TOWARD EMPOWERMENT AND INCLUSION: IMPROVING PERFORMANCE AND REMOVING BARRIERS FOR SUPPORTED EDUCATION CLIENTS IN POSTSECONDARY EDUCATION

A Capstone Project

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by

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Abstract

The purpose of this study is to identify Supported Education (SED) strategies that promote the postsecondary success of Supported Education Clients (SECs), a population composed of college students with neuropsychiatric conditions (SWNPs) including Serious Mental Illness (SMI) (e.g., depression, anxiety, schizophrenia) and/or neurodevelopmental conditions (e.g., autism spectrum disorder, attention-deficit/hyperactivity disorder). This study employs both the medical model and the social model of disability to investigate SECs' adversities and to identify responsive support strategies. This dual model approach allows exploration of the students' internal individual challenges in the cognitive, behavioral, and affective domains and the external environmental barriers that they face, including stigma, nondisclosure, and exclusion. Eleven SED professionals participated and were asked to articulate the individual challenges and environmental barriers that SECs experience in the postsecondary landscape as well as support strategies that help students address these challenges and barriers. Through analysis of the seminal ideas articulated by participants and presented in documents, and upon corroboration of those ideas in the literature, this study produced a range of findings on individual challenges (e.g., executive functioning challenges, underutilization of academic skills, problems with student-faculty communication, and anxiety) and environmental barriers (e.g., public and self-stigma, nondisclosure, exclusion, and uncoordinated campus services). Then, relying on these findings, this study makes recommendations to a local SED program to help this program enhance its support strategies for local SECs.

Keywords: Supported Education, postsecondary education, students with disabilities, mental health, executive functioning, anxiety, stigma, nondisclosure, exclusion, academic support strategies, student success, retention

DEDICATION

To my beloved parents, who instilled in me a love of learning and tenacity in the face of adversity at the earliest age. The sounds of your typewriters were my lullabies as a child, and they reverberate throughout the following pages.

To my daughters, may you carry forward this love of knowledge and a fearlessness in struggle throughout your lives.

To all learners and teachers, may you celebrate yourselves and each other during your transformative journeys in education.

To the American education system, may we continue to evolve toward the empowerment and inclusion of all learners. Let us reimagine student success not merely as a goal, but as a right. Let us question ourselves and innovate until the process of learning becomes an unmitigated joy for everyone.

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I also offer a 'barbaric yawp' to my lifelong friend and academic ally, James Sears, who joyfully joined this adventure with his exceptional intellect and unabashed feedback, discussing in hyper-detail with me ad nauseam every nuance of every page that follows. Beginning with our first meeting on our first day of college many years ago, the journey continues my friend! To my family, who have always supported my efforts and never questioned my purpose, I am eternally thankful and grateful to be a part of our loving, powerful, and joyous tribe. Onward!

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Chapter 1

In recent decades, there has been a rise in students with psychiatric disabilities and neurodevelopmental conditions attending college (Lipson et al., 2019). This trend is likely due to increased K12 special education support, improved high school graduation rates of students with disabilities, and their greater interest in postsecondary education (Wolanin & Steele, 2004; Belch, 2011). However, while these students are increasingly represented on college campuses, they experience less success than their peers, as evidenced by lower GPAs and higher rates of academic probation and attrition (Blase et al., 2009; Hellingenstein et al., 1999; Farmer et al., 2015). In addition, researchers have identified concerns over these students' emotional health, exposure to stigma, rates of nondisclosure, and exclusion from the campus academic and social environments (Dijkhuis et al., 2020; Belch, 2011; Clouder et al., 2020).

According to the literature, the college experiences and outcomes of students with neuropsychiatric disabilities (SWNPs) are shaped by their *individual challenges* and the *environmental barriers* that they face in the postsecondary landscape (Shakespeare & Watson, 2000; Trammel, 2009a). To understand these challenges and barriers and to identify potential support strategies to address them, this case study project investigated the experiences of SWNPs who receive Supported Education (SED) services. Data collection included interviews with SED practitioners and document collection. The resulting findings helped develop recommendations to enhance the student support services of a local SED program.

Background of the Problem

Regarding individual challenges, the literature suggests that SWNPs can experience difficulties in the cognitive, behavioral, and affective domains that can compromise their academic success (Salehinejad et al., 2021; Boularian et al., 2018; Prevatt et al., 2015). In the

cognitive domain, researchers have identified executive functioning challenges (EFCs) as a primary challenge among SWNPs (Salehinejad et al., 2021; Elias & White, 2018). In the behavioral domain, researchers have observed a lack of utilization of positive academic success skills, including effective study techniques and time management strategies ((Boularian et al., 2018; Weyandt & DuPaul, 2006). In the affective domain, researchers have associated anxiety and a negative sense of self with academic struggles and poor performance (Prevatt et al., 2015; Clouder et al., 2020).

In terms of environmental barriers for SWNPs in higher education, research shows that factors such as stigma, nondisclosure, and exclusion have persisted over time (Belcher, 2011; Gorman & Brennan, 2023). The 1960s-70s saw discriminatory policies at universities due to mental health (MH) stigma, which led to civil rights lawsuits and the eventual enactment of the Individuals with Disabilities Act of 1990 (IDEA) (Pavela, 1985; Unger, 1998; Kincaid, 1994). Despite recent progress towards inclusion, studies have shown that stigma against SWNPs continues on college campuses, often due to the invisibility of their conditions and a lack of awareness among faculty and peers, which has fostered misconceptions about SWNPs and hindered their integration (Clouder et al., 2020; Schniedermann et al., 2022; Haegele, 2016). In addition, the fear of stigma has been associated with higher rates of nondisclosure among SWNPs, thereby limiting their access to helpful accommodations (Belch & Marshak, 2006). Collectively, these factors of stigma, nondisclosure, and exclusion have posed significant environmental barriers to SWNPs' success in higher education (Collins & Mowbray, 2005; Megivern et al., 2003; Trammel, 2009a).

Statement of the Problem

SWNPs experience lower college graduation rates and higher attrition than their peers. Specifically, students with autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD) have graduated from college at rates of 38.8% and 37%, compared to 52% for their peers (Farmer et al., 2015). Additionally, studies have found that 86% of students with psychiatric disabilities did not complete their degrees in 2005 (Collins & Mowbray, 2005) and 64% of college students with mental illness dropped out in 2012 (NAMI, 2012). These data indicate that a problem of educational equity persists in American postsecondary education for SWNPs.

The Local Problem: Supported Education Clients' (SECs) Challenges and Barriers

The local SED program (as discussed more fully in Chapter 3) supports SWNPs who are applying to or attending college and have diagnoses of, but not limited to: ASD, ADD/ADHD, depression, anxiety disorder, bipolar disorder (BPD), and schizophrenia. College students with these conditions often underutilize academic skills, face anxiety, and struggle with stigma and integration issues (Collins & Mowbray, 2005). To address these concerns, Supported Education Specialists (SESs) provide guidance in setting educational goals, counseling, and practical support such as assisting with securing financial aid, enrolling in college, fostering self-efficacy, and increasing independence (SAMHSA, 2011a; Ringeisen et al., 2015). Despite this support, an informal accounting of 2022 outcomes at the local program indicated persistent academic challenges among Supported Education Clients (SECs): 52.3% either showed no progress towards educational goals, failed, withdrew from classes, or dropped out of college.

Regarding individual challenges, I have observed various struggles among SECs across the cognitive, behavioral, and affective domains during my five years as an SES at the local

program. Cognitively, many have faced EFCs such as *task initiation* with completing college applications or long-term school projects. Task initiation, which refers to the cognitive capacity of an individual to begin a necessary task, has been identified as a critical EF skill (Meltzer & Krishnan, 2017). Other SECs have described becoming overwhelmed by the *cognitive load* of their courses and have had to withdraw as a result. Cognitive load is the amount of mental effort required to process and hold information in working memory, and the inability to manage cognitive load has been linked to the EFC of inattention (Sweller, 1988; Shifrin & Schneider, 1977). Behaviorally, my SED clients have shown an underuse of time-management and task organization skills which have led to difficulties in meeting deadlines. Additionally, the majority of SECs that I have supported struggle with anxiety and depression, which have manifested as low self-esteem and a negative self-image (Prevatt et al., 2015; Clouder et al., 2020).

Regarding environmental barriers, my experience with SECs has echoed the literature's findings on the barriers of stigma, nondisclosure, and exclusion. For example, one client failed a Chemistry quiz and exam partly because she did not disclose her disability status to her professor out of a fear of being perceived as 'stupid' and therefore did not use her accommodation for extra time. This nondisclosure, driven by a fear of stigma, exacerbated the anxiety she experienced during assessments and, she said, contributed to failing grades. In another case, an SEC's accommodation request was denied by a staff member at the local community college, who appears to have misunderstood the legal definition of disability under the Americans with Disabilities Act (ADA) (1990). The ADA definition includes MH conditions as disabilities that warrant accommodations, and this incident highlights a gap in staff awareness regarding legal rights for accommodations (ADA, 1990). These examples are a small sample of the individual challenges and the environmental barriers that I have witnessed as an SES which have

compromised SECs' academic success.

