also equals the mean ($M = 4$; $Mdn = 4$).

The open-ended question for the staff participant social validity survey inquired: “What do you believe is the most useful about the SACR intervention as a tool to teach accommodation requesting skills to students with disabilities?” One of the academic advisors reported: “The role-playing. Practicing skills is so critical for skill attainment and generalization.” The program director reported: “It is such an important skill to have not only for college, but as they enter employment. Students need to know how to articulate what their learning needs are, what accommodations they need, and how to request them.”

Table 10

*Staff Participant Social Validity Survey Likert-Scale Responses*

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Staff Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>D</td>
</tr>
</tbody>
</table>

97
<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching students with disabilities how to request academic accommodations is important and necessary.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Teaching students with disabilities how to request academic accommodations enhances their self-advocacy skills in college.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>The modified Self-Advocacy and Conflict Resolution (SACR) strategy is a beneficial intervention that can help students with disabilities learn how to request academic accommodations.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>The modified Self-Advocacy and Conflict Resolution (SACR) strategy was implemented at an appropriate time before the incoming students’ first college semester.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>I would like to see the modified Self-Advocacy and Conflict Resolution (SACR) strategy implemented by our staff in future semesters.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td><strong>Mean (M)</strong></td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Median (Mdn)</strong></td>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* 1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree; A = advisor; D = director.
Chapter V

DISCUSSION

The purpose of this study was to examine the effects of a virtually delivered self-advocacy intervention package on the abilities of college students with IDD to request their academic accommodations. This is the first study of its kind to virtually implement a modified version of the *Self-Advocacy and Conflict Resolution* (SACR) strategy with college students with IDD and contributes to the current literature by incorporating a direct measure of the DV (i.e., the 10 structured questions). Findings from this research show moderate to strong evidence of a functional relation between the intervention and students' abilities to request their academic accommodations, as verified by the visual analyses showing the students' responses to the primary and secondary measures of the DV in Chapter IV and based on an examination of the data within and across phases in the previous chapter (Kratochwill et al., 2010). This chapter provides further description of visual analyses, compares this study's findings to the conceptual framework, and presents implications for practice, policy, and research.

**Further Description of Visual Analyses**

Evidence standards for single-subject design research indicate that data must be analyzed within and across conditions to establish a functional relation between the IV and DVs (Horner et al., 2005; Kratochwill et al., 2010). Based on the visual analyses, there can be strong evidence, moderate evidence, or no evidence of a functional relation (Kratochwill et al., 2010). Chloe's
visual analysis shows strong evidence of a functional relation between the SACR intervention and her ability to request academic accommodations according to the primary measure of the DV. Although Chloe did not achieve mastery, according to the primary measure of the DV, she experienced improvements in her responses from the baseline to the intervention condition. This suggests that if Chloe persisted in the intervention, she would have likely continued to improve the number of correct responses until reaching mastery.

However, concurrently, it seemed that Chloe's nature/personality played a part in responding to the questions. Specifically, Chloe reported that she knew the answers came from the lessons, but she could not remember what they were. When she could not remember, she would often say, "I don't know," and sometimes add that the questions were "boring." Based on Chloe's actions (observed periods of silence and frustrated expressions after questions were asked), she appeared to put pressure on herself to get the right answers. Ryan and Deci (2000) posit that such actions (e.g., protecting one's ego, avoiding shame) reflect introjected regulation (i.e., performing actions "with the feeling of pressure in order to avoid guilt or anxiety or to attain ego-enhancements or pride;" p. 62), which is a form of extrinsic motivation located closer to the left (non-self-determined) end of the Self-Determination Theory's Taxonomy of Motivation (Ryan & Deci, 2020).

Without including the 10 structured questions to measure this study's intervention effects, it would be unclear the extent to which participants, like Chloe, would be able to comprehend their actions (i.e., engaging in role-play scenarios to practice advocating for their accommodations with course instructors) and understand why these actions are important. The 10 structured questions ask for a more in-depth understanding of the participants' actions, with responses that can be found directly in the intervention package. These questions include "How
do you know if [your accommodation] is working for you?”, "How does [your accommodation] affect your learning?” and "Why would you request [your accommodation]?”

Without this direct measure of the DV, it could have been assumed, as in previous studies (e.g., Walker & Test, 2011), that participants were competent in requesting their accommodations based on their responses in the role-play scenarios (using scripted notecards), without understanding why these actions were so critical to their success in college. This is the case for Chloe, who effectively role played in all intervention sessions. However, she had difficulty applying her knowledge to the questions asked.

Unlike other single-subject design interventions (e.g., Chambers, 2016; Walker & Test, 2011), this study used multiple measures to assess students' abilities to effectively request academic accommodations. This is similar to the Palmer and Roessler (2000) study that used a self-reported efficacy instrument that measured students' confidence levels in requesting academic accommodations and a survey to examine students' general knowledge of their rights to reasonable accommodations as identified in federal law. Although Palmer and Roessler (2000) used a group experimental design, these instruments could have been beneficial to further assessing students' efficacy in requesting accommodations independently and their knowledge of rights to reasonable accommodations in college. In particular, the efficacy instrument could have benefited Chloe, who reported a lack of confidence in communicating with her instructors toward the beginning of the intervention.

Interestingly, in our third intervention session, I asked Chloe how often she looked at the scripted notecards when she role-played with me, and Chloe stated that she memorized the notecard and referred back to it only once or twice to confirm her responses. Thus, although Chloe was aware of her resources (demonstrating leadership—a subcomponent to self-advocacy according to Test et al., 2005a), she did not actively seek them because she recognized she did
not need the additional support, demonstrating knowledge of self (another subcomponent to self-advocacy according to Test et al., 2005a). Unfortunately, Chloe decided to stop her participation in this research after learning she would need to continue the intervention sessions.

The other two participants' baseline scores were higher than Chloe's scores. For Omar, this may be because he was a second-year student and therefore has prior experience needing to work with the disability support services office on campus to acquire accommodations during his first year. The decrease in Omar’s scores from intervention to generalization conditions suggests that while the intervention was effective for Omar, it would have likely benefited him to have participated in the intervention condition for more than four sessions. Thus, his visual analysis shows moderate evidence of a functional relation between the SACR intervention and his abilities to request academic accommodations, given the decrease in scores after the intervention condition. Because the 10 structured questions have not been used in previous literature with similar research studies (e.g., Chambers, 2016; Holzberg, 2018; Holzberg & Besaw, 2018; Walker & Test, 2011), piloting this intervention would have likely assisted in understanding that a greater number of minimum intervention sessions could have benefited participants like Omar.

Shane, a first-year student, had the highest baseline scores compared to the other two participants. Interestingly, in one of our sessions, Shane explained how he had moved from another state two years prior to entering his college program, where he was presented with limited transition-related opportunities, for example being directed toward employment options that did not align with his preferences or interests (i.e., working in a nursing home or another residential facility, when he desired to work in politics). This discrepancy between Shane's aspirations and the options presented to him by his educators reflects the opposite of a person-centered approach (an evidence-based practice used to enhance the quality of life for people with IDD: Taylor & Taylor, 2013) and may have influenced a need for Shane to self-advocate during
his secondary education. This could explain his higher baseline scores (and lower change in level) compared to the other participants. In the intervention condition, Shane's scores showed an immediate effect on the outcome measure, scoring at least 8 out of 10 structured questions accurately in the intervention, generalization, and maintenance conditions. This shows strong evidence of a functional relation between the SACR intervention and his ability to request academic accommodations.

In addition to the student participants' responses to the 10 structured questions, students’ abilities to request academic accommodations were also examined through engaging in role-play scenarios, similar to previous literature (e.g., Chambers, 2015; Holzberg, 2018; Walker & Test, 2011), however with their responses in the role-play scenarios used as the secondary measure of the DV rather than the primary measure. Also, unlike previous literature—which included seven lessons in the intervention package and 11 targeted behaviors, with each behavior taught only once—three lessons were taught in each session with three targeted behaviors. By repeatedly measuring the outcome variable, this increased the study's validity and strengthened its overall design (Kratochwill et al., 2013).

All students scored 100%, correctly demonstrating three out of three of the targeted skills in each condition's role-play scenarios. Unlike Chloe, who demonstrated minimal autonomous motivation for engagement in these sessions, Omar went above and beyond to learn as much as possible. For example, in our third intervention session, Omar paused the session so he could "get out his notes;" Omar created notecards for the role play probes on his own time, outside of the scheduled meetings, to review what he learned in the study. These actions reflect an inherent, intrinsic motivation to succeed in the study, which is "a prototype for self-determined activity" (Ryan & Deci, 2000, p. 62). Developing the flashcards was something he thought of on his own because he remembered how he learned best based from the meetings. By creating these
flashcards outside of our study meetings, Omar recognized how he learned best (knowledge of self) and he used his resources (the scripted notecards from our sessions; i.e., knowledge of rights) to develop a study material that would positively impact his learning (Test et al., 2005a).

Shane preferred to use the AVP, rather than the scripted notecards. Previous literature suggested incorporating this visual prompt as an option for participants to improve future research (Holzberg & Besaw, 2018). In this study, Shane reported that the AVP was easier to understand and the flexibility of using the prompts allowed him to structure his sentences. "Once I have a sentence starter, I know what to say," he reported.

Shane even recalled the information from the AVP to assist him in his scheduled meeting (previously scheduled by his academic advisor) with the disability support services office on campus. During our second intervention session, he reported that he had used the skills he learned from our first session, especially practice with the AVP, as he explained his needs for reasonable accommodations at the disability support services office on campus. Shane reported that the disability support services staff member was impressed with his ability to effectively explain his needs and the benefits of his needed accommodations. The support staff member proceeded to grant Shane all the accommodations he requested, including the one selected for our intervention (i.e., taking tests and quizzes in a separate location).

Findings from this study's social validity data also highlight the clinical significance of the modified SACR intervention and supporting self-advocacy instruction at the college level, as similarly emphasized in the current literature (e.g., Holzberg & Besaw, 2018; Ju et al., 2017). Both Omar and Shane reported that they agreed or strongly agreed that the intervention helped them learn how to explain their needs and increase their awareness of what they need to do well in their classes. Meanwhile, students and program staff reported several benefits of intervention components for enhanced student success, such as role-playing. These findings are consistent
with previous literature, showing that role-playing can be an effective means for increasing self-advocacy skills for college students with disabilities (e.g., Chambers, 2016; Holzberg, 2018; Holzberg & Besaw, 2018; Roper 2018; Walker & Test, 2011). The program staff participants all strongly agreed that teaching students with disabilities how to request academic accommodations is important and necessary and enhances their self-advocacy skills in college. This is similarly consistent with the literature. For example, while program staff (including student's academic advisors and the program director) were surveyed in this study, Walker and Test (2011) surveyed the director of disability support services, who similarly strongly agreed upon the practicality of the intervention. Unlike this research, Walker and Test (2011) also had a faculty panel rate whether they would give students their requested accommodations based on randomly selected videos from the baseline and intervention conditions.

**Comparison to Conceptual Framework**

This study postulated that college students with IDD must be able to use the four self-advocacy components defined by Test et al. (2005a) to acquire their academic accommodations. Foremost, they must know their disability status and what they need to succeed in academic environments (knowledge of self). All three participants identified their disabilities and their accommodation needs, with some participants needing more guidance than others. For instance, Chloe did not know what other disabilities she had aside from epilepsy, and she also did not know what accommodations she had previously used in high school. According to the literature, approximately half of the students with disabilities enter college without thinking they have a disability (Wagner et al., 2005). This is concerning because without knowing one's self and one's disability, students may not receive the accommodations they need to have equitable academic experiences in college. Further, college students with disabilities report that gaining self-awareness and an understanding of themselves to persevere are essential components of
advocacy or self-determination needed for persisting in college and receiving needed support on
campus (Getzel & Thoma, 2008). Given Chloe's baseline knowledge of self, a more in-depth
conversation was needed about her disability and how her disability affects her learning;
something the other two participants did not need.