Current Support of Individual Challenges and Environmental Barriers for SECs

If SED is to achieve its goal of academic success for its student-clients, it should provide support strategies that address individual cognitive, behavioral, and affective challenges and the environmental barriers of stigma, nondisclosure, and exclusion that are identified in the literature. To understand how SED programs currently work to address these challenges and barriers, I analyzed the federally provided SED toolkit, the *Evidenced-Based KIT: Supported Education: A Promising Practice*, published in 2011 by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services. This federally published toolkit appears to be the one standard SED model and is used by the local SED program, by eight SED programs in Oregon (V. Taylor, personal communication, November 10, 2022), and by five SED programs in Connecticut (DMHAS, 2022).

In terms of supporting individual challenges, the SED model offers some support for EFs within the cognitive domain such as: 1) checklists to assist SECs in keeping track of pre-enrollment and orientation tasks, 2) checklists to help SECs self-assess their concentration abilities and study and time-management skills, 3) tips for supporting time-management such as wake-up calls and the use of schedulers, and 4) alerts to SESs that certain cognitive impairments and medication side effects can impact concentration and memory and suggestions for skill building and securing accommodations to address those challenges (SAMHSA, 2011b). For the behavioral domain, the toolkit suggests that SESs monitor students' academic progress and refer them to resources like study groups or tutoring for skill improvement if needed (p. 70). For the affective domain, the model encourages SESs to help SECs use coping skills for stress and symptom management, highlights the importance of expressing empathy and helping SECs

maintain hope, and encourages cognitive and behavioral support to facilitate positive emotional changes (pp. 70, 76).

With respect to supporting the environmental barriers of stigma, nondisclosure, and exclusion, the model emphasizes exposing students to campus resources such as accommodation offices and tutoring services and building relationships between SESs and campus personnel for on-campus support (SAMHSA, 2011b). In addition, the toolkit addresses "internalized stigma" faced by SECs, recommending that SESs try to counter these feelings by listening and providing empathy (p. 30). It also advises SESs to assess campus cultures for their openness to students with psychiatric disabilities and to discuss with their clients the emotional impacts of disclosure that they might experience due to stigma. These strategies aim to protect SECs from stigma and discrimination, highlighting the model's commitment to supporting client inclusion and access to postsecondary education.

Overall, the SED model recognizes the cognitive, behavioral, and emotional challenges that SECs might experience during college and provides general suggestions on how SESs can support them. The checklists that address task organization appear to be helpful tools for both SESs and SECs cognitively, but the model lacks specific guidance on how to handle complex EFCs that students might encounter once enrolled, such as managing multiple syllabi, competing assignment deadlines, and the need to prioritize tasks (SAMHSA, 2011b). In addition, the SED model addresses the topics of stigma, nondisclosure, and exclusion and provides suggestions for general courses of action, but it does not provide explicit instructions on how to achieve results and monitor progress.

Conceptual Framework

The Conceptual Framework of this project, presented in Chapter 2, includes both the

individual challenges and environmental barriers that SECs are likely to experience in college according to the literature. Individual challenges represent the medical model of disability and include the cognitive, behavioral, and emotional domains. Environmental barriers represent the social model of disability and include stigma, nondisclosure, and exclusion. The Conceptual Framework is described in more detail and depicted as Figure 1 in Chapter 2.

Purpose of the Study

The purpose of this study was to understand the individual challenges and environmental barriers experienced by postsecondary students who are receiving SED services to identify strategies for their success. This project utilized a case study approach to address the following research questions:

- Research Question 1: According to Supported Education specialists and experts, what individual challenges do SED clients experience related to postsecondary education?
    - Research Question 1a: What support strategies do Supported Education specialists find helpful in mitigating these challenges?
- Research Question 2: According to Supported Education specialists and experts, what external barriers do SED clients experience in the postsecondary education environment?
    - Research Question 2a: What strategies do Supported Education specialists find helpful in overcoming these barriers?

Significance of the Study

1. Responds to scholarly calls for new research on challenges faced by SED clients in college programs and innovation in meeting those challenges (Ringeisen et al., 2015; Ellison et al., 2014).

2. Enhances understanding on the link between EF support and college retention for SED clients, specifically related to time-management, organization skills, and study habits (Kidd et al., 2014; Ellison et al., 2014).
3. Aims to boost college retention of local SED clients through enhancement of the local program's support services.
4. Promotes inclusion and social justice by identifying success strategies for SED student empowerment and inclusion.

Definition of Terms

Academic Performance: The attainment of educational objectives through goal-oriented action whose metrics include GPA and retention and graduation rates (Weyandt & Dupal, 2006).

Attrition: Student departure from all forms of postsecondary education prior to completion of a credential or degree (Wellman et al., 2012).

Retention: The rate, measured as a percentage, of first undergraduate students who return to the same institution the following fall (NCES, 2022).

Student Success: Students meeting clearly defined educational goals whether they are course credits, career advancement, or achievement of new skills (Tinto, 1993).

Students with Neuropsychiatric Conditions (SWNPs): Students diagnosed with Serious Mental Illness (SMI), such as depression, anxiety, bipolar disorder (BPD), schizophrenia, and traumatic brain injury, and/or neurodevelopmental conditions such as attention deficit/hyperactivity disorder (ADD/ADHD) and autism spectrum disorder (ASD), conditions related through similarities in executive functioning challenges (Salehinejad et al., 2021).

Supported Education Clients (SECs): Individuals with neuropsychiatric conditions who receive postsecondary educational support services from SED programs to develop educational goals,

choose and apply to programs, access financial aid, apply for accommodations, manage their time and workload, develop study skills, and connect with resources on campus (SAMHSA, 2011a; SAMHSA, 2011b).

Chapter 2

This literature review explores the individual challenges and environmental barriers experienced by students diagnosed with neuropsychiatric conditions (SWNPs) in postsecondary education. As a group, SWNPs includes individuals diagnosed with Serious Mental Illness (SMI), such as depression, anxiety, bipolar disorder (BPD), schizophrenia, and traumatic brain injury, and/or neurodevelopmental conditions such as ADD/ADHD and ASD (Salehinejad et al., 2021). It takes a dual approach to investigate both the individual challenges and the environmental barriers impeding SWNPs' success as well as strategies to support their success.

First, this chapter explores individual challenges within the cognitive, behavioral, and affective domains of student engagement which researchers have correlated to postsecondary success (Fredericks, 2004; Medalia & Revheim, 2002). Regarding cognition, the literature identified executive functioning challenges (EFCs) as a primary variable among SWNPs that negatively impacted their academic performance and emotional well-being (Salehinejad et al., 2021; Elias & White, 2018; Fleming & McMahon, 2012; Petcu et al., 2021). In terms of behavior, studies identified difficulties in employing effective study and time-management strategies that have resulted in poor academic outcomes (Boularian et al., 2018; Weyandt & DuPaul, 2006; Reaser et al., 2007). Additionally, studies focusing on challenges in the affective domain have linked elevated levels of anxiety and a negative sense of self to poor academic performance (Prevatt et al., 2015; Clouder et al., 2020). To address these individual challenges, the literature identified two support strategies as being particularly helpful across the domains: proactive counseling (PC) and academic coaching (AC). These one-to-one strategies have been shown to help students manage EFCs, improve students' academic outcomes, and increase students' emotional well-being (Fleming & McMahon; Miller, 2010; Bettinger & Baker, 2014).

Second, this literature review explores environmental barriers to SECs' success in the postsecondary environment. The literature to be discussed in this review has identified dynamics of stigma, nondisclosure and exclusion as significant environmental barriers shown to impede the success of students with MH conditions (Corrigan & Matthews, 2004; Blacklock et al., 2003; Gorman & Brennan, 2023). In addition, the literature in this review has identified strategies that have addressed these barriers to increase inclusion of SECs, which include faculty training, peer support, instructional initiatives, and improved coordination of existing services (Dowrick et al., 2005; Hartley, 2010; Blacklock et al., 2003).