College students with IDD must also know that they have the right to reasonable
accommodations in PSE according to federal law (knowledge of rights; Palmer & Roessler,
2000; Test et al., 2005a). This is critical because changes in students' rights from secondary to
postsecondary education brings on new responsibilities (e.g., managing accommodations and
coursework) distinct to college students with disabilities (Getzel, 2017). The students' rights,
according to federal law, were explained to them during the intervention condition. First,
participants were shown the CTI's video on the differences between high school and college, and
then engaged in a discussion after the video to assist their understanding. Shane requested that
the most explanation of his rights after the video, mainly because he felt like watching the video,
was not the most beneficial way for him to learn.

As Test et al. (2005a) explained with his conceptual framework, knowledge of self and
knowledge of rights are precursors to communication and leadership, because students must
have these skills before they can communicate their needs effectively with others. As identified
in this study's literature review, most self-advocacy intervention studies at the college level
targeted knowledge of self and communication. Thus, the current study adds to the literature by
addressing all four components, including communication—despite not being able to generalize
the students' learned skills directly with course instructors in a generalization condition. Rather,
Shane and Omar generalized their learned skills with a video simulation, demonstrating they
could effectively communicate with other individuals. Using a video simulation allowed for
interobserver agreement data collection because this interaction was video recorded, unlike
previous literature, which did not collect agreement data during the generalization phase (e.g., Walker & Test, 2011).

Finally, college students with IDD must know what resources are available to them to succeed (leadership). According to a review of literature on disability disclosure and accommodations for youth with disabilities in PSE, having a lack of knowledge of supports and how to access these supports is one of the major barriers to successfully self-disclosing one's disability and seeking accommodations in college (Lindsay et al., 2018). In this study, all three participants had the option of using a scripted notecard or the AVP prompts as resources during the intervention.

In this study, self-advocacy was conceptualized as a subcomponent to self-determination directly in the modified framework and in alignment with more recent understandings of self-determination in the literature (i.e., Shogren et al., 2015). Although a self-advocacy intervention package to enhance students' self-advocacy, was implemented, opportunities to enhance students' overall self-determination were also incorporated, such as asking students to use the scripted notecard, the AVP, or neither during role-play scenarios in each lesson. As an integral part of self-determination, making choices—and having the opportunity to make choices—was a demand of people with IDD in the self-advocacy movement and continues to be considered a critical skill contributing to people's quality of life (Wehmeyer & Abery, 2013).

**Implications for Practice**

Like previous literature, the findings from this study suggest that self-advocacy instruction should be implemented at the postsecondary level (e.g., Daly-Cano et al., 2015; Getzel, 2017; Getzel & Thoma, 2008; Ju et al., 2017). In particular, mixed/hybrid programs for college students with IDD, like Program X, are encouraged to implement the SACR curriculum (depending on their students' and program's needs) with incoming students as part of the bridge-
in process, since first-year students particularly lack skills related to self-determination, such as self-advocating for their accommodations and services in college (Ju et al., 2017).

To improve upon this research, program staff can implement this intervention closer to the start of students' academic semesters than when this study was conducted, so students can directly request their academic accommodations with their university course instructors. This is especially critical since, according to a study surveying 149 inclusive higher education programs in 39 states, only 14% of college students with IDD independently requested academic accommodations from course instructors, although approximately 88% of accommodations were requested (Grigal et al., 2012a).

Unlike previous literature, which supports the practicality and effectiveness of implementing the SACR intervention with college students with IDD within in-person environments (e.g., Holzberg et al., 2018), this intervention was adapted for virtual instruction because of a global coronavirus pandemic that can be spread from person to person. Students with IDD will likely continue to need to advocate for their needs using virtual platforms, such as requesting accommodations virtually, and inclusive higher education program staff can use this study as an example/guide to adapt their self-advocacy instruction so that they can benefit their students' needs from home.

Further, program staff can consider other ways their students can practice self-advocating for their needs on campus, such as encouraging normal risk-taking behaviors and learning from their failures (Perske, 1972). In particular, program staff should encourage students' knowledge of self (e.g., encouraging students to better understand how their disability impacts them), knowledge of rights (e.g., informing students about their rights to reasonable accommodations), communication (e.g., helping students be able to talk to course instructors about their needs), and leadership (e.g., giving students opportunities to feel empowered; Test et al., 2005b), in
alignment with this study’s conceptual framework and which could be accomplished through implementing the modified SACR intervention. Practitioners must understand and encourage all four self-advocacy components.

Also, many students with disabilities are not often fully prepared to self-advocate at the postsecondary level based on their experiences and exposure in secondary education (Daly-Cano et al., 2015). Thus, to further encourage student success once in college, secondary educators should promote the self-determination and self-advocacy of their students with IDD, such as encouraging their involvement in the Individualized Education Program (IEP) process, as required under the IDEA (2004). Students with IDD should be included in conversations that directly impact their lives, especially when planning for their transition after high school. During this process, students should be aware of the legislative changes impacting their rights to reasonable accommodations from the secondary to the postsecondary level (knowledge of rights), so they know they have the right to request reasonable accommodations from the disability support services office on campus once in college.

Finally, secondary practitioners should familiarize themselves with different post-school options for their students depending on their students' wants, preferences, and needs, including the different attributes of the various inclusive higher education programs across the country for those with IDD seeking college, including the level of inclusivity and the extent to which staff support and foster student self-determination; this information can be accessed by conducting a college search on the Think College website; Think College is a national initiative which collects data on inclusive higher education for students with ID.
Implications for Policy

Supporting Students with IDD in College

At the postsecondary level, the Higher Education Act (HEA) is a federal law that addresses the needs of higher education programs and provides financial aid to college students, including those with IDD. While the law's appropriations continue to be allocated to higher education programs like comprehensive transition and postsecondary programs (CTPs) for students with IDD, a reauthorization of the act is long overdue, with the last one in 2008. Recently, issues related to sexual assault on campus have halted efforts for reauthorization in Spring 2020, along with the impact of the 2020 coronavirus pandemic changing the congressional focus to the immediate health and safety needs of constituents.

Over the past few years, legislators, like Senator Bob Casey, have proposed amendments to the HEA, such as versions of the RISE (Respond, Innovate, Succeed, and Empower) Act. This act would ease the college selection and the accommodation seeking process for students with disabilities (including those with IDD), ease their transitions from high school to the postsecondary level and provide technical assistance to higher education institutes to better support their students with disabilities (e.g., S.1585—116th Congress, 2019-2020). If a version of this bill is passed, it must include the aforementioned components but also retain IDD provisions to continue to encourage access to federal financial aid for students with IDD; develop and expand TPSID projects; and fund the National Coordinating Center (NCC; which provides technical assistance, evaluates TPSID projects, and offers program standards).

Allowing students with IDD to attend college supports their growth in many areas, including self-determination and self-advocacy (Grigal et al., 2013), which has long-term benefits (e.g., in terms of independent living and employment) for adults with IDD (Wehmeyer & Abery, 2013). This must be recognized and supported by policymakers and reflected in their policy to
encourage more positive outcomes for adults with IDD and their inclusion in postsecondary environments.

At the secondary level, the IDEA supports self-determination development and authorizes transition services requirements to promote positive post-school outcomes for youth. However, as of Federal Fiscal Year 2020, the federal government covers only 13% of the promised 40% of "excess costs" for supporting children and youth with disabilities in public education. This leaves states, local school districts, and taxpayers to finance the remaining costs associated with educating children and youth with disabilities covered under this law. Policymakers should support a progression to fully-fund the IDEA to (a) encourage self-determination development and (b) ensure transition services are implemented appropriately based on individualized student needs. In return, this will help prepare students with disabilities for life after high school, including those seeking to attend inclusive higher education programs for students with IDD.

**Distance Education During the Coronavirus Pandemic and Beyond**

The recent circumstances with the coronavirus pandemic have urged secondary and postsecondary education systems and establishments to rethink what education looks like for students with and without disabilities. Distance education has become the new normal, with twenty-first-century technological advancements allowing for continued education for many students during, and likely after, the global COVID-19 pandemic. While implementing distance education, the federal law mandates that secondary schools and postsecondary institutions provide an accessible and equitable education for all students in compliance with the IDEA (secondary level), as well as the ESSA, Section 504 of the Rehabilitation Act, and the ADA (secondary and postsecondary levels; U.S. Department of Education, 2020). To meet the needs of students with disabilities receiving distance education, federal and state policies must continue
to allocate funds (e.g., through COVID relief packages; appropriations of emergency funding) to enhance accessibility and offer technical assistance support educators in providing equitable instruction for all students.

The National Center for Immunization and Respiratory Diseases (2020) reports that people with disabilities who have underlying health conditions are at higher risk of contracting the coronavirus. Therefore, they need to limit their in-person interactions to reduce the risk of infection. Whole specific information related to participants' medical records was not obtained; however, the participants in this study, and other students with IDD in college, may be at greater risk for the coronavirus and would need continued virtual instruction as states reopen community environments. State policies must include people with disabilities in their plans for reopening community and educational settings, not only to ensure their health and safety but to ensure their rights are protected (e.g., their rights to reasonable accommodations) and to establish a clear path toward full community participation that does not lead to further segregation or isolation.

Limitations and Directions for Future Research

As previously reported, findings from this research show moderate to strong evidence of a functional relation between the SACR intervention and participants' abilities to request academic accommodations. Since this research focused on college students with IDD attending a PSE program affiliated with a four-year university, its findings may only be applied to this student population.

Given (a) this study's small sample size (although acceptable for the current design), and (b) that participants were recruited from the same inclusive PSE program using purposeful sample selection, this may limit the ability to generalize findings of this research across diverse program types and in other settings. Therefore, researchers should replicate this research in similar postsecondary environments (i.e., mixed-hybrid, inclusive higher education programs for
college students with IDD) to see if there is evidence of causal relation within similar programs and to enhance the generalizability of this research. Future research could also consider expanding this research to other disability categories at the college level and dual enrollment students who access college-inclusive classes but are still in high school. Further, because this study was the first to support college students with IDD and their abilities to request accommodations using distance education, researchers should consider implementing the SACR intervention package virtually, similar to the current research.

When using virtual platforms for research purposes, potential uncontrollable factors might arise during intervention implementation, including technological difficulties. This study experienced minor complications with the online video platform, Zoom. For example, shortly after logging onto Zoom, and right before beginning a baseline session, one of the participant's (Omar) internet stopped working. Thus, the session was conducted via phone and the 10 structured questions were emailed, so he could follow along as the questions were asked. Speaker phone was used to ensure his responses could be loud enough to be recorded over Zoom, according to the plans outlined in IRB. On another occasion, a new Zoom link with Chloe was created because the original Zoom link stopped working. Finally, Omar could not hear sound on the video simulation for his first day in the generalization condition. Thus, this data was included in the analysis, and we started again with a generalization session on the following day. Such unplanned events may have negatively influenced the participants' responses to the 10 structured questions. Future researchers should have contingency plans to proactively reduce the potentially negative impact of technological difficulties on their participants' performance in the intervention.