Theoretical and Conceptual Frameworks

Theoretical Framework

This literature review uses a postmodern paradigm that integrates the medical and social models of disability, enabling it to encompass both the individual challenges and environmental barriers experienced by SWNPs in postsecondary education (Gabel & Peters, 2004). The medical model has advanced an understanding of disabilities which focuses on functional impairments of an individual's body and/or mind that may be caused by injury, disease, or other conditions (Forhan, 2009). In contrast, while recognizing that medical factors can limit an individual's abilities, the social model has advanced an understanding of disability which focuses on environmental barriers, asserting that disability has been a result of socially-constructed limits placed on nonnormative learners (Haegele & Hodge, 2016). While seemingly incongruous, these two models can coexist within the postmodernist *third space* between the traditional binary of objective theory (functionalism/medical model) and subjective theory (structuralism/social model of disability) (Gabel & Peters, 2004). This third space exists at the "intersection of biology and society and of agency and structure [as] a multiplicity, a plurality" (Shakespeare &

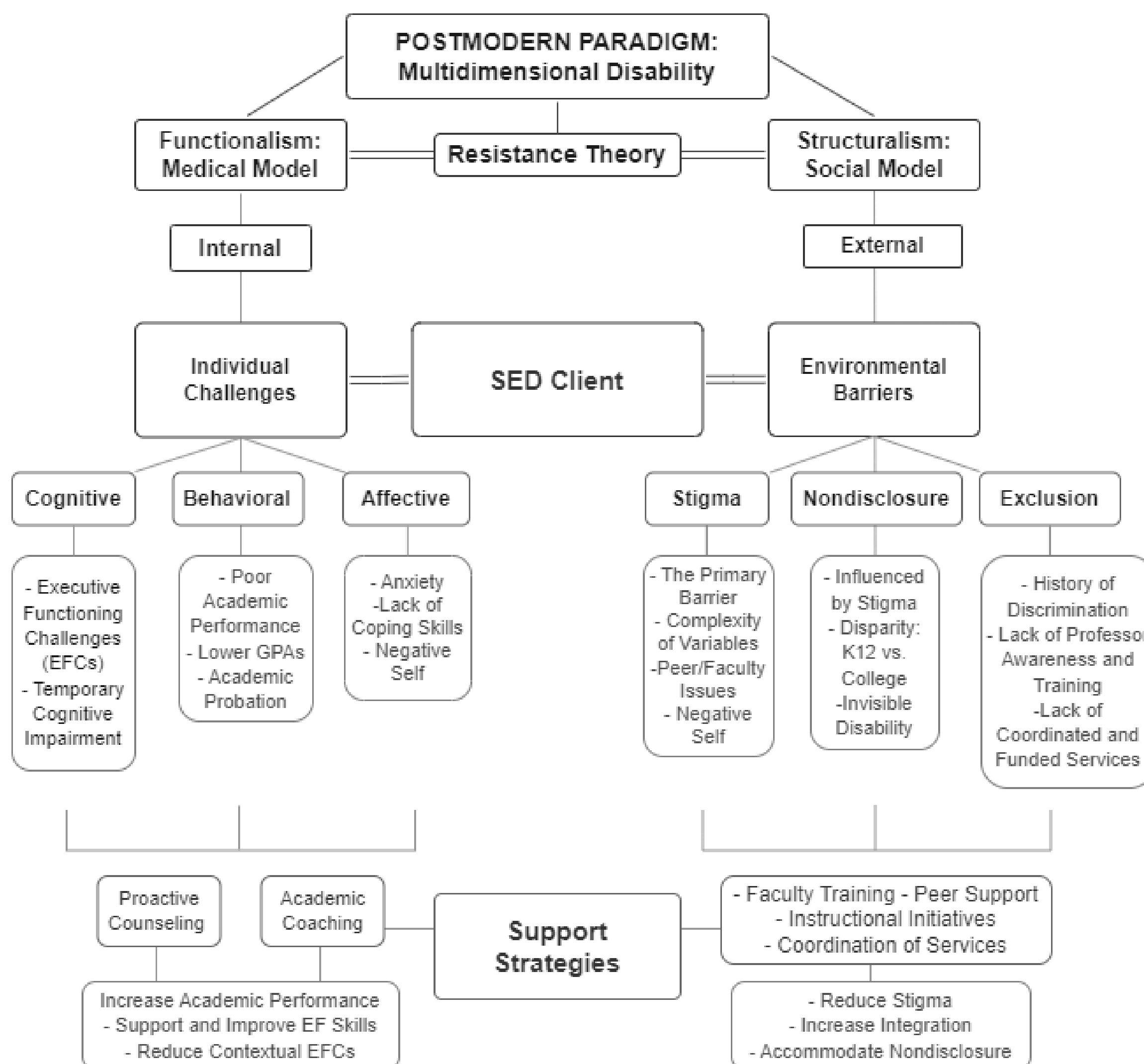
Watson, 2001, p. 19). This postmodern paradigm embraces the *multidimensionality of disability* and asserts that the medical and social models work as co-constructors of disability. This co-construction is made possible through "resistance theory," a lens that seeks to bring together various perspectives on disability through their common themes of resistance (Gabel & Peters, 2004). To explicate, the social model originates in direct resistance to the medical model, while the medical model resists the silencing of the lived experiences of people with functional impairments - those who experience the effect of biology on their lives (Gabel & Peters, 2004). As applied in this study, the intersectional framework of both models of disability allows for an exploration of both the individual and the environmental factors related to student success and represents a multidimensional approach.

Conceptual Framework

The Conceptual Framework that underpins this study represents a multidimensional understanding of disability that is co-constructed by the medical and social models as enabled by a postmodern paradigm Gabel & Peters, 2004; Shakespeare & Watson, 2001). This Conceptual Framework is provided in Figure 1.

Figure 1

Conceptual Framework



The left side of the Conceptual Framework reflects a medical model approach that allows for exploration of the internal and individual challenges related to the student. Based on insights from the literature, individual challenges are categorized under the cognitive, behavioral, and affective domains of student engagement (Fredericks, 2004; Medalia & Revheim, 2002). Cognitive challenges include EFCs and temporary cognitive impairment. Behavioral challenges include poor academic performance, low GPAs, and higher rates of academic probation.

Affective challenges include anxiety, a lack of coping skills, and a negative sense of self. The right side, in turn, reflects a social model approach that allows for exploration of the external and environmental barriers related to the student. Based on insights from the literature, environmental barriers are categorized as stigma, nondisclosure, and exclusion. Stigma as a barrier includes public stigma, self-stigma, and peer and faculty issues. Nondisclosure may be influenced by stigma and is related to the notion of invisible disability. Finally, exclusion can occur due to discrimination and a lack of coordinated services that can arise due to a lack of faculty training and awareness. The primary categories of individual challenges and environmental barriers and their subcategories align explicitly with the literature review, inform the research questions, and direct the coding system for data analysis.

Individual Challenges of Students with Neuropsychiatric Conditions

Cognitive Challenges

In the literature, EFCs have been considered the primary cognitive challenge for SWNPs primarily because SMI, ASD, and ADD/ADHD are not "learning disabilities" in the sense of an individual having challenges with verbal or auditory language processing and/or mathematics or reading comprehension (Barkely, 1997; Shea et al., 2019). Instead, it has been argued that may SWNPS understand course material very well but have trouble *cognitively accessing* the content and *adequately performing* due to EFCs (Brown, et al., 2011; Shea et al., 2019). For this reason, as will be shown in support strategies for SWNPs, increased cognitive access to course material and stronger academic performance due to EF support have been identified as key interventions for this population (Dupal et al., 2017). In addition to EFCs present due to symptomatology, studies have identified a second area of cognitive difficulty among SECs: temporary cognitive

impairment, which is described as resulting from the fluctuating nature of SMI and from problems with medication and is discussed in detail below (Hartley, 2010).

Executive Functioning.

History, Constructs, and Definitions. Prior scholarship has identified the origins and evolution of EF as a construct and its role in human cognition. Goldstein et al. (2014) presented a historical account of EF's origins as a theoretical and clinical construct beginning with the case of Phineas Gage, a railroad foreman whose frontal lobe was pierced by an iron rod in the 1840's. Gage survived, but damage to his frontal lobe resulted in hyperactivity and inhibition, prompting future brain scientists to explore the notion of an executive control mechanism in this area of the brain. His case is considered foundational in following brain research that ultimately led to EF being considered a single construct (Goldstein et al., 2014).

Notable research, in the 20th century, includes studies by Broadbent (1958) of selective attention and by Shifrin and Schneider (1977) of automatic and controlled cognitive processes which allow the brain to involuntarily ingest and respond to stimuli while also controlling cognitive load. In 1975, Posner contributed the term "cognitive control" to the conversation, arguing that a separate cognitive process must be responsible for focusing attention on the selected information proposed earlier by Broadbent. In addition, Pribram (1973) is frequently noted in the literature and is credited with first using the term "executive" when researching the functions of the prefrontal cortex, which is the anterior portion of the frontal lobe. He concluded that the frontal cortex is "involved in implementing executive programs [that] are necessary to maintain brain organization in the face of insufficient redundancy in input processing and in the outcomes of behavior" (Pribram, 1973, p. 312). In other words, he described a central executive brain function that organizes and prioritizes information to focus and direct behavior.