Given that this study was conducted over the summer, prior to the participants' enrollment in their college classes, the participants could not generalize their learned skills
directly with their university course instructors. Future research is recommended to implement this study closer to the beginning of students' fall semesters so that the students could generalize their learned skills in naturalistic settings (e.g., with course instructors in university classrooms or using a virtual platform, such as Zoom).

Also, while variations of this intervention have been shown to be effective with different populations at the secondary (e.g., Bethune, 2015) and postsecondary level (e.g., Holzberg & Besaw, 2018; Walker & Test, 2011), previous literature did not include a direct measure for the observed variable in a single subject study. Ten structured questions were developed with answers found directly in the intervention to document participants' abilities to request academic accommodations. Future researchers should consider adopting this direct measure when implementing the SACR intervention, although it is important to note that primary measure for the DV was not piloted, presenting as a limitation to the current research.

Although participants increased the accuracy of their responses to the 10 structured questions from the baseline to the intervention condition, Chloe did not achieve mastery, and Omar decreased the accuracy of his responses in the generalization and maintenance conditions. This suggests that these students could have benefited from participating in the intervention condition longer than three or four sessions to increase and maintain accurate responses. When implementing this intervention, future research should consider increasing the number of intervention sessions with student participants to enhance the generalization and maintenance of learned skills, depending upon their participants' needs.

Another limitation of this research is that only students who had consented to give their information to program staff at the time of recruitment were able to be recruited for this study—this was approximately half of the students in the inclusive higher education program. Since not all students were given the opportunity to participate in this research, all of this study's materials
were shared with program staff members after the study concluded and assistance was offered in implementing this intervention with future cohorts. After program staff received the intervention materials, they responded with: "Really glad we have been able to partner in this study! I look forward to reading your dissertation, and I appreciate you sharing all of the materials so we can implement it with future cohorts."

**Conclusion**

This study was conducted amidst the COVID-19 pandemic, with the understanding that there would be a continuous need to prepare youth with IDD for their next postsecondary endeavors regardless of the global climate. Some could argue that self-advocating for one's wants, supports, and needs in college is more complicated than ever before, with virtual instruction and distance learning becoming an uncharacteristically new "normal" for many students. As demonstrated in this dissertation research, the modified SACR intervention package provides a means for helping students with IDD increase their self-advocacy skills by learning how to request academic accommodations with university course instructors. Hopefully, this research will inspire future researchers, practitioners, and policymakers to encourage students to enhance their self-determination, so students with IDD can have more positive, inclusive, and barrier-free college experiences.
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https://doi.org/10.1177/2165143413486927


https://doi.org/10.1177/0022466913489733


Appendix A

Program Director Letter of Support

This letter has been modified to protect confidentiality, see below.

August 2, 2019

Dear Katie,

I am pleased to write this letter in support of your dissertation study involving ACE-IT in College students. Our discussions about your study to help students with I/DD increase their abilities to request accommodations from their instructors will be a tremendous asset to our program.

We are excited about this study and look forward to working with you.

Sincerely,
Appendix B

Recruitment Materials

The following recruitment materials have been modified to protect confidentiality, see below:

Staff Introductory Email:
Program X staff sent the following initial message, along with my recruitment materials, to their students. Note, this message has been modified to protect confidentiality.

Good afternoon, I hope this email finds you well today. I am forwarding on an opportunity that I would like to share with you. X staff are presented with various research projects throughout the year and are very selective in how/if we share with students. We do not want students to feel obligated to participate nor do we want students to feel we are endorsing without carefully reviewing first.

Below you will find an email related to a research opportunity with [student researcher]. [Student researcher] has served in various roles at Program X during her doctoral program and still serves as a peer mentor with us. Through careful review of her study, we feel this would be something beneficial to students as we move into the next semester. Please note, this study is limited to 5 students and these 5 students will receive a monetary compensation through the study for participation. Program X and its staff are not part of this study. If you have additional questions, please reach out to [student researcher] directly. Her email is [email address] or you can call her [phone number] if you have any questions or are interested in participating.

Recruitment Email for Student Participants:
Subject: Study Participants Invited from [Program X]

Body:

Dear [Program X] Student,

My name is Katie Brendli, and I am a doctoral candidate at VCU, studying Special Education and Disability Policy/Leadership. I am asking you and other college students in the [Program X] to take part in a research study. A research study is a way to learn more about something!

I am doing this study to find out about the effects of an intervention on your abilities to ask for accommodations. This study will be completed virtually using Zoom, a video conferencing platform, so you can feel safe and comfortable completing the study in your own home! I believe that this intervention may help you self-advocate in college by giving you the skills to ask for what you need in your classes without help from others. Self-advocacy means standing up for your wants, supports, and needs by knowing yourself and your rights, communicating what you know about yourself and your rights with others, and standing up for yourself and others. Please contact me by phone at 804-350-5835 or by email at brendlikr@mymail.vcu.edu if you want to be in this study!
Recruitment Follow-up Reminder Email Message for Student Participants:

Subject: Follow-up/Reminder Email_Study Participants Invited from [Program X]

Body:

Dear [Program X] Student,

My name is Katie Brendli, and I am a doctoral candidate at VCU, studying Special Education and Disability Policy/Leadership. I recently sent you an email to see if you would like to take part in a research study. (A research study is a way to learn more about something!) I am doing this study to find out about the effects of an intervention on your abilities to ask for accommodations. I believe that this intervention may help you self-advocate in college by giving you the skills to ask for what you need in your classes, without help from others. Self-advocacy means standing up for your wants, supports, and needs by knowing yourself and your rights, communicating what you know about yourself and your rights with others, and standing up for yourself and others. Please contact me by phone at 804-350-5835 or by email at brendlikr@mymail.vcu.edu if you want to be in this study!

Recruitment Phone Script for Student Participants:
Hello ____! My name is Katie Brendli, and I am a doctoral candidate at VCU, studying Special Education and Disability Policy/Leadership. I am asking you and other college students in the [Program X] to take part in a research study. A research study is a way to learn more about something! I am doing this study to find out about the effects of an intervention on your abilities to ask for accommodations. This study will be completed virtually, so you can complete the study feeling safe and comfortable in your own home! Please contact me at 804-350-5835 or by email at brendlikr@mymail.vcu.edu if you want to be in this study!

Recruitment Phone Voicemail Message for Student Participants:
Hello ____! My name is Katie Brendli, and I am a doctoral candidate at VCU, studying Special Education and Disability Policy/Leadership. I am asking you to take part in a research study. A research study is a way to learn more about something! I am doing this study to find out about the effects of an intervention on your abilities to ask for accommodations. Please contact me at 804-350-5835 or by email at brendlikr@mymail.vcu.edu if you want to be in this study!
Recruitment Flyer:

**Students Needed!!**

I am asking you and other college students in the ACE IT in College program to take part in a research study. A research study is a way to learn more about something!

My name is Katherine Brendli, and I am getting my Ph.D. in Special Education and Disability Policy at Virginia Commonwealth University. I am doing this study to find out if an intervention helps you and your ability to ask for accommodations from your course instructors.

This study is called the "Effects of a Self-Advocacy Intervention on Requesting Academic Accommodations for Students with Intellectual and Developmental Disability in Post-Secondary Education."

I believe this intervention may help you self-advocate in college by giving you the skills to ask for what you need in your classes without help from others.

**Self-advocacy** means standing up for your wants, supports, and needs by

- knowing yourself and your rights;
- communicating what you know about yourself and your rights with others; and
- standing up for yourself and others.

Contact me today for more information on how you can be in this research study!!!

Are you a student in the Program?

Are you 18-26 years old?

Do you have an intellectual and developmental disability?

Do you want to learn how to self-advocate for your accommodations in college?

This study may be the right fit for you!

**KATHERINE BRENDLI**

brendli@mymail.vcu.edu

(804)-350-5835
Recruitment Email for Program Staff Members (i.e., the program director and academic advisors):

Dear ________,

My name is Katie Brendli, and I am a doctoral candidate at VCU, studying Special Education and Disability Policy/Leadership. I am currently conducting a study with [Program X] students to help them request their academic accommodations. As an academic advisor/the program director, I am inquiring if you would be willing to complete a social validity form to help me better understand the practical significance of my study from your perspective. If you are willing and have the time, please complete this social validity form, which can be accessed by clicking on the following link: __________. This form is voluntary, and it should take no more than 5 minutes to complete. Please feel free to also contact me by phone at 804-350-5835 or by email at brendlikr@mymail.vcu.edu if you have any questions or comments.

Thank you for your time and your consideration,

Katie
Appendix C

In this appendix, I provide the student participant consent form, the student participant assent form, and the program staff participant consent form.

RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM

STUDY TITLE: Effects of a Self-Advocacy Intervention on Requesting Academic Accommodations for Students with Intellectual and Developmental Disabilities in Postsecondary Education

VCU INVESTIGATORS:
Katherine Brendli, M.A.T., Ph.D. candidate and student researcher, 804-350-5835
LaRon Scott, EdD., principal investigator, (804)-828-6556

WHY ARE WE MEETING WITH YOU?
I am asking you and other college students in the ACE-IT in College program to take part in a research study. A research study is a way to learn more about something. You are being asked to join this research study because:
- You are between 18-26 years old
- You have a documented intellectual disability or an intellectual disability with one or more other disabilities
- You are a VCU college student enrolled in the ACE-IT in College program
- You have never received a self-advocacy intervention for requesting your academic accommodations in college
- You are in need of increased self-advocacy skills
- You are comfortable using Zoom for online interactions

After we tell you about this study, we will ask if you’d like to be in this study or not. This form may have some words that you do not know. Please ask me to explain any words that you do not know. You make take home an unsigned copy of this consent form to think about before making your decision. NOTE: In this consent form, “you” always refers to the research participant. If you are a legally authorized representative, please remember that “you” refers to the research participant.

ABOUT THIS CONSENT FORM
This consent form is meant to help you in thinking about whether or not you want to be in this study. You do not have to be in this study. It is up to you. You can say okay now and change your mind later. No one will blame you or get mad at you if you don’t want to do this. All you have to do is tell us you want to stop.

138
AN OVERVIEW OF THE STUDY AND KEY INFORMATION

WHY IS THIS STUDY BEING DONE?
We are doing this study to find out about the effects of an intervention on your abilities to request an academic accommodation. We think that this intervention may help you self-advocate in college by giving you the skills to ask for what you need in your classes without help from others. Self-advocacy means standing up for your wants, supports, and needs by knowing yourself and your rights, communicating what you know about yourself and your rights with others, and standing up for yourself and others.

WHAT WILL HAPPEN IF I PARTICIPATE?
All research procedures will be conducted online using VCU Zoom. There will be no in-person interactions. In this study, you will be asked to do the following things using Zoom over the course of about 3-6 weeks:

1. Pre-baseline phase (15-30 minutes total):
   a. Review your demographic information (e.g., race/ethnicity, gender)
   b. Identify an accommodation you need in the classroom based on your disability

2. Baseline phase:
   a. Answer 10 structured questions (3-5 times). This will take about 5 minutes each.

3. Intervention phase (3-6 sessions):
   a. Watch a five-minute video presentation (only once) on the differences in your rights from high school to college and in understanding your disability
   b. Participate in 3-6 sessions, with three lessons (15 minutes each) in each session. You will participate in a minimum of three sessions and a maximum of 6 sessions. To only participate in three sessions, you must answer at least 8 of the 10 structured questions correctly at the end of each session. Otherwise, you will continue with the sessions until you answer at least 8 of the 10 questions correctly or until you have completed six sessions. You will participate in no more than six sessions.
   c. Role play asking for an accommodation and answer 10 structured questions (3-6 times)

4. Generalization phase (if appropriate; 5 minutes total):
   a. Watch a video simulation of a mock course instructor, where you will request your accommodation, if you answered at least 8 of the 10 structured questions correctly for three consecutive times in the intervention phase
   b. After, you will be asked to complete a final social validity form to find out your beliefs on whether or not this intervention helped your ability to self-advocate

5. Maintenance phase (5-10 minutes total):
a. Role play asking for an accommodation and answer 10 structured questions only once, 1 week after completing the intervention phase

Sample Schedule:

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<th>Week</th>
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<th>Wednesday</th>
<th>Thursday</th>
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<td>Baseline 3</td>
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</tbody>
</table>

Each phase will be video-recorded using the record feature on Zoom, so the researcher can collect the most accurate data. Up to five students will participate in this study.

WHAT ARE THE RISKS?
It is not likely you will experience any risks or discomforts from being in this study. However, sometimes talking about different things makes people upset. You do not have to talk about anything you do not want to talk about. You can leave the virtual meetings at any time. If you do become upset, the people running the meetings will help you. There is also the unlikely risk of loss of confidentiality and privacy. In order to reduce this risk, your name will not be included on any of the written documents in this research, except the signed consent form. Your signed consent forms will be kept separate from the research data, and the researcher will have control of the research materials at all times. All information collected, including video recordings, will be stored on a secure, password protected computer, behind a locked door. Study data, including all video recordings, will be destroyed after the study is finished.

WHAT ARE THE BENEFITS?
It is possible that this study may help you learn how to self-advocate for what you need in college. This study may also help us know whether or not we can use the SACR intervention to help other students with intellectual and developmental disabilities stand up for what they need in college too. In general, we will not give you any individual results from the study.

WHAT ARE THE COSTS?
There will be no costs to being in this study other than the time you will spend in the study.

WILL I BE PAID TO PARTICIPATE IN THE STUDY?
You will be paid $25.00 in a gift card for participating in this research.

**CAN I STOP BEING IN THE STUDY?**

You can stop being in this research study at any time. Leaving the study will not affect your academic standing at VCU. Tell the study staff if you are thinking about stopping or decide to stop.

Your participation in this study may be stopped at any time by the student researcher without your consent. The reasons might include:

- You have not followed study instructions

**HOW WILL INFORMATION ABOUT ME BE PROTECTED?**

We will not tell anyone the about your participation in the intervention. Data will be kept on a password protected computer. This consent form will be stored in a locked filing cabinet. The information collected as part of this study will not be used or distributed for future research studies, even if identifiers are removed.

Personal information about you might be shared with or copied by authorized representatives from the following organizations for the purposes of managing, monitoring and overseeing this study: representatives of VCU and the VCU Health System or officials of the Department of Health and Human Services.

**WHOM SHOULD I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY?**

You can ask questions at any time. You can ask now or later. Just tell the researcher when you see her, or ask another adult to contact:

The Student Researcher, Ms. Katherine (Katie) Brendli via email: brendlikr@mymail.vcu.edu or by phone: (804)350-5835

OR

The Principal Investigator, Dr. LaRon Scott via email: scottla2@vcu.edu or by phone: (804)-828-6556

If you have general questions about your rights as a participant in this or any other research, or if you wish to discuss problems, concerns or questions, to obtain information, or to offer input about research, you may contact:

Virginia Commonwealth University Office of Research
800 East Leigh Street, Suite 3000, Box 980568, Richmond, VA 23298
(804) 827-2157; https://research.vcu.edu/human_research/volunteers.htm
Before you say **yes** or **no** to being in this study, we will answer any questions you have now.

*If you don’t want to be in this study, just say so, and don’t sign this form.*

**STATEMENT OF CONSENT**
I have been given the opportunity to read this consent form carefully. All of the questions that I wish to raise concerning this interview have been answered. My signature indicates that I freely consent to participate in this research study. I will receive a copy of the consent form for my records.

---

**Signature Block for Enrolling Adult Participants**

________________________________________________

Adult Participant Name (Printed)

________________________________________________

Adult Participant’s Signature


Date

________________________________________________

Name of Person Conducting Consent Discussion (Printed)

________________________________________________

Signature of Person Conducting Consent Discussion


Date

________________________________________________

Principal Investigator Signature (if different from above)


Date

---

**Signature Block for Enrolling Decisionally Impaired Adult Participants – LAR Consent**

________________________________________________

Name of Adult Participant (Printed)


142
<table>
<thead>
<tr>
<th>Name of Legally Authorized Representative (Printed)</th>
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<tr>
<td>Principal Investigator Signature (if different from above)</td>
<td>Date</td>
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</table>
STUDY TITLE: Effects of a Self-Advocacy Intervention on Requesting Academic Accommodations for Students with Intellectual and Developmental Disabilities in Postsecondary Education

VCU INVESTIGATORS:
Katherine Brendli, M.A.T., Ph.D. candidate and Student Researcher, 804-350-5835
LaRon Scott, EdD., VCU Principal Investigator, (804)-828-6556

Why are we meeting with you?
I am asking you and other college students in the ACE-IT in College program to take part in a research study. A research study is a way to learn more about something. You are being asked to join this research study because:

- You are between 18-26 years old
- You have a documented intellectual disability or an intellectual disability and one or more other disabilities present
- You are a VCU college student enrolled in the ACE-IT in College program
- You have already registered with VCU’s Student Accessibility and Educational Opportunity (SAEO) Office on campus by sharing documentation of a disability
- You have never received a self-advocacy intervention for requesting your academic accommodations in college
- You are in need of increased self-advocacy skills
- You are comfortable using Zoom for online interactions

After we tell you about this study, we will ask if you’d like to be in this study or not.

This form may have some words that you do not know. Please ask me to explain any words that you do not know. You may take this form home to think about and talk to your parents about before you decide if you want to be in this study.

What is this study about?
We are doing this study to find out about the effects of an intervention on your abilities to request an academic accommodation from one of your university course instructors. We think that this intervention may help you self-advocate in college by giving you the skills to ask for what you need in your classes without help from others. Self-advocacy means standing up for your wants, supports, and needs by knowing yourself and your rights, communicating what you know about yourself and your rights with others, and standing up for yourself and others.

What will happen to me if I choose to be in this study?
All research procedures will be conducted online using VCU Zoom. There will be no in-person interactions. In this study, you will be asked to do the following things using Zoom over the course of about 3-6 weeks:

1. Pre-baseline phase (15-30 minutes total):
   a. Review your demographic information (e.g., race/ethnicity, gender)
   b. Choose an accommodation you need in the classroom based on your disability

2. Baseline phase:
   a. Answer 10 structured questions (3-5 times). This will take about 5 minutes each.

3. Intervention phase (3-6 sessions):
   a. Watch a five-minute video presentation (only once) on the differences in your rights from high school to college and in understanding your disability
   b. Participate in 3-6 sessions, with three lessons (15 minutes each) in each session.
      i. You will participate in a minimum of three sessions and a maximum of 6 sessions.
   c. Role play asking for an accommodation and answer 10 structured questions (3-6 times)

4. Generalization phase (if appropriate; 5 minutes total):
   a. Watch a video simulation of a mock course instructor, where you will request your accommodation, if you answered at least 8 of the 10 structured questions correctly for three consecutive times in the intervention phase
   b. After, you will be asked to complete a form to find out your beliefs on whether or not this intervention helped your ability to self-advocate

5. Maintenance phase (5-10 minutes total):
   a. Role play asking for an accommodation and answer 10 structured questions only once, 1-2 weeks after completing the intervention phase

Each phase will be video recorded using the record feature on Zoom, so the researcher can collect accurate data. Up to 5 students will participate in this study.

**Will any parts of this study make me feel bad?**
Sometimes talking about different things makes people upset. You do not have to talk about anything you do not want to talk about. You can leave the virtual meetings at any time. If you do become upset, the people running the meetings will help you.

**How will this study help me?**
This study may help you learn how to self-advocate for what you need in college. This study may also help us know whether or not we can use this intervention to help other college students with intellectual and developmental disabilities stand up for what they need too.

**What do I get if I am in this study?**
You get a $25.00 gift certificate to the mall for completing this study.

**Will you tell anyone what I say?**
We will not tell anyone the answers you give us. However, other members of your group will know what you say. We will not share your answers with your teachers, parents, or friends.

**Do I have to be in this study?**
You do not have to be in this study. It is up to you. You can say okay now and change your mind later. No one will blame you or get mad at you if you don’t want to do this. All you have to do is tell us you want to stop.

**Do you have any questions?**
You can ask questions at any time. You can ask now or later. Just tell the researcher when you see them, or ask your parent or another adult to call: (804) 350-5835.

Before you say yes or no to being in this study, we will answer any questions you have now.

*If you don’t want to be in this study, just say so, and don’t sign this form.*

**ASSENT**
***If you sign here, it means you agree to participate in this study.***

________________________________________________  ______________________
Participant’s Name (Printed)  Date

________________________________________________  ______________________
Participant’s Signature  Date

________________________________________________  ______________________
Name of Person Conducting Assent Discussion (Printed)  Date

________________________________________________  ______________________
Signature of Person Conducting Assent Discussion  Date

________________________________________________  ______________________
Principal Investigator Signature (if different from above)  Date
RESEARCH PARTICIPANT INFORMATION AND CONSENT FORM

STUDY TITLE: Effects of a Self-Advocacy Intervention on Requesting Academic Accommodations for Students with Intellectual and Developmental Disabilities in Postsecondary Education

VCU INVESTIGATORS:
Katherine Brendli, M.A.T., Ph.D. candidate and student researcher, 804-350-5835
LaRon Scott, EdD., principal investigator, (804)-828-6556

I am asking you to take part in a research study, where you would be responsible for completing a social validity form. You are being asked to join this research study if you are the program director or an academic advisor for the ACE-IT in College program. I would like to collect social validity data from these parties because:

1. The program director is responsible for determining whether such an intervention has the potential for future implementation at ACE-IT.
2. Academic advisors are responsible for helping students in the college program select their courses and track progress on their goals.

Your participation is completely voluntary, and you can stop your participation at any time. Your decision not to take part or to withdraw will involve no penalty or loss of benefits to which you are otherwise entitled. You may also take the next three business days to review an unsigned copy of this consent form to think about your participation before making your decision.

WHY IS THIS STUDY BEING DONE?
We are doing this study to find out about the effects of an intervention on the abilities of college students with intellectual and developmental disabilities (IDD) to request their academic accommodations. We think that this intervention may help students with IDD self-advocate in college by giving them the skills to ask for what they need in their classes, without help from others. Self-advocacy means standing up for your wants, supports, and needs by knowing yourself and your rights, communicating what you know about yourself and your rights with others, and standing up for yourself and others.

WHAT WILL HAPPEN IF I PARTICIPATE?
You will be asked to complete and return a social validity form. This survey form is one page long and should take no longer than 5 minutes to complete.

WHAT ARE THE RISKS?
It is not likely you will experience any risks or discomforts from being in this study. There is the unlikely risk of loss of confidentiality and privacy. In order to reduce this risk, your name will not be included on any of the written documents in this research.

**WHAT ARE THE BENEFITS?**
This study may help us know whether or not the Self-Advocacy and Conflict Resolution (SACR) strategy is considered a practically significant intervention, based on your perspective. In general, we will not give you any individual results from the study.