Pribram (1973) drew a parallel between mechanical (computer) thinking and biological thinking, both of which require a "marker or flag," a mechanism to prevent distracting interference of simultaneous cognitive stimuli. He demonstrated in his research that frontally lesioned primates who are provided these markers to prevent distraction improve their performance on tasks. For example, primates who performed alphabet recognition tasks that have additional spaces provided between letters (markers) "[could] so readily perform [this] task that had been their nemesis for decades" (p. 312). Pribram's discovery that providing a "marker or flag" can improve cognition during tasks is relevant to discussions of how to support EF in the learning environment because he first demonstrated that decreasing the EFC of distraction can improve performance. His conclusion that cognitive support of prefrontal cortex functions within distracting contexts can improve task performance is significant because it demonstrated that negative impacts of EFCs on performance can be mitigated. Therefore, Pribram's research of EF support in primate brain research can be considered an early harbinger of current notions of EF support for students through strategies such as scaffolding.

Since Pribram's work in the 1970s, over thirty additional EF constructs, models, and definitions have been published by EF researchers and scholars (Goldstein et al., 2014). Emphasized by Goldstein et al. (2014) are Baddely's (1988) introduction of a "central executive" component that allows short-term memory to manipulate information and Shallice's (1988) theoretical contribution of a "supervisory system" capable of regulating attention by overriding automatic responses. In all, Goldstein (2014) provided 33 verbatim definitions of executive functioning taken from publications dated from 1966 to 2011. Excerpts from five of these definitions are included below to represent each decade over the past 50 years:

- “The frontal cortex is critically involved in implementing executive programmes where these are necessary to maintain brain organization in the face of insufficient redundancy in input processing and in the outcomes of behavior” (Pibram, 1973, p. 301).
- “Executive functions is a generic term that refers to a variety of different capacities that enable purposeful, goal-directed behavior, including behavioral regulation, working memory, planning and organizational skills, and self-monitoring” (Stuss & Benson, 1986, p. 272).
- “[Executive functions] refers to a collection of related but somewhat distinct abilities such as planning, set maintenance, impulse control, working memory, and attentional control” (Roberts & Pennington, 1996, p. 105).
- “EF encompasses meta-cognitive processes that enable efficient planning, execution, verification, and regulation of goal directed behavior” (Oosterlaan et al., 2005, p. 69).
- “Neither a single ability nor a comprehensive definition fully captures the conceptual scope of executive functions; rather, executive functioning is the sum product of a collection of higher-level skills that converge to enable an individual to adapt and thrive in complex psychosocial environments” (Delis, 2012, p. 14) (Goldstein, 2014).

These definitions are similar through the decades and represent what cognitive psychologist Akira Miyake refers to as a “unity and diversity” concept within the EF construct (Miyake et al., 2000). This perspective recognizes a commonality of related brain functions with a latent variable of EF that also varies according to distinct functions across individuals (O’Rourke et al., 2018). This family of associated symptoms allows educators, psychologists, and researchers to refer to EF as a single construct even though its origin and specificity varies across individuals. The broad consensus is that EF is comprised of three domains: inhibitory

control (the ability to suppress irrelevant stimuli and one's reaction to them), set-shifting (cognitive flexibility that allows easy shifting between tasks or rules), and working memory (the ability to hold information in mind while performing a related task) (O'Rourke et al., 2020).

While Goldstein et al. (2014) provided an informative and detailed historical outline of the development of EF and a comprehensive collection of EF definitions, they chose not to provide or favor one operational definition. Rather, they opted to present a panoply of the research which formed today's current broad understanding of EF as an umbrella term that is used to cover diverse cognitive processes that include attention, initiation, inhibition, planning, self-monitoring, self-regulation, planning, and working memory in the frontal lobe (Goldstein et al., 2014). Due to the variations of EF definitions in the literature, this review will use the current American Psychological Association's (APA) Dictionary of Psychology for an operational definition of "executive functions," which is:

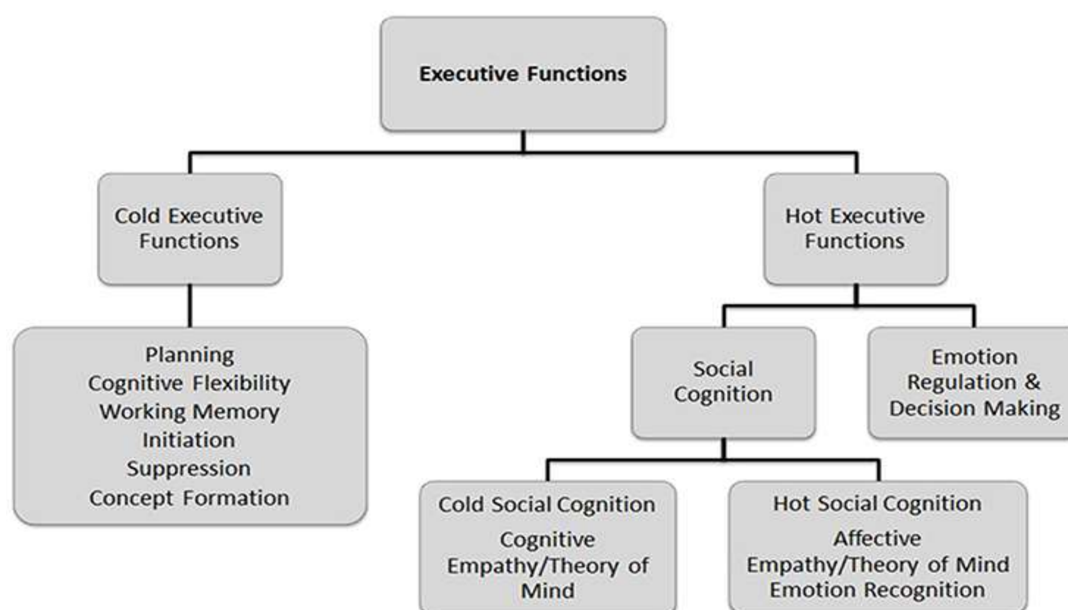
> Higher level cognitive processes of planning, decision making, problem solving, action sequencing, task assignment and organization, effortful and persistent goal pursuit, inhibition of competing impulses, flexibility in goal selection, and goal-conflict resolution. These often involve the use of language, judgment, abstraction and concept formation, and logic and reasoning. They are frequently associated with neural networks that include the frontal lobe, particularly the *prefrontal cortex.* (APA, 2022)

Differences Between Hot and Cold EFs. As the discussion above shows, EF was being described as a process within the prefrontal cortex in the frontal lobe as recently as 2014. However, developments in neuroimaging technology used in brain research have led researchers to split EF into two categories now known as "cold EFs" and "hot EFs." Poon (2018) explained that cold EFs, also referred to as "cool EFs," are the same as the EFs covered so far in this

review: cognitive regulation such as inhibitory control, cognitive flexibility, and working memory. Hot EFs, on the other hand, refer to emotional regulation, sources of impulsivity, delayed gratification, and motivation. Cold EFs are now considered to be the "traditional" understanding of EFs and considerable research has recently been conducted to explore the newer notion of hot EFs and describe their difference from cold EFs (Poon, 2018). Figure 2 provides a broad visual representation of these differences:

Figure 2

The Distinction between Cold Executive Functions and Hot Executive Functions



Note. From Zimmerman, D. Ownsworth, T., O'Donovan, A., Roberts, J., and Gullo, M. (2016). Independence of hot and cold executive function deficits in high-functioning adults with autism spectrum disorder. *Frontiers in Human Neuroscience*, https://doi.org/10.3389/fnhum.2016.0002. Copyright 2016 Zimmerman, Ownsworth, O'Donovan, Roberts and Gullo.

Salehinejad et al. (2021) explained how these distinctions in Figure 2 arose from recent advances in neuroimaging, such as functional magnetic resonance imaging (fMRI), which now gives researchers the ability to link cold and hot EFs to their respective origins in the brain, at

times outside the prefrontal cortex. The discovery that other brain regions control certain EFs represents an expansion of prior understandings of EFCs, which were previously thought to only be associated with the prefrontal lobe. Salehinejad et al. (2021) concisely summarized these different physiological origins and their connection to the differences between cold/hot EFs, as shown in Figure 3:

Figure 3

Domains, Brain Structures, and Assumptions of Cold and Hot Executive Functions

COLD EXECUTIVE FUNCTIONS		
Majors Domains	***Brain Structures***	***Assumptions***
working memory set shifting response inhibition multi-tasking attentional control error detection problem solving performance monitoring cognitive flexibility fluency	**Cortical** - dorsolateral prefrontal cortex - lateral prefrontal cortex - anterior cingulate cortex - inferior frontal cortex **Subcortical** - hippocampus - basal ganglia	Purely cognitive Place on a spectrum (no all-or-none) Dependent on task features Deliberate top-down processing Automatic bottom-up processing Related to lateral regions of the prefrontal cortex
HOT EXECUTIVE FUNCTIONS		
Majors Domains	***Brain Structures***	***Assumptions***
emotional regulation reward processing delay discounting risky decision making affective decision self-referential social cognition *any cold executive function domain with emotional or motivational features	**Cortical** - medial prefrontal cortex - ventrolateral prefrontal cortex - orbitofrontal cortex **Subcortical** - amygdala - insula - limbic system - striatum	Predominantly emotional/motivational Place on a spectrum (no all-or-none) Dependent on task features Bottom-up emotional expectation / reward experience Hot top-down expectation Related to medial regions of the prefrontal cortex

Note. Adapted from Salehinejad, M. A., Ghanavati, E., Rashid, M. H. A., & Nitsche, M. A. (2021). Hot and cold executive functions in the brain: A prefrontal-cingular network. *Brain and Neuroscience Advances*, 5, 23982128211007769. https://doi.org/10.1177/23982128211007769. Copyright Salehinejad et al., 2021.