**HOW WILL INFORMATION ABOUT ME BE PROTECTED?**
All information collected will be stored on a secure, password protected computer, behind a locked door. Study data will be destroyed after the study is finished. You will not receive any individual results, and the social validity form will not be used or distributed for future research studies, even if identifiers are removed.

Personal information about you might be shared with or copied by authorized representatives from the following organizations for the purposes of managing, monitoring and overseeing this study: representatives of VCU and the VCU Health System or officials of the Department of Health and Human Services.

**WHOM SHOULD I CONTACT IF I HAVE QUESTIONS ABOUT THE STUDY?**
You can ask questions at any time by contacting:

The Student Researcher, Ms. Katherine (Katie) Brendli via email: brendlikr@mymail.vcu.edu or by phone: (804)350-5835

**OR**

The Principal Investigator, Dr. LaRon Scott via email: scottla2@vcu.edu or by phone: (804)-828-6556

If you have general questions about your rights as a participant in this or any other research, or if you wish to discuss problems, concerns or questions, to obtain information, or to offer input about research, you may contact:

Virginia Commonwealth University Office of Research
800 East Leigh Street, Suite 3000, Box 980568, Richmond, VA 23298
(804) 827-2157; https://research.vcu.edu/human_research/volunteers.htm

**STATEMENT OF CONSENT**
I have been given the opportunity to read this consent form carefully. All of the questions that I wish to raise concerning this interview have been answered. I freely consent to participate in this research study. I will receive a copy of the consent form for my records.
Appendix D

VCU INFORMED CONSENT EVALUATION INSTRUMENT
FOR RESEARCH INVOLVING GREATER THAN MINIMAL RISK

Subject Identifier: ___________________ Date of Evaluation: ___________________

Directions

This instrument is designed for an investigator/evaluator to use to evaluate for satisfactory understanding of a research subject following the informed consent discussion. The evaluator should ask the subject the following questions. The intent is that the subject will indicate a solid understanding of what has been presented. However, the role of the evaluator is to use his or her best judgment to interpret the responses as a “Yes” “No” or “Unsure”. The evaluator may certainly use different wording in asking the questions in order to assist the subject’s understanding of the question. The process of using this instrument will often generate more discussion regarding the proposed research that will help to ensure that subjects are fully informed about research participation. NOTE: Some questions may not apply and should be skipped.

1. Do you understand that your participation in this research study is voluntary. In other words, do you understand that you do not have to be in this study if you do not want to?
   ___Yes  ___No  ___Unsure

2. Can you describe the alternative to participation in this research?
   ___Yes  ___No  ___Unsure  ___N/A (Skipped)

3. Can you name at least two possible risks of study participation?
   ___Yes  ___No  ___Unsure

4. Can you name at least two things that you will be expected to do as part of your participation in this research study?
   ___Yes  ___No  ___Unsure

5. Do you understand that you have a right to stop participating in this research study at any time?
   ___Yes  ___No  ___Unsure

6. Do you understand that you do not have to say or do anything that makes you uncomfortable or upset during this research study?
   ___Yes  ___No  ___Unsure

7. Can you tell me what you would do if you feel uncomfortable, with or without any reason, during participation in this research study?
   ___Yes  ___No  ___Unsure

8. Do you understand that you will be using Zoom, an online video conferencing platform, to complete this study?
9. Do you feel comfortable and confident in your abilities to use Zoom for this study?
   _____Yes  _____No  _____Unsure

Evaluator’s Statement/Signature

Is the subject (or the subject’s legally authorized representative) able to communicate with the evaluator and give acceptable answers to the questions above?
   _____Yes: The evaluator should sign this instrument
   _____No: The subject may not have understood the information provided to them during the informed consent process.

It is my opinion that the subject is able to communicate and gave acceptable answers to the questions above.

______________________________________________
Printed Name of Evaluator and Title or Roll, in Relationship to Research Project

______________________________________________  ________________
Evaluator’s Signature  Date
Appendix E

Demographic Information

Directions: These questions can be read out loud by Ms. Brendli or on your own. The questions in this section will ask about your disability, race/ethnicity, and other factors that make up your culture. You may choose not to answer any questions that make you uncomfortable.

1. What disabilities do you have? (e.g., intellectual disability, autism, attention deficit and hyperactivity disorder, traumatic brain injury, dyslexia, etc.)

2. How would you describe your race/ethnicity? (e.g., Asian or Pacific Islander, Black or African American, Latino/a and/or Hispanic, Native American or Alaskan Native, White, other)

3. What is your gender? (e.g., female, male)

4. What is your grade level? (e.g., first-year, second-year)

5. What accommodations do you have registered with the Student Accessibility and Educational Opportunity (SAEO) office? [refer to accommodation letter]. If you do not have accommodations currently registered, what kinds of accommodations have you had in the past? Provide at least one example.
Appendix F

Center on Transition Innovations (CTI) Video Transcript

High School vs College: Understanding the Differences
This video will give you a glimpse of the changes you need to expect while attending college. What can you expect? You can definitely enjoy the freedom. No one tells you to do your homework or what time to go to bed. However, college also comes with responsibilities like doing your own laundry, planning your study schedule, and asking for accommodations.

In this Video

• Variations in the laws
• Differences that are controlled by the college
• Differences you can control

This video will help you learn those important differences before you go to college. We will cover variations in the laws, differences that are controlled by the college setting, and those differences that you can control.

Differences in the Laws

IDEA

• Educational law - funding source
• Receive special education services
• Special education teacher/case manager

ADA

• Civil rights law - prevent discrimination
• Receive accommodations
• No special education teacher
• Accommodations may vary

College and high school are very different. In order to make a successful transition you will need to be knowledgeable of the contrasts between federal laws covering high school and college.

Individualized Education Programs, also referred to as IEPs, and 504 plans are mandated through federal legislation. Students with IEPs receive services as a result of the Individuals with Disabilities Education Act of 2004 which is also referred to as IDEA. This law was enacted to ensure all students, regardless of disability, are able to receive a free, appropriate, public education. Students with 504 plans receive accommodations and modifications in the public school setting due to Americans with Disabilities Act, known as the ADA, and section 504 of the Rehabilitation Act of 1973. These two pieces of legislation are intended to prevent discrimination of students with disabilities in school programs and activities that receive federal monies from the U.S. Department of Education.
If you are a high school student with an IEP transitioning to college you move from protection under IDEA to protection under ADA and Section 504. For some, this is a big change. IDEA is an educational law designed to provide services while the Americans with Disabilities Act is a civil rights law designed to prevent discrimination. This means you will receive accommodations, not special education services, at the college level. College accommodations ensure you are not denied access to an education or discriminated against in the college setting due to your disability. What does this mean? First, you will not have a case manager or a special education teacher to provide you services. In college, you will also not have an IEP or pull out services with a specialist. Additionally, the accommodations you had in high school may not be allowed at your college. For example, some students have an accommodation included in their IEP for unlimited extended time on tests and/or tests broken into parts and taken over multiple days. Many colleges specify a student is only allowed time and a half or double the amount of time, but not unlimited time. Additionally, many colleges do not allow tests to be taken over the course of multiple days. The accommodations you receive in college will depend on your individual needs and be based on your disability documentation.

**Common College Accommodations**

- Extra time on tests
- Textbooks in alternate formats
- Early registration
- Taking tests in a limited distraction room

Common accommodations may include extended time on tests, textbooks in alternate formats, access to early registration, and taking tests in a limited distraction room. You can learn more about some of the typical accommodations colleges allow simply by visiting the office of disability website for each college that you are interested in attending.

If you are a student with a 504 plan transitioning from high school into college, you are probably already accustomed to just receiving accommodations and not services in high school so this may not be as significant of a change for you. However, remember some of the accommodations you currently have listed in your high school 504 plan may not be allowed in the college setting.

**External Differences between High School and College**

There are also many other changes, beyond laws, in the way college differs from high school. In general, you will have a lot more freedom, but you will also have many more responsibilities in this new environment. Some of these differences will not be under your control. Let’s discuss some of the external variations such as course schedules, class content, and assignments.

**Schedule**

While in high school, you are given a schedule in August that a school administrator or counselor created based on some input from you and your parent. Typically, you do not have a say in the time of day, day of the week, or length of each course selected. At the college level, you have full control over the scheduling of your courses. Don’t want 8 a.m. classes? No problem - don’t schedule an 8 a.m. class. Class times vary throughout the day and evening and you might have a chunk of time in between. In high school, you typically attend classes for
approximately 6½ hours a day/32 hours a week. At the college level, you may average being in class 15 hours a week. Don’t get confused. We said you may only have 15 hours of “seat time” or 15 hours of actually being in the class. This does not mean this is the only time you spend on your classes. In fact, it is often recommended that you devote 1 to 2 hours of time outside of the class to reading, completing assignments, and studying. Still, the difference in the hours you spend in class allows you to create a schedule that meets your needs and allow for employment and family responsibilities. So what’s the catch to this great schedule? It will be your responsibility to make sure you schedule the courses you will need for your degree or program of study.

Additionally, you need to make sure your schedule accommodates your disability. For example, students who have significant reading or processing needs may need to take one or two fewer classes each semester than others to allow for the extra time needed to meet the reading requirements of college courses. Having a reduced course load each semester is not an uncommon practice for many college students. You may also be eligible for priority registration as part of your accommodations, which means you can register for classes earlier than other students. Priority registration can assist you in accessing the classes that best meet your needs. For example, you may learn best in the morning and will want to utilize priority registration in order to ensure your classes are all scheduled before noon.

Structure & Content

The structure and content of the classes will also be different. Depending on how many days per week you meet, classes might last from 50 minutes to three hours. In addition to class time, some courses might also include a separate lab session. Depending on the college, class sizes may be larger than you are accustomed to in high school. Some classes at the college level reach 100 students or more.

Because of this increased class size and lecture format, you will have less interaction during class with your instructors. Again, when possible, you want to make sure you choose the class structure and class size that will best meet your needs as a person who experiences a disability. If you are a student with significant movement needs or you are hyperactive, you might choose to take an Art Appreciation class that meets for 50 minutes three days a week, rather than the Art Appreciation class that meet for an hour and a half two days a week. In both examples, you spend the same amount of time-3 hours in class per week. For those with attention problems, breaking the time into three 50 minutes sessions may help you to concentrate more effectively.

Assignments

Course assignments also differ at the college level. Instructors tend to give fewer tests and quizzes, and frequently don’t grade homework assignments. This sounds like less work, but the amount of time you will need to study will increase due to the amount of reading and writing required at this level.

Some professors allow flexibility in terms of how students demonstrate their knowledge or mastery of information. If your disability makes it difficult for you to complete a particular type of assignment, you may want to see if your college allows for accommodations in this area. If not, speak with your professor to see if he can agree to another way for you to demonstrate your understanding of the material. A student with dysgraphia or problems with handwriting may request to use a computer rather than manually writing the responses to a classroom assignment.
A student with a speech impairment may request to develop a PowerPoint presentation in lieu of making an oral speech to the class.

**Internal Differences between High School and College**

All these changes between high school and college create an environment in which you have more responsibility for learning. These are the internal changes; the ones you control. Students in college attend class, do homework, read assignments, and study for tests not because someone is “making” them, but because they want to learn and take responsibility for their learning. Instructors and professors don’t remind students of missing assignments or follow up with them when they are absent.

**Advocating**

The most important difference between high school and college is that you will need to seek help when you need it and advocate for yourself. For example, if you know you benefited from accommodations in high school you choose to seek out the disability office to begin the process of securing accommodations at the college level. Additionally, if you are struggling with writing assignments and want assistance, you will need to locate the writing lab on campus for support.

**Parents/Guardians**

Another key difference between high school and college is the role your parents play in your education. While parents should continue to provide significant guidance and support, you must take responsibility for communicating your needs at the college level. Your instructors will expect to talk to you, not your parents, when learning about the accommodations you need in their class and when an issue arises. Did you know that a college professor cannot legally share information with parents without a student’s written permission? You may be asking, “Why is this?” It is because college students have reached the “age of majority” or that age where they are provided the rights and responsibilities that were once held by their parents or guardians. You can and should turn to your parents for advice and support while you are in college; however, remember this is a time when you are learning to be more self-directed and independent. Ultimately, the responsibility will reside with YOU! Your decisions and actions, not those of your parents, determine if you are successful in college.

**Let’s Review**

Knowledge is power, and having a clear understanding of the differences between high school and college is important when determining future plans. Understanding your abilities and how your disability will impact you in various settings will assist in good decision making regarding future employment and education and training choices.

**Let’s summarize some of the key points.**
IDEA is an educational law designed to provide funding to school and services to students while the Americans with Disabilities Act is a civil rights law designed to prevent discrimination. While in high school, your classes are smaller, school personnel generally determine your schedule, and your grades may be based on more assignments. In college, you may have larger classes, meet less frequently, have less interaction with instructors, and your grades for a course may be determined by fewer assignments.

In high school, you and your IEP team advocate for the services and supports you need. Students with disabilities in college may choose to access supports and will be responsible for navigating a greater level of independence in their learning environments.

### Appendix G
Modified Self-Advocacy and Conflict Resolution Training Lesson Plans: Script

<table>
<thead>
<tr>
<th>Day 1</th>
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| Targeted Behavior: a Notecard #1 Introduction/Greet Instructor | 1. Create the notecard  
2. Skill Description: Introduction  
   - “Okay, so do you remember at our first meeting, we watched a video that gave information on the differences between high school and college. We also selected something that you said helps you to learn better in the classroom.  
   - Do you remember what that was? [student’s response].  
   - Today, we are first going to learn how to introduce yourself and greet your professor when you are in their class. Remember to be relaxed and try not to say “uh” or “ummm”.  
3. Goal of the Skill  
The goal of the introduction is to establish a friendly basis for interaction and let the professor know who you are and your relationship to him or her.  
4. Skill Examples  
Usually, you would start by saying, “Hi, I’m Joe Smith and I’m in your 10am Tuesday/Thursday English 101 class.”  
5. Model Skill  
Okay, let me give you an example of a good introduction. [Instructor models an introduction for the students]  
   - Notice how I spoke directly to the professor.  
   - Hi Dr. Test, my name is Jane Smith and I’m in your 10am Tuesday/Thursday English 101 class.  
So, I greeted the professor, gave them my name, and then said the class that I am taking with the professor.  
6. Student Practice  
Let’s practice the introduction.  
[Student practices three times with the interventionist using the scripted note-cards as a visual prompt.]  
7. Role-play  
Ok, let’s do the role-play  
   - Pretend I am your instructor that you are introducing yourself to.  
   - Try different greetings so you can become more comfortable with rather than just one. |
<table>
<thead>
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<th>Day 1</th>
</tr>
</thead>
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<tr>
<td>Targeted Behavior: #b and #c</td>
</tr>
<tr>
<td>Notecard #1 Explanation of Disability in Functional Terms</td>
</tr>
</tbody>
</table>

1. Skill Description: Disclosure
Next, are going to learn how to disclose and explain your disability. The word, disclose, means simply to tell someone something. Today, you are going to learn how to tell your professor about your disability status and how your disability affects your ability to function in the classroom.

2. Goal of the Skill
The goal of this skill, disclosure, is to be able to identify your disability, and explain your disability in functional terms, that is to be able to tell your professor how your disability affects you in the classroom.

3. Skill Examples
First, you need to make a general statement about your disability. For example, you can say “I have accommodations with the SAEO office on campus.” Then, explain how the disability affects you. For example, you can say, “It is difficult for me to take notes and listen to the lecture at the same time.” By saying this, you are telling the professor what needs you have in the classroom and this does not focus on your disability itself.

4. Model Skill
I’m going to show you an introduction and disclosure together. [Instructor models an introduction and disclosure for the student].
- Notice, how I used the introduction skills we talked about last time, and then explained how the disability affects me and what accommodation I needed. First, I stated the disability and then moved to what I need to help me in the classroom.

5. Student Practice
Now, let’s practice identifying your disability status to your professor, and how your disability affects your learning [Student practices three times with the interventionist using the scripted note-cards as a visual prompt.]

6. Role-play
- “Now, you can practice with me. Pretend I am your professor. Your job is to identify your disability and explain how your
disability affects your learning.

- Remember to begin with an introduction and then make your disclosure statement.
  [Student practices with instructor until he/she is able to make comfortable and effective disclosure statements.]

7. Summary

Great job, you have just learned how to identify your disability, and explain how your disability affects your learning
Day 1
Targeted Behaviors: #1, #2, and #3

Table: Notecard #2
<table>
<thead>
<tr>
<th>Identification of previous accommodations, explains benefits of past accommodations, and requests use of accommodations</th>
</tr>
</thead>
</table>

Review: [Evaluation]
- You just learned how to identify your disability status and explain how your disability affects your learning. Show me how you would identify your disability status and how your disability affects your learning.
- [Student role-plays the targeted behavior].
- Provide praise if correct.
- If incorrect, role-play the correct response. Ask student again to role-play the skill. Repeat until student can role-play the skill correctly.

1. Create the notecard

2. Skill Description: Solution
Today, you are going to learn how to explain what accommodation you have used in the past that has worked and how to request to use that (or a similar) accommodation in a college class.

3. Goal of the Skill
- The goal of the solution
  - To explain to the professor what accommodation you have identified as effective
  - Why that accommodation is helpful to you
  - Request to use that accommodation in his/her class

4. Skill Examples
- First, give an example of an accommodation.
  - For example, you can say “I need to use a note-taker in your class.”
  - Then, explain how the accommodation helps you
    - You may say “this helps me keep up with the lecture, and I can be more certain that I am reviewing accurate notes when I study.”
    - Finally, you need to request for the accommodation as a help to you in the class. You may say, “Can I use a notetaker in your class?”

5. Model Skill
Okay, let me give you an example of how the solution follows naturally after the introduction and disclosure. Watch me.
- [Model an introduction, disclosure, and solution for the students]. Notice how I told the professor the accommodation...
that helps me learn better, gave an example of why it was helpful to me, and then suggested a solution.

- Also, I had a positive and confident tone.

6. Student Practice
Now, let’s practice providing an accommodation, explaining how this accommodation helps you, and requesting a solution. [Student practices three times with the interventionist using the scripted note-cards as a visual prompt.]

7. Role-play
Ok, let’s do the role-play

- So, start with the introduction, next is the disclosure, and then suggest an accommodation that has been helpful, and request to use that accommodation in the classroom.
- Pretend I am your professor.
- Now, tell me what accommodation has helped you, explain how the accommodation helps you, and request a solution. [Student practices with instructor until he/she is able to make comfortable and effective solution statements.]

8. Summary
Great job, you have just learned how to tell a professor an accommodation that has worked in the past, explained how this accommodation has helped you, and request the use of the accommodation in the professor’s class.
Appendix H
This appendix includes the SACR strategy sample scripted and blank notecards.

**SACR Scripted Notecards**

**Example**

a. Hi, Dr. Plum, I’m Anne Teak from your Monday/Wednesday History 1100 class.
b. I wanted to talk to you about my accommodations from the Office of Disability Services (ODS).
c. I have difficulty focusing during quizzes and tests, which impacts my grades.

---

**Example**

1. This semester, I need to take my tests in a separate setting.
2. This really helps me concentrate on the quiz or test material.
3. Would I be able to have a separate setting for quizzes and tests in your class?


Example #1

a. Hi, ________________________, I’m ______________________ from your___________________________.
   (instructor’s name) (student’s name)
   (day/s and name of class)

b. I wanted to talk to you about my accommodations.

c. I ________________________ ______________________
   ________________________ ______________________.
   (Explain the classroom challenge and how it impacts learning.)

Example #2

1. I need, _____________________________________________.
   (Explain accommodations)

2. _____________________________________________________.
   (Explain how the accommodation is helpful.)

3. Can I use _________________________________ in your class?
   State the requested accommodation.)


Appendix I
10 Structured Questions

Directions [read aloud by interventionist]: You will now be asked 10 questions related to your individual needs. Respond to these questions the best you can. If you do not feel comfortable answering a question, ask me to “skip” the question and I will move on to the next one. If you do not know an answer, it is completely OK to say “I don’t know.”

Do you understand the directions?

1. What would you say when you first come to a class?
   a. [A greeting]
   b. Hello! I’m ____. I’m in your ______ class.
   c. Hi! My name is ____. I’m in your _____ class.
   d. Good morning/afternoon! How are you? I’m _____, and I’m in your_____ class.

2. How would you “disclose” your disability to a professor?
   a. [Can state their disability or discuss they have accommodations with the disability support services office on campus, SAEO]
   b. I have accommodations with the SAEO office on campus
   c. I need to use accommodations because I am registered with SAEO
   d. I have a disability and I use accommodations
   e. I use accommodations

3. How would you explain to someone how your disability affects you?
   a. [Statement on how their disability makes it hard for them to do certain things]
   b. It is difficult for me to take notes and listen to the lecture at the same time
   c. It’s hard for me to …
   d. I have difficulty focusing during quizzes and tests, which impacts my grades.

4. What would you do when you need [your accommodation]?
   a. [Statement of contacting a professor, an advisor, or the SAEO office for help]
   b. Ask my professor
   c. Ask my course instructor

5. What would you do when you don’t understand?

Possible Responses
1. What would you say when you first come to a class?
   a. [A greeting]
   b. Hello! I’m ____. I’m in your ______ class.
   c. Hi! My name is ____. I’m in your _____ class.
   d. Good morning/afternoon! How are you? I’m _____, and I’m in your_____ class.

2. How would you “disclose” your disability to a professor?
   a. [Can state their disability or discuss they have accommodations with the disability support services office on campus, SAEO]
   b. I have accommodations with the SAEO office on campus
   c. I need to use accommodations because I am registered with SAEO
   d. I have a disability and I use accommodations
   e. I use accommodations

3. How would you explain to someone how your disability affects you?
   a. [Statement on how their disability makes it hard for them to do certain things]
   b. It is difficult for me to take notes and listen to the lecture at the same time
   c. It’s hard for me to …
   d. I have difficulty focusing during quizzes and tests, which impacts my grades.

4. What would you do when you need [your accommodation]?
   a. [Statement of contacting a professor, an advisor, or the SAEO office for help]
   b. Ask my professor
   c. Ask my course instructor
a. [Statement about asking for help/clarification/their accommodation]
b. Ask for help
c. Ask for your accommodation
d. Ask for clarification

6. Why would you need help?
   a. [Statement about why they would need the accommodation in the class due to their disability]
   b. I have difficulty paying focusing during quizzes and tests impacts my grades.

7. How do you know if your accommodation is working for you?
   a. [Statement about the outcome of use of the accommodation]
   b. By helping me concentrate on the quiz or test material.

8. How does your accommodation affect your learning?
   a. [Statement about the benefits of the accommodation]
   b. This helps me keep up with the lecture
   c. I can be more certain that I am reviewing accurate notes when I study

9. How do you request your accommodation?
   a. [Statement of request, a question]
   b. Can I use a notetaker in your class?
   c. Can I use ______ in your class?
   d. Would I be able to have a separate setting for quizzes and tests in your class?