Salehinejad et al.'s (2021) discussion represents a substantial evolution in the understanding of EFs since Pribram's (1973) original notion of a primitive neurological executive mechanism. Importantly, these recent discoveries have occurred while EF implications for children have come to the forefront in developmental psychology and therefore the hot/cold EF scenario is now being linked to childhood education and early intervention (Zelazon et al., 2000). Past EF assessments focused on clinical settings to assess neurological dysfunction in the frontal lobe of adults, but newer assessments of hot EFs in children are now being considered as potential tools to predict academic success and achievement (Zelazon et al., 2000). This expansion from medical diagnosis in adults to educational assessment in children represents EF's growth as an operational construct across disciplines. However, research indicated that the recently recognized educational benefit of assessing hot EFs in children has not transferred to the postsecondary realm and there is a gap in scholarship that links the cold/hot EF variations to EF support strategies for postsecondary students with EFCs (Zelazon et al., 2000). Therefore, since the purpose of this review is to understand EFs in postsecondary students specifically, this literature review will proceed by using the inclusive APA definition of EFs that does not use the cold/hot EF distinction.

Importance to Success in Higher Education. The literature firmly established the critical importance of executive functioning in determining student success in higher education and the impact of compromised EF on academic performance. Shmulsky et al. (2017) identified a statistically significant correlation between EFCs and lower GPAs in their analysis of the relationship between executive functioning scale scores from the Behavioral Rating Index (BRI), the Metacognitive Index (MI) and the Global Executive Composite (GEC) in relation to data on cumulative GPAs of students with ASD and EFCs. Shmulsky et al.'s (2017) study is limited,

however, due to using only self-reported data to measure EF. Intentionally building on their work, Dijkhuis et al.'s (2020) quantitative study on the causes of attrition among students with ASD added a measurable EF performance component in addition to self-reported EF. The researchers found that the variance in the students' academic progress that was explained by ASD severity (12%) was raised to 25% by adding performance-based EF factors (mental flexibility and working memory) and to 36% when adding self-reported daily EF factors into their regression analysis. They concluded that improved EF is related to academic progress and therefore qualifies as a target for early intervention to prevent the attrition of students with EFCs (Dijkhuis et al., 2020). One significance of this study is the authors' claim to be the first to use both cognitive performance-based and self-reported measures of EF as predictors of academic success. However, one limitation noted by both studies is their comparatively low sample sizes (Shmulsky et al., 2017, n = 32; Dijkhuis et al., 2020, n = 39). Therefore, as claimed by both sets of authors, similar studies of larger sample sizes that correlate EF and success in higher education are in order. In addition, both studies used only GPA to determine "success," a construct that could be measured in other ways depending on an individual's goals and characteristics. That said, the studies successfully revealed a link between EF and academic success in higher education.

Additional literature has linked EF and success in postsecondary education and advanced EFCs as a risk-factor for attrition. In their work on proposed intervention principles for EFCs in college students with ADD/ADHD, Fleming & McMahon (2012) argued that EF skills which enable organization, time-management, planning, and goal-setting, are necessary for postsecondary academic success. The authors suggested that the lack of these skills puts students at risk for attrition. Similarly, the impetus for Grieve et al.'s (2014) study was to draw the same

connection between EFs and academic success based on a perceived risk of attrition for students with EFCs due to the considerable challenges to self-regulation found in the college setting. Likewise, Petersen et al. (2006) explicitly stated their intention to examine the link between EF and postsecondary success, using results from the Executive Functioning Rating Scale (Lott & Petersen, 1998) and the study strategy LASSI measurement (Weinstein et al., 1987). They determined a positive correlation between perceptions of difficulties in life-management with EFCs and higher anxiety as well as negative correlations between EFCs and concentration and academic performance (Petersen et al., 2014). Though the sample size (n = 81) of this study can be considered small, these results highlight a direct connection from EFCs to anxiety/concentration and to poor academic performance, representing an interplay between the cognitive, affective, and behavioral domains.

Furthermore, other literature linked specific EF skills as factors that influence students' pathways to either retention or attrition. For example, Zimmerman & Paulsen (1995) identified self-monitoring during instruction as critical in preventing college attrition. Likewise, Schutz et al. (2000) found that long-term planning and goal-setting correlated to better academic performance. Meanwhile Pritchard & Wilson (2003) discussed how social and emotional factors can compromise students' concentration and planning, leading them to feel overwhelmed by the multiplicity of roles and tasks required in higher education.

Additional studies have recognized the link between EF and school success by targeting specific EF skills for improvement to enhance academic performance. For example, Gunn et al. (2017) studied the value of behavioral skills training and coaching aimed at improving the executive function of working memory in a college student to increase her engagement in a preschool practicum course. Similarly, Hillier et al. (2018) targeted time management using a 7-

week counseling group to improve student success in their current courses. The results of these studies indicated that EF skills are crucial to success in higher education and their improvement can lead to the increased effectiveness of student engagement with postsecondary instruction and curriculum.

This section of the literature review has highlighted connections between EF and school success through specific studies that demonstrated the negative effect of EFCs and the positive effects of EF skills training on academic performance. An abundance of additional research exists on this link between EF and academic achievement. For example, a search using University of Virginia's "7 Education Database" function with the terms "executive function or executive dysfunction or executive functioning" AND "higher education or college or university or post-secondary or postsecondary" returns 7,187,104 results. A Google Scholar search of "importance of executive functioning in higher education" returns 2,320,000 results. These numbers indicate the importance of and interest in this link between EF and college. In addition, while the samples of the quantitative studies discussed above are admittedly small, their data suggest a correlation between EFCs and retention/attrition. Finally, the substantial number of studies that consider EFCs as targets of intervention suggest that scholars, researchers, and practitioners have been highly concerned over the risk that EFCs pose to students' academic progress. Collectively, therefore, the literature indicated that EFs to success in postsecondary education.

Populations at Risk. The literature has identified two primary subgroups of students at-risk of EFCs related to the cognitive characteristics of their conditions: 1) students with the neurodevelopmental conditions of ASD and/or ADD/ADHD and 2) students with certain types of Serious Mental Illness (SMI) whose symptoms interfere with EFs (Salehinejad et al., 2021).

Due to their similarities in EF, the two groups can be discussed as one group of students with neuropsychiatric conditions who have a commonality of EFCs which vary across individuals and therefore reflect the "unity and diversity" perspective of EF mentioned above (Miyake et al., 2000). The identification of this unified but diverse group of individuals with EFCs has been made possible by recent advances in neuroimaging which have allowed researchers to reveal and confirm EFCs across a variety of conditions, not simply in those that affect the frontal lobe (Salehinejad et al., 2021). Therefore, neurodivergent students and students with certain types of SMI, to be explained below, can be understood as one group for the purposes of considering EFC's impact on academic achievement.

Neurodivergent students with ASD and/or ADD/ADHD are addressed as one subgroup for several reasons. For one, Otterman et al. (2019) noted that students in these categories have developmental similarities beginning in childhood and share a variety of traits regarding executive functioning that set them apart from other neurological disorders such as dyslexia. Additionally, the two groups overlap: 30-50% of people diagnosed with ASD meet the criteria for ADD/ADHD and 20-50% people with ADD/ADHD meet the criteria for ASD (Shmulsky et al., 2017). Furthermore, education research has frequently discussed the two as one pair due to their displayed executive functioning similarities (Elias & White, 2018; Shmulsky et al., 2017; Levy et al., 2010; Couzens et al., 2015; Bolourian et al., 2018).