10. Why would you request your accommodation?
    a. [Statement explaining need for accommodation]
    b. Because I have difficulty with_____ as a result of my disability

Citation: Adapted and modified from Holzberg, D. G. & Besaw, J. M.(2018). The effects of self-advocacy instruction on the ability of college students with intellectual disabilities to request academic accommodations. Manuscript in preparation.


## Appendix J
### Behavior Checklist

<table>
<thead>
<tr>
<th>Lessons and Objectives</th>
<th>Behavior</th>
<th>Student Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B₁</td>
<td>B₂</td>
</tr>
<tr>
<td><strong>Lesson 1</strong></td>
<td>✓✓ Greet Instructor</td>
<td>a</td>
</tr>
<tr>
<td><strong>Lesson 2</strong></td>
<td>✓✓ Identify Disability Status</td>
<td>b</td>
</tr>
<tr>
<td><strong>Lesson 3</strong></td>
<td>✓✓ Mention Need for Accommodation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>✓✓ Explain Benefits of Accommodations</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>✓✓ Request Use of Accommodations</td>
<td>3</td>
</tr>
</tbody>
</table>
Citation: Holzberg, D. G. & Besaw, J. M. (2018). The effects of self-advocacy instruction on the ability of college students with intellectual disabilities to request academic accommodations. Manuscript in preparation.


### Appendix K

#### Interobserver Reliability for Role-Play Probes

<table>
<thead>
<tr>
<th>Observable Target Behaviors</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Greet teacher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally states a greeting such as “hi, hello, or good morning.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b. Identify disability status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally identifies his/her disability (e.g., I have an intellectual disability.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c. Explain needs functionally</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally explains disability in functional terms. (e.g., Because of my intellectual disability, it is very difficult for me to take accurate notes and listen to the teacher at the same time.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Mention accommodation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally identifies potential accommodations. (e.g., Having a hard copy of the presentation would be helpful.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Explain the accommodation benefit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally explains how the accommodation(s) will benefit him/her. (e.g., If I have a copy of the notes in class, I can listen to what the teacher is saying and add my own comments. This will help me understand the material better.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. Request use of accommodation(s)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>❖ Student verbally requests the accommodation(s) (e.g., I would like to have a copy of the classroom notes for your class.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Appendix L

This appendix includes the procedural fidelity forms for the baseline and maintenance conditions, the intervention condition, and the generalization condition.

Baseline and Maintenance Procedural Fidelity Checklist

Date: ___________________    Session: _______________________

Observer: _________________    Student _______________________

The researcher states that they are going to role-play and have the student ask his/her teacher for accommodations. _____

The researcher states that she will play the role of the university course instructor. _____

Citation: Holzberg, D. G. & Besaw, J. M. (2018). The effects of self-advocacy instruction on the ability of college students with intellectual disabilities to request academic accommodations. Manuscript in preparation.


Intervention Procedural Fidelity Checklist

Date ___________  Student ___________________  Session ___________
Observer ______________________  Lesson ___________

The researcher verbally reviewed the targeted skills from all previous sessions (if applicable)  ____

The researcher and student role-played (if applicable)  ____

The researcher verbally stated the skill description for the targeted behavior.  ____

The researcher verbally stated the goal of the skill.  ____

The researcher verbally stated the skill examples.  ____

The researcher modeled the skill.  ____

The researcher practiced the skill with the student. If the student did not practice the new skill, in addition to the previous skills correctly, the researcher asked the student to repeat the skill (if applicable).  ____

The researcher verbally summarized the skill taught in the lesson and any previously taught skills.  ____


The researcher states that they are going to role-play with the video simulation and have the student ask for accommodations.  _____

The researcher states that the individual recorded on the video will play the role of the university course instructor.  _____


https://doi.org/10.1111/j.1540-5826.2011.00333.x

Appendix M

This appendix includes all social validity forms, including forms for the student participants and for the program staff participants.

**STUDENT SOCIAL VALIDITY QUESTIONNAIRE**

Name: _____________________________
Date: _______________________________

<table>
<thead>
<tr>
<th>Circle Your Choice</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The SACR lessons helps me to explain my needs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. The steps of SACR were easy to use.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. The role-playing sessions were helpful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I will have the confidence to ask my instructors for my accommodations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. When I ask for accommodations, I will follow the steps I was taught.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I am more aware of what I need to do well in my classes now.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I understand it is important to learn how ask for my accommodations in college.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. During instruction, the notecards helped me learn the steps.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

What did you like most about the SACR intervention?

________________________________________________________

________________________________________________________

176


**PROGRAM STAFF SOCIAL VALIDITY QUESTIONNAIRE**

Name: __________________________  
Date: ___________________________

<table>
<thead>
<tr>
<th>Circle Your Choice</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaching students with disabilities how to request academic accommodations is important and necessary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Teaching students with disabilities how to request academic accommodations enhances their self-advocacy skills in college</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. The modified Self-Advocacy and Conflict Resolution (SACR) strategy is a beneficial intervention that can help students with disabilities learn how to request academic accommodations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. The modified Self-Advocacy and Conflict Resolution (SACR) strategy was implemented at an appropriate time before the incoming students’ first college semester</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I would like to see the modified Self-Advocacy and Conflict Resolution (SACR) strategy implemented by our staff in future semesters</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. What do you believe is the most useful about the SACR intervention as a tool to teach accommodation requesting skills to students with disabilities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

178


## Appendix N
Operational Definitions of Modified SACR Intervention Behaviors

<table>
<thead>
<tr>
<th></th>
<th>Definitions</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><strong>Greets Professor</strong></td>
<td>Student verbally states a greeting, states name to the instructor, states the class he/she/they is taking with the instructor</td>
</tr>
<tr>
<td>b.</td>
<td><strong>Identifies Disability Status</strong></td>
<td>Student makes a general statement about his/her disability or status at the disability support services office</td>
</tr>
<tr>
<td>c.</td>
<td><strong>Explains Disability in Functional Terms</strong></td>
<td>Student makes a verbal statement that explains how the disability affects him/her.</td>
</tr>
<tr>
<td>1.</td>
<td><strong>Identification of Accommodation</strong></td>
<td>Student makes a verbal statement identifying an accommodation used in school</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Explains Benefits of Accommodation</strong></td>
<td>Student explains the benefit of the past or hypothetical accommodation in class</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Request Use of Accommodation</strong></td>
<td>Student verbally asks the accommodation</td>
</tr>
</tbody>
</table>
Appendix O  
Student Abbreviated Visual Prompt (AVP)

**Interventionist Version (example)**

<table>
<thead>
<tr>
<th>Lesson 1</th>
<th>Behavior</th>
<th>Student Prompt</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Greeting</td>
<td>Hello</td>
</tr>
<tr>
<td>b.</td>
<td>Disability</td>
<td>SAEO</td>
</tr>
<tr>
<td>c.</td>
<td>Needs</td>
<td>Hard to concentrate</td>
</tr>
<tr>
<td>1.</td>
<td>Accommodation</td>
<td>Note-taker</td>
</tr>
<tr>
<td>2.</td>
<td>Benefit</td>
<td>Pay attention to lecture</td>
</tr>
<tr>
<td>3.</td>
<td>Request</td>
<td>Can I…?</td>
</tr>
</tbody>
</table>

**Student Version (example)**

| a.       | Greeting       | Hello                |
| b.       | Disability     | SAEO                 |
| c.       | Needs          | Hard to concentrate  |
| 1.       | Accommodations | Note-taker           |
| 2.       | Benefit        | Pay attention to lecture |
| 3.       | Request        | Can I…?              |
Appendix P

Video Simulation Script

**Directions:** The mock university course instructor will verbally state the words typed in bold. She will not state the word “pause” written in brackets. In essence, these bolded words make up her script; the italicized words include sample student responses. The mock instructor will not read the italicized words. The mock instructor will be video recorded when she reads aloud this script. This recording will be used for the video simulation in the generalization condition.

Hello, I’m Mrs. Thompson! [pause]

Hello, Mrs. Thompson. I’m Mark, and I am in your EDUS 101 class.

It’s nice to meet you. What can I do for you today? [pause]

I want to talk to you about my accommodations.

Sure, no problem. I have a few minutes to chat. What do you want to talk about? [pause] I have difficulty concentrating, and so it’s hard for me to take notes and listen to your lectures at the same time.

Thank you for letting me know. What can be done in my class to help you overcome this challenge? [pause]

I need someone who can take notes for me in class. I have an education coach who can help me take notes.

How will this be helpful to you? [pause]

Having a notetaker will help me concentrate while I’m in your class, and it will also let me review notes from your lectures at a later date.

That’s a good point. Thank you for explaining how it would be helpful to you in my class. [pause]

Can I use a notetaker in your class?

Yes, you can use this accommodation in my class. I appreciate you asking me first and letting me know what you need in my class to be successful. Please let me know if there is anything I can do to further support you in the future.
VITA

Prepared: August 8, 2020

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Phone: (804) 350-5835
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• Virginia—Special Education, K-12, General Curriculum
• Leadership in Education on Neurodevelopmental Disabilities (LEND), long-term trainee
• Person-Centered Thinking, Partnership for People with Disabilities, Virginia Commonwealth University
• CPR/AED/First Aid certified

EDUCATION
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2017, May M.A.T., Special Education, 3.967 GPA, James Madison University, Harrisonburg, VA

2016, May B.S., Interdisciplinary Liberal Studies, Exceptional Education (minor), Concentration: Math, Humanities, and Social Sciences, 3.61 GPA, James Madison University, Harrisonburg, VA.

RESEARCH INTERESTS
• Post-secondary transitions/inclusive higher education
• Self-determination/self-advocacy
• Promoting positive wellbeing/high quality of life
• Culturally-responsive practices
• Teacher retention

ACADEMIC APPOINTMENTS AND OTHER SIGNIFICANT WORK EXPERIENCE
2017-2020 Graduate Research Assistant, Department of Special Education and Disability Policy at Virginia Commonwealth University. Lead member of the Teacher Retention and Transition Lab; organizes, hosts, and co-leads lab meetings; contributes to qualitative, quantitative, and mixed-methods research; collects and analyzes data; conducts qualitative interviews; holds
administrative responsibilities in the Certifying Online Virginia Educators (COVE) alternative route to special education teacher licensure program; contributes to IRB submissions; provides editorial assistance to grant submissions and other works; developed research, policy, and service internship rubrics for an Office of Special Education Programs (OSEP) leadership training grant; developed six course syllabi for VCU’s new undergraduate program. Works with Dr. LaRon Scott.

2014-2017  Substitute Teacher & Substitute Instructional Assistant, Chesterfield County Public Schools

2016-2017  Student Teacher, John Wayland Elementary in Bridgewater Virginia and Wilson Memorial High School in Fishersville, Virginia

2017, Spring  Job Coach, JIVE program in Harrisonburg, Virginia

2016, Summer  Special Education Teacher, La Romana, Dominican Republic, “Diversity, Literacy, and Special Education in the Dominican Republic” program through James Madison University—taught Spanish literacy to Haitian and Dominican children with disabilities

2014-2016  Teacher Candidate at Kate Collins Middle School in Waynesboro, Virginia; Spotswood Elementary School in Harrisonburg, Virginia; Stone Spring Elementary School in Harrisonburg, Virginia; Fort Defiance High School in Fort Defiance, Virginia; and Wilson Elementary School in Fishersville, Virginia.

RESEARCH

BOOKS/CHAPTERS

SUBMITTED FOR PUBLICATION


Scott, L., Morgan, J., **Brendli, K.,** & Catherine, E. (revise and resubmit). A review of state policies regulating special education alternative pathways to licensure program requirements.


**Brendli, K.** (under review). 5 guided questions for promoting effective culturally responsive self-determination instruction for diverse students.


**MANUSCRIPTS IN PREPARATION**


**RELEVANT PAPERS, POSTERS, AND WORKSHOPS PRESENTED**

**REFERRED**

**INTERNATIONAL**

Brown, A., & **Brendli, K.** (2020, June) *Diverse Families’ Perceptions of Their Child with ASD Post-School Outcomes.* Poster Presentation Accepted at Division of International Special Education & Services. Dubai, United Arab Emirates.

**Brendli, K.** (2020, June) *Effects of a Self-Advocacy Intervention on College Students with Intellectual and Developmental Disabilities.* Presentation Accepted at the European State of the Art Congress. Salzburg, Austria.


**NATIONAL**


**STATE**


**LOCAL**


---

**NON-REFERRED**

**Brendli, K.** (2018, August). *Campus Relationships.* PowerPoint presented at Virginia Commonwealth University, Center on Transition Innovations (CTI) ACE-IT Welcome Day, Richmond VA.

**Brendli, K.** (2016, Dec.) *Exceptional Education.* Presentation presented at the Inter-Professional Education Seminar, James Madison University, Harrisonburg, VA.


---

**TEACHING**

**ADLT 688: Lifespan Issues for Adults with Learning and Behavioral Disabilities.** Virtual Guest Lecturer. (Graduate Level). June 2, 2020. Virginia Commonwealth University.

**SEDP 651: Special Topics—Seminar for School Counselors as Related Services Providers/Special Education.** Instructor (Graduate Level). Spring 2020. Virginia Commonwealth University.

**SEDP 651: Special Topics—Seminar for School Counselors as Related Services Providers/Special Education.** Instructor (Graduate Level). Fall 2019. Virginia Commonwealth University.

**ADLT 688: Lifespan Issues for Adults with Learning and Behavioral Disabilities.** Guest Lecturer. (Graduate Level). May 29, 2019. Virginia Commonwealth University.

**SEDP 651: Special Topics—Seminar for School Counselors as Related Services Providers/Special Education.** Instructor (Graduate Level). Spring 2019. Virginia Commonwealth University.

**SEDP 651: Special Topics—Seminar for School Counselors as Related Services Providers/Special Education.** Instructor (Graduate Level). Fall 2018. Virginia Commonwealth University.

**SEDP: 630 Trends in Special Education.** Teaching Assistant (Graduate Level/Online). Summer 2018. Virginia Commonwealth University.

**Relevant Teaching Activities**

2020, Spring
Clinical Faculty Program, VCU Center for Teaching Leadership, an intense 5 module training based on the New Teacher Center Santa Cruz mentoring model, designed to encourage the acquisition of knowledge and skills needed to support pre-service teachers as they become critically reflective practitioners.

Bachelors of Science program development at VCU, developed the following undergraduate courses for Fall 2019:
- SPED 315 Classroom Management and Behavior Support of Students with Disabilities
- SPED 379 Assessment Practices in Autism and Developmental Disabilities
- SPED 380 Teaching Reading to Students with Disabilities
- SPED 401 Exceptionality and Technology: Augmentative and Alternative Communication and Assistive Technology
- SPED 404 Methods in Teaching Science & Social Studies for Students with Disabilities
- SPED 460 Specialized Reading and Writing Interventions for Students with Disabilities

**SERVICE**

**INTERNATIONAL**

2020, Jan.
Proposal submitted to found the Cross-Cultural Student Association, under the Asian-American Studies Center at Virginia Commonwealth University. Designed to encourage international and interdisciplinary collaboration between graduate students across cultures and areas of study within education.

2019, Summer
Virginia Commonwealth University’s (VCU’s) 2019 PK-20 United States Summer Program, in collaboration with four universities in China; Student ambassador, supervising field observations and assisting with program events

2019, Spring
Virginia Commonwealth University’s (VCU’s) 2019 practicum with Shanghai Normal University's School of Education, China; Student ambassador, supervising field observations and assisting with program events

**NATIONAL**

2019-2020
Leadership in Education on Neurodevelopmental Disabilities (LEND) Trainee Liaison; trainee representative for the Commonwealth of Virginia in the national Association of University Centers on Disabilities (AUCD) network

2019, June-Aug.
Policy Intern, with the Think College Policy Strategist at the AUCD in Washington, D.C., advocating for disability rights on Capitol Hill and writing/contributing to federal legislation on inclusive higher education
STATE
2019, March 25-26 Virginia Division on Career Development and Transition (VA-DCDT) conference committee coordinator and board member, co-host for the 2019 VA-DCDT conference

LOCAL
2019, Sept. VCU School of Education Peer Review Committee Member for Promotion and Tenure
2019-2020 VCU School of Education Strategic Planning Committee Member
2019, Aug. Staff Volunteer, ACE-IT in College, Welcome Day
2018-present Education Coach. ACE-IT, providing in-class support and supervision to a college student with intellectual disabilities.
2017-present Academic/Peer Support. ACE-IT, providing tutoring and mentorship support to college students with intellectual disabilities.
2017-present Administrative Staff. Certifying Online Virginia Educators (COVE), alternative special education teacher licensure program at Virginia Commonwealth University
2018, August 21 Staff Volunteer, Center on Transition Innovations (CTI) ACE-IT Welcome Day, 8:30AM-2PM
2018, May-August Service Intern, Center on Transition Innovations (CTI), Richmond Rehabilitation Training Center (RRTC)

SPEAKING ACTIVITIES
2019, Nov. Served on the American Association of Colleges for Teacher Education (AACTE) Government Relations Committee Panel at the Teacher Education Division (TED) national conference; discussion on the Special Education Legislative Summit (SELS)
2019, Oct. Served on the Student Ambassador Panel at the First Jian-American Conference: Cross Cultural Perspectives on Research, Teaching, and Learning, Wuxi, Jiangsu, China; discussion on graduate-level education in the United States
2018, March VCU Scholarship Awards Ceremony Keynote Speaker: Student Reflections

PRACTITIONER/COMMUNITY PRODUCTS
Brendli, K. Information Brief #2: Graduate Students: Your Feelings are Valid, You are Not Alone. Council for Exceptional Children: Division of International Special Education Services.

MANUSCRIPT REVIEWER
- Editorial Board Member of the Inclusion Journal, American Association on Intellectual and Developmental Disabilities (AAIDD)

AD HOC MANUSCRIPT REVIEWER
- Inclusion
- Journal of Special Education Technology (JOSET)
- Exceptional Children

189
• Journal of Intellectual and Developmental Disabilities
• Journal of Postsecondary Education and Disability (JPED)
• Exceptional Children
• Journal of Emotional and Behavioral Disorders (JEBD)
• SAGE OPEN
• Journal of Child and Family Studies (JCFS)
• Focus on Autism and Other Developmental Disabilities

MEMBERSHIP IN ORGANIZATIONS AND SOCIETIES
2020-Present  Division of International and Special Education Services (DISES)  Communications Committee member
2020-Present  Division of International and Special Education Services (DISES) Membership Committee Student Representative
2020-Present  Association on Higher Education and Disability (AHEAD)
2019-Present  Virginia Division on Career Development and Transition (VA-DCDT) Board Member: Secretary
2019-Present  Think College Affinity Group: Research on Higher Education for Students with Intellectual Disability
2018-Present  Council for Exceptional Children (CEC): Division on Career Development and Transition (DCDT), Culturally and Linguistically Diverse Learners (DDEL), Teacher Education Division (TED), Division of International Special Education and Services (DISES)
2018-Present  American Association on Intellectual and Developmental Disabilities (AAIDD)
2018-Present  AAIDD Legal Process and Advocacy Professional (LPAP) Interest Network, Student and Early Career Professional (SECP) Interest Network, Creative Arts SIG Interest Network
2018-Present  Division on Career Development and Transition (DCDT) Student and Early Career Committee
2018-Present  Think College Affinity Group for Public Policy in Inclusive Higher Education

UNIVERSITY/SCHOOL COMMITTEES
2019-present  Virginia Commonwealth University Student Leadership Council—President/Chair
2019-present  Association of Aspiring Leaders in Education (AALE), Virginia Commonwealth University—Treasurer; general member since 2017
2017-Present  Teacher Retention & Transition Lab member, Virginia Commonwealth University
2017-present  LaunchPAD member, Virginia Commonwealth University
2017-present  Active Minds member, Virginia Commonwealth University, empowering students to speak openly about mental health in order to educate others and encourage help-seeking
2012-2017  Associate member, Best Buddies, James Madison University, promoted job opportunities and one-to-one friendships for individuals with intellectual and developmental disabilities
2013-2017 Friends of Rachel, James Madison University, promoted kindness and compassion to improve safety of schools, prevent bullying, teach awareness, and positively affect others

**AWARDS**


Spring, 2020 2020 DISES Distinguished International Student Award, for demonstrated excellence in my contribution to the field of special education, Council for Exceptional Children (CEC) Division of International Special Education and Services (DISES)

Spring, 2020 Association of University Centers on Disabilities (AUCD) Emerging Leaders Map Program Representative, selected by the AUCD national network to represent the commonwealth of Virginia’s Leadership in Education on Neurodevelopmental and Related Disabilities (LEND) program on the 2020 Emerging Leaders Map for my leadership and work towards improving access for people with disabilities

2019-2020 Research to Disability Policy Advocacy (RTPA) Scholar, Office of Special Education Programs (OSEP) leadership training grant

2019, Fall AUCD 2019 Volunteer Trainee scholarship.

2019, Fall VCU School of Education Internal Funding Grant Recipient. Graduate Student Seed Funding for doctoral student research. 1200.

2019, Fall PhD Student Travel Funding Award Recipient, Office of Graduate Studies, School of Education, Virginia Commonwealth University

2019, Fall Vicki Godsey White Scholarship in Special Education Award Recipient

2019, July Teacher Education Division (TED) Sponsorship Recipient for the Council for Exceptional Children (CEC) Special Education Legislative Summit

2019, Spring PhD Student Travel Funding Award Recipient, Office of Graduate Studies, School of Education, Virginia Commonwealth University

2018 LeeEtta (Lee) Pratt Merit Scholarship recipient, Merit-based award for those interested in teaching special education

**COMMUNITY ENGAGEMENT: SCHOOL-BASED**

2015-2016 Best Buddies Executive Position, Activities Coordinator, James Madison University Chapter

2015, July Best Buddies Leadership Conference representative, elected to represent James Madison University at the 2016 Best Buddies Leadership Conference in Bloomington, Indiana

2010-2017 Volunteer at Midlothian High School in Midlothian, Virginia, assisted in instruction for students with autism

2013, Fall Volunteer Power Hour Assistant at the Boys and Girls Club in Elkton, Virginia, assisted in behavior management, academic instruction, and tutoring for elementary-aged students after school
<table>
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<th>Year</th>
<th>Position</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>2012, Summer</td>
<td>Volunteer Camp Counselor at Social Lights in Richmond, Virginia, a camp that prepares and encourages social interactions for children, ages three through eight, in need of social-emotional support</td>
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<tr>
<td>2012, Summer</td>
<td>Volunteer at the Faison School for Autism in Richmond, Virginia</td>
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<tr>
<td>2010-2012</td>
<td>Volunteered in self-contained high school classrooms for students with severe/multiple disabilities</td>
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