The literature has established that these students exhibit and struggle with EFCs in school. For example, Dijkhuis et al. (2020) explicitly stated, "It is known that many students with autism experience difficulties in several aspects of EF" (p. 1355). Likewise, Adreon and Durocher (2007) listed EFCs as a primary challenge for students with ASD in their comprehensive evaluation of their transition-to-college needs. Their study emphasized that

postsecondary students with ASD will require accommodations for organizational strategies to address EFCs, as well as support in developing study skills and planning long-term projects. Similarly, Jarret (2016) wrote that students with ADD/ADHD will also face EF struggles in college and EFCs have been a hallmark of those diagnoses. It is symptom of inattention, stated Fleming and McMahon (2012), that "interfere with key behaviors leading to academic success in college—in particular, the capacity to sustain attention for long periods of time, organize complex tasks, and independently initiate and complete tasks" and lead to struggles with maintaining and sustaining long-term goals, attention, organization, and self-regulation (p. 304). Multiple studies have identified EFCs in students with ADD/ADHD; Kern et al. (1999) discussed the academic implications of poorer time management and organization of these students relative to their peers; Turnock et al. (1998) provided evidence of their greater procrastination; Reaser et al. (2007) reported less concentration in comparison with their peers. On a final note, Boularian et al. (2018) viewed students with ASD and ADD/ADHD as one group regarding EFCs: "executive functioning can impact the way students with ASD or ADD/ADHD interact with the academic material and environment" (p. 3332). According to the literature, therefore, the neurodevelopmental conditions of ASD and ADD/ADHD impact EFs in similar ways that can compromise their academic success.

The second subgroup of students identified in the literature with cognitive profiles that can exacerbate problems with EF are students with Serious Mental Illness (SMI). SMI is defined as "a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities" (SAMSHA, 2022). Within SMI, psychiatric literature has identified the following six conditions that specifically compromise EF: depression, anxiety, BPD, obsessive-compulsive disorder (OCD),

schizophrenia, and traumatic brain injury (Rabinovici et al., 2015). This expanded consideration of additional students who may struggle with EF is due to the advances in neuroimaging which allow researchers to determine cause and effect between brain injury or disease, cognition, and behavior (Crosson et al., 2010; Rabinovici et al., 2015). These brain mapping techniques have found that EF relies on areas in addition to the frontal lobe such as the parietal cortex, basal ganglia, thalamus, and cerebellum, and injury or illness in any of these regions can cause EFCs. Rabinovici et al. (2015) wrote that "Dysexecutive symptoms. … occur in most neurodegenerative diseases and in many other neurologic, psychiatric, and systemic illnesses. [Therefore,] executive dysfunction is extremely common in patients with neurologic disorder" (p. 646). Consequently, students with the SMI listed above (depression, BPD, OCD, schizophrenia, and traumatic brain injury) qualify as at-risk for attrition due to EFCs alongside their peers with ASD and ADD/ADHD.

The literature has established the manifestation of EFCs as symptoms of the SMI listed above. Regarding depression, Hartlage et al. (1993) and Howieson et al. (2004) established that the condition interferes with tasks requiring attention in young patients without brain injury. Similarly, Channon (1996) uncovered significant differences between test scores of EF skills such as problem solving, mental flexibility, and "set-shifting," between non depressed and depressed people. Likewise, Veiel (1997) established that deficits were found on tasks that require frontal lobe EF processes in people with depression. In addition, Wingo et al. (2013) reported a relationship between EFCs, depression, and college maladjustment that can lead to attrition and concluded that EFs were salient for healthy functioning of students with depression in the real-world college environment. Their data demonstrated a significant association among college women between depression, EF, and adjusting to postsecondary education. While general

intellectual ability was not found to be a significant predictor of academic problems, metacognition (EF) was and accounted for 19% of the variance in academic problems (Wingo et al., 2013).

In addition to depression, the literature has confirmed EFCs in students with the other listed diagnoses: anxiety, schizophrenia, BPD, schizophrenia, and traumatic brain injury. For example, anxiety has been shown to be a leading cause of college attrition due to its impact on cognitive processes that involve EF (Bettis et al., 2017), and Snyder et al. (2014) found that EFCs were directly associated with heightened symptoms of anxiety and identified a link between anxiety and the exacerbation of EFCs in individuals with ADD/ADHD. Significantly, Jarrett's (2016) study on the interplay of anxiety and EFCs in college students with ADHD (N = 421; ages 17-25; 73.1% female) found that anxiety symptoms were associated with EFCs "above and beyond" symptoms of ADHD. In other words, anxiety can sometimes be more detrimental to EF than ADHD, leading the authors to call for future studies to determine how EF can be supported in emerging adults with ADHD and anxiety for college success.

Regarding the remaining four conditions highlighted by Rabinovici et al. (2015) above, *Bipolar Affective Disorder*, known as the "chameleon of psychiatric disorders," has been shown to manifest in wide mood swings that alternate between depression and mania and to be frequently comorbid with EFCs. It has been shown to cause inattention, compromise concentration, and cause agitation and the appearance of disinterest in postsecondary academic settings (Pedersen, 2020). *Schizophrenia* has repeatedly been shown to result in significant cognition deficits in EF skills such as attention, working memory, verbal learning, and memory (Bowie & Harvey, 2006). *Obsessive Compulsive Disorder* has been correlated to EFCs that compromise adaptation to new environmental stimuli and planning behavior (Manarte et al.,

2021). Finally, *Traumatic Brain Injury* has been shown to disrupt signaling in neurotransmission and to produce long-lasting deficits in impulsivity, working memory, and behavioral flexibility (Ozga et al., 2018). Therefore, according to the literature, students with these SMIs can experience EFCs similar to students with ASD and ADD/ADHD and can therefore also be at-risk of attrition.

Temporary Cognitive Impairment.

Fluctuating Nature of SMI. In addition to EFCs related to variations in brain biology that can be chronic and persistent (Salehinejad et al., 2021), TCI has been identified as another cognitive challenge that SWNPs may experience due to the natural fluctuation of MH symptoms and issues surrounding medication (Hartley, 2010). For example, periodic increases of depression and anxiety and associated changes in sleep, energy, and appetite were shown to compromise some students' concentration, short-term memory, planning, and organization, which led to poor academic performance (Hartley, 2010; Muckenhoupt, 2000; Hembree, 1988; Dobson & Kendall, 1993). While entitlement to accommodations does not depend on whether a condition is temporary or permanent, awareness of the possibility for the sudden onset of intermittent cognitive difficulties has been considered an important element of support for SWNPs (Condra et al., 2015).

Problems Related to Medication. Similarly, medications used to treat neuropsychiatric conditions were found to have side effects such as insomnia, fatigue, nausea, and headaches which can compromise focus and attention (Hartley, 2010; Weiner & Weiner, 1997) which led to deficits in comprehension, accurate note-taking, and time management (Collins & Mowbray, 2000; Knis-Matthew et al., 2007). In addition, medication adjustments and new prescriptions were shown to impact academic functioning as students adjusted to them (Megivern et al., 2003).

Finally, Shea et al. (2019) suggested that since SWNPs entering college may not adhere to medication protocols since it may be the first time that they are responsible for their medication regime, refilling prescriptions, and scheduling doctor appointments. This lack of following medication protocols was associated with fluctuating symptoms and side effects that disrupted cognition and threatened their academic success (Meaux et al., 2000). For these reasons of fluctuation and medication side effects, SWNPs were reported to experience TCI that was acute and sudden with significant impacts on their academic functional levels (Shea et al., 2019).

Behavioral Challenges

The literature has repeatedly identified the behavioral challenges of SWNPs in postsecondary education as stemming directly from EFCs which can ignite broad problems with organization, study skills, and attention, and manifest in behaviors that undermine academic performance by interfering with key behaviors required for success (Fleming & McMahon, 2012; Ozonoff et al., 1991; Weyandt & DuPaul, 2006; Boularian et al., 2018; Kern et al., 1999; Dijkhuis et al., 2020; Lewandowski et al., 2008). For example, shifting attention and self-regulation problems during instruction can result in poor academic behavior such sparse note-taking on important lectures, increased restlessness, and more deviation from class procedures compared to neurotypical peers (Jansen et al., 2017, Turnock et al., 1998; Weyandt & DuPaul, 2006). Students with ASD and ADD/ADHD have been shown to exhibit poorer time management, planning, and organization for extended projects as well as increased procrastination, less concentration, a slower studying pace, and less use of study skills such as test-taking strategies, particularly on timed tests, relative to their peers (Kern et al., 1999; Turnock et al., 1998; Reaser et al., 2007; Dijkhuis et al., 2020; Lewandowski et al., 2008; Shmulsky et al., 2017). Additionally, challenges with

organization and sequencing have been associated with unorganized writing and difficulties selecting main ideas from required readings in comprehension tasks (Gregg et al., 2002; Reaser et al., 2007).

Regarding SMIs, depression has been shown to be positively correlated to college maladjustment due to EFCs and students with BPD have been shown to appear more disinterested and agitated and to have more problems with attention and concentration in college classes than their peers (Wingo et al., 2017; Bettis et al., 2017). In addition, SWNPs returning to studying while recovering from BPD manic episodes have been shown to experience difficulty concentrating (Stark, 2017), and the comorbidity of anxiety and ADHD has been positively correlated with a lack of focus, organization, and time management (Prevatt et al., 2015).

These troubles in academic functioning can also lead to more dramatic events with long-term implications, such as one student who switched majors due to confusion over unpredictable class procedures and another had to retake an entire course due to a missed final exam (Bolourian, 2018; Meaux et al., 2009). Other events have been shown to be acute and chronic, such as frequent instances such as “freak[ing]” and “blank[ing] out” in class, as one student put it, due to cognitive stress (Bolourian, 2018). Similarly, catatonic behavior has been associated with students’ being cognitively overwhelmed. For example, in response to a canceled class, one college student with ASD said, “I was really confused during the entire day. I could not cope with the change. … I became so upset by the loss of structure that I could not do anything else for the rest of the day” (Van Hees et al., 2015, p. 1680). Finally, significant outcomes for SWNPs due to these academic behavior challenges

and experiences have been shown to include lower GPAs and higher instances of academic probation and dropping out compared to peers (Fleming & McMahon, 2012).

Affective Challenges

EFCs and poor academic performance have also been shown to accompany a range of negative emotions, which can include frustration, shame, embarrassment, low self-esteem, learned helplessness, feeling overwhelmed, and hostility due to academic struggles (Dupal et al., 2017; Turnock et al., 1998; Reaser et al., 2007). In addition, students with ASD have been shown to report decreased self-efficacy and increased self-doubt due to a general lack of understanding, inflexibility, and judgment from lecturers (Clouder et al., 2020). SWNPs have also been shown to experience increased anxiety, depression, and loneliness (Fleming & McMahon, 2012; Van Hees et al., 2015) as well as feelings of disgrace (Clouder et al., 2020). Within this myriad of human emotional responses due to academic struggle, however, a review of the literature revealed that anxiety and a negative sense of self were the two primary roots of emotional challenges for SWNPs as discussed below.

Anxiety and Lack of Coping Skills. Anxiety has been identified as the leading MH problem among students in postsecondary education (ACHA, 2019) and has been shown to be correlated to cognitive dysfunction in memory and concentration which can result in academic performance deficits (Lysnyj et al., 2020; Afolayan et al., 2013; Kitzrow, 2009). Furthermore, the emergent adult stage of life during postsecondary education has been shown to correlate to the peak age of anxiety and other MH problems, a time of transitional stressors of competing academic, social, and financial concerns (Lysnyj et al., 2020). In addition, an increase in frequency and severity of MH concerns has been partly attributed to more students with diagnoses pursuing postsecondary education than ever before (MacKean, 2011). For students

with SMI, anxiety levels have been compounded by the first semester which can lead to missed classes, risk of failing or withdrawing from classes, and losing financial aid (Ringeisen et al., 2015). Furthermore, higher anxiety levels have been associated with the medication side effect of insomnia previously mentioned as a challenge for SWNPs (Bettis et al., 2017).

Anxiety has also been shown to be a leading cause for depression in college students and to be significant in students with ADD/ADHD, sometimes found to be more detrimental to EF than symptoms of the condition itself (Bettis et al., 2017; Jarret, 2016). Young adult students with ASD have been shown to frequently struggle with untreated anxiety, which has a lifetime prevalence rate of 27% to 42%. (Capriola-Hall et al., 2021). Anxiety's symptoms of intrusive and persistent worry have been shown to block and consume EFs such as working memory, information processing, and attention which have been shown to diminish academic performance (Eisenberg et al., 2009; Kitzrow, 2009).

A Negative Sense of Self. In addition, a lack of coping skills among SWNPs has been shown to compound anxiety (Hartley, 2010). Coping has been defined as the purposeful regulation of cognition, behavior, and emotion in response to environmental stress (Bettis et al., 2019). An active coping style has been identified as a main contributor to persistence and resilience and a significant predictor of cumulative GPA (Hartley, 2010; Brockelman & Scheyett, 2015). However, research has shown that students' ability to cope effectively with anxiety can be diminished by the increased social, financial, and academic pressures that SWNPs face when they transition into postsecondary education, which can exacerbate symptoms of anxiety and further threaten academic success for SWNPs (Belcher, 2011). The literature revealed a negative sense of self among SWNPs related to their academic performance and disability identity which can include low-self-esteem, self-

doubt, and a lack of confidence (Megivern et al., 2003; Muckenhoupt, 2000; Clouder et al., 2020). This negative sense of self has been shown to originate in bullying, stigma, or ableism (Shmulsky et al., 2021). It has also been associated with neuropsychiatric conditions which can include a reduction in feelings of control and academic self-confidence (Shmulsky et al., 2021; Megivern et al., 2003). In addition, past difficulties with academic performance and failure have been shown to fuel low self-esteem which can present a major barrier to success by decreasing attention and participation (Weiner & Weiner, 1996). Furthermore, SMI symptoms such as depression have been associated with negative self-perception that may lead to irritation, anger, and risk-taking which can impact motivation and academic self-efficacy (Muckenhoupt, 2000). Finally, low self-confidence for students with psychiatric disabilites have been correlated to a lack of studying, poor attendance, and incomplete assignments (Hartley, 2010). Overall, the factors that can contribute to a negative sense of self has been shown to further magnify EFCs and poor academic behaviors, and also influence SWNPs to forego the disclosure that would secure accommodations and support (Clouder et al., 2020; Dupal et al., 2017).

Individual Support Strategies: Addressing EFCs for Student Empowerment

As revealed in the literature regarding the three domains above, SWNPs' individual cognitive, behavioral, and affective challenges have shown a connection EFCs: EFCs are cognitively integral to neuropsychiatric conditions and TCI (Muckenhoupt, 2000; Dijkhuis et al., 2020; Adreon & Durocher (2007), highly related to poor academic behavior and negative outcomes (Reaser et al., 2007; Fleming & McMahon, 2012; Weyandt & DuPaul, 2006), and are significantly correlated to anxiety and a negative sense of self (Lysnyj et al., 2020; Clouder et al., 2020; Dupal et al., 2017). Therefore, due to their wide-ranging impact across the three domains,

EFCs represent a wide opportunity for intervention that encompasses not only cognitive difficulties, but the associated academic and emotional challenges as well (Kidd et al., 2014; Bettinger & Baker, 2014; Dupal et al., 2017).

Furthermore, according to the literature, the development of strong EF skills has been shown to empower students by enabling them to set and achieve goals, manage time effectively, stay organized, regulate emotions to be focused and engaged, and correlate to increased motivation in higher education (Jozsa et al., 2022). EF support to strengthen academic skills has been considered an opportunity for student empowerment and crucial to college success because these skills help students become more independent, take ownership of their learning, and persist through challenging tasks (Brinckerhoff, 1996). In addition, utilizing self-monitoring techniques has allowed students to shift learning strategies and timelines for goal attainment based upon feedback from a variety of sources and to increase their efficacy as learners (Wilson, 1994). In general, therefore, studies have shown that strong EF has empowered students to learn and use crucial academic skills to achieve personal independence and find success in their educational goals (Brinckerhoff, 1996).

In regard to providing EF support, the literature revealed that proactive counseling (PC) and academic coaching (AC) are two of the most effective strategies to effectively support EFs and empower students for success in the college environment (Bettinger & Baker, 2011; Dupal et al., 2017; Fleming & McMahon, 2012). Fleming and McMahon (2012) advocated for a two-pronged approach to counter EFCs by (1) improving EF skills within the student and (2) reducing contextual challenges presented by the college environment. Both prongs appropriately sought to improve overall academic *performance* through EF support (Dupal, 2017). This focus was considered fitting because EFCs are a key struggle for SWNPs, and they do not necessarily

require help with comprehension of course content - a challenge associated more with specific learning disabilities that might be addressed through tutoring (Barkely, 1997). Brown et al. (2011) concurred with Barkely (1997) and found that the primary academic challenges of students with EFCs were related to cognitive processing and working memory performance, not comprehension deficits. Therefore, due to their focus on EF, PC and AC have been considered particularly well-suited to support SWNPs through performance improvement and by mitigating EFCs presented by the college experience, as explained below.

Proactive Counseling

Proactive counseling, also known as *intrusive advising*, has been found to increase access to support and promote postsecondary success (Davis, 2005). Varney (2012) explained that PC counselors proactively reach out to students to provide early academic intervention and referrals to additional services such as academic coaching, mentoring, and tutoring, before problems arise. Furthermore, Higgins (2003) found that PC developed meaningful relationships between counselors and students to address problems specific to the student through frequent and intentional contact and fosters the student's connectedness with the environment. In addition, proactive interactions were shown to increase awareness in students of institutional supports, policies, and documents, which are the types of informational elements with which students with EFs struggle (Jansen et al., 2017). To support EF functioning, Bettinger and Baker (2011) reported that PC usually involves weekly/bi-weekly contact initiated by counselors to provide or refer academic support, such as checking a student's progress on a particularly challenging assignment, and studies find that this high frequency of meetings correlates to better academic performance. For example, Vander Schee (2007) examined the effects of intrusive academic advising among 20 male and 22 female college students and found that students who attend three

to eight meetings showed significant improvement in semester GPA compared to students who attended two or fewer meetings.

Taking Action to Improve EF Performance through Proactive Counseling. According to Fleming and McMahon (2012), PC has been linked to improved academic performance due to its support for initiating the planning, organization, time management, and completion of tasks that a student would otherwise be left to do on their own. PC has been shown to offset potential performance problems caused by EFCs that can result in incomplete tasks by providing EF support. PC has been shown to accomplish this by providing an external structure to bolster efforts toward long-term goals, assignments, and rewards, with strategies such as planning backwards and completing concrete goals (Fleming & McMahon, 2012). For example, Rothwell and Shields (2020) explained that in the 2-4-8 proactive counseling model used by Catholic University, the first counseling session of each semester tackled the three crucial tasks to be performed at the outset of a term for students with accommodations: send their letter of accommodations to professors, order textbooks, and review course syllabi. These tasks were targeted because they required EF skills such as prioritization, planning, organization, and follow-through and can be left undone by students with EFCs (Rothwell & Shields, 2020). This example captured how performance problems such as unsent letters of accommodations, unordered textbooks, and neglected syllabi, can be avoided if counselors performed the tasks with the student and simultaneously taught them how to perform the tasks for the future (instruction through modeling). In addition, Brown and Coomes (2016) found that PC's preventative approach of frequent, scheduled, and one-to-one meetings increased performance and aimed to "empower students" by fostering a consistent and safe sense of connectedness (p. 475).

Reducing Contextual Challenges to Improve Executive Functioning Performance with Proactive Counseling. Studies also found that PC directly reduced threats to proper EF by reducing ambiguity in the school context, such as within the information of course syllabi and school policies and procedures (Weyandt & DuPaul, 2006). For example, Jansen et al. (2017) explained how reviewing syllabi of each class with the student alleviated confusion or misunderstanding of these crucial documents, an exercise that can be challenging for SWNPs on their own. In addition, addressing time-management challenges in classes with the direct participation of instructors has been shown to reduce the ambiguity that burdens EF. For example, collaborative meetings that include a counselor, student, and instructor have been shown to create more supportive frameworks for students that include additional check-ins and smaller and more frequent deadlines for particular courses (Fleming & McMahon, 2012). In these ways, in addition to identifying and completing concrete goals, PC has been shown to reduce contextual challenges (lack of clarity on syllabi, schedule, policies and procedures) by alleviating potential organizational and planning pitfalls that can compromise academic success.

Finally, the literature also showed that PC further alleviated contextual confusion by serving as a gateway to crucial information and support. Counselors have been described as proactively sharing the information students need, such as dates and deadlines of the academic calendar. This information-sharing has been considered a source of empowerment for students by promoting informed decision-making through increased clarity on registration dates, holds, adding and dropping courses, degree planning, and transfer requirements (CCSSE, 2014). Furthermore, PC counselors have been able to provide information and referrals to students for campus and community support services to improve performance: concrete knowledge that students may not find on their own (Verny, 2012). In sum, PC clears the context of confusion

and ambiguity of the "how" in accomplishing goals by raising awareness of critical information and specialized services such as academic coaching, the second strategy identified in the literature for treating EFCs.

Benefits of Proactive Counseling for Student Success. Prior literature firmly established the benefits of proactive (intrusive) advising on student success and retention. For example, Glennen's (1975) report of an intrusive university advising program claimed that attrition dropped drastically from 45% to 6% for first-year students during the first two years of the program and resulted in fewer students on academic probation and fewer withdrawals. Ableman and Molina (2001) found that the amount of intrusiveness (required meetings) correlated to increased GPA for students on academic probation and to higher retention rates. While they discovEered that any amount of intrusiveness correlated to better academic performance, the researchers found a statistically significant increase in GPA for students on probation in a "fully intrusive intervention" compared to students in the "moderate" and "nonintrusive" interventions over three years. As well, retention rates were found to be highly dependent on the level of intrusiveness with the fully intrusive group achieving 83% retention, moderately intrusive at 65%, and nonintrusive at 57% (Ableman & Molina, 2001).

In addition, the literature showed that PC programs specifically incorporated EF support into its services for students which resulted in academic improvement. For example, Ryan and Glenn (2002) studied the benefits of incorporating academic skill building (e.g., note-taking, organization, test preparation) based on Martin et al.'s (1983) *Supplemental Instruction (SI) Program* into the intrusive counseling method and enacted a model similar to 2-4-8's proactive counseling model which included the same type of academic skill development (Rothwell & Shields, 2020). They found an increase in the one-year retention rate for students from a

historical 29% to 60% for their participants, whom they deemed at "extreme academic risk - [their] provisionally admitted freshmen" (p. 312). Ryan and Glenn (2002) took a consumer satisfaction approach and initiated their study on the observation that at-risk students are ineffective "consumers of [their] educational product" (p. 302). They concluded that increasing the academic competence of at-risk students can significantly improve retention because it improved the students' ability to increase the performance of "consuming" new information. Ryan and Glenn's (2002) study demonstrated that PC-style student support which improved students' ability to function (perform) by attending to cognitive needs and skills could increase their academic success.

Furthermore, Rothwell and Shields (2021), showed benefits to the EF of students who were enrolled in their proactive counseling program known as 2-4-8. Their recent study of the effects of participation in 2-4-8 (n =37), listed the following percentages of students' who reported increases in various EF skills over one semester: 67.74% in time-management, 61.29% in organization, 45.16% in meeting deadlines, 41.94% in test taking, and 41.94% in studying. To understand the implications of these reported improvement in EF skills among participants more fully, the authors contrasted these percentages with reported improvement in writing (19.35%) and family communication (12.90%), both skills that were not emphasized in 2-4-8. Rothwell and Shields (2021) reasonably concluded that the higher increases in EF skills over non-EF skills demonstrated the effectiveness of 2-4-8 in improving EF skills. In addition, paired-samples t-tests conducted for each academic skill produced statistically significant increases in organization and studying and there was a difference that trended in significance for time-management. Rothwell and Shields' (2021) study is noteworthy due to its consideration of PC's effectiveness in supporting EFs. For, while the researchers studied the effect of 2-4-8 on a

variety of academic skills (organization, writing, test taking, studying, time-management, professor communication, family communication, self-advocacy, motivation, and meeting deadlines), the largest benefits were seen in EF based skills: organization, studying, and time-management (Rothwell & Shields, 2021).

Finally, in addition to these academic performance benefits, PC has been shown to benefit emotional well-being. For example, PC's development of meaningful relationships and academic skills has been associated with increases in students' academic confidence and self-efficacy (Miller, 2010) and the emotional support services integral to PC have been shown to increase feelings of self-worth (Schulz et al., 2001). In addition, Donaldson et al. (2016) found that PC ensured goal completion and boosted student motivation compared to their past prescriptive counseling experiences. Similarly, PC's strong focus on building academic competency in counseling programs has been correlated to increased academic motivation, persistence, and retention rates (Ryan & Glenn, 2002).

Academic Coaching

Academic coaching (AC) is an individualized one-to-one student support strategy that seeks to empower students through instruction on study skills and troubleshooting individualized student problems with current courses (Schwartz et al., 2005) and it functions in ways similar to PC. For example, Schwartz et al. (2005) detailed how academic coaches proactively initiate frequent meetings, use an individualized approach for each student, and anticipate potential threats to student success such as impending deadlines, disorganization, or poor sleeping schedules Additionally, colleges that provided AC made it accessible on-campus in a manner similar to counseling services and involved one-to-one scheduled meetings. In these meetings, both PC and AC involved confidentiality and intended to be therapeutic (Schwartz et al., 2005).

Furthermore, AC services were seen to be individualized like PC: coaches and students formed collaborative relationships to improve time-management, planning, organization, and problem-solving related to each student's specific needs (Jaska & Ratey, 1999). Academic coaches were shown to tackle student-generated problems, such as confusion over assignments or falling behind on their current readings, much like a proactive counselor would focus on students' individual struggles regarding accommodations or course planning. Schwartz et al. (2005) also noted that the final goal of student-centeredness in both AC and PC was independence through the creation and maintenance of internal and external support structures.

However, the literature revealed that there are differences between these two support strategies. For one, counseling has been shown to be a mainstay at postsecondary institutions, while coaching has been considered an innovative student support strategy in postsecondary education. Robinson (2015), in her meta-study on the emergence of AC in higher education, identified only 109 programs in the U.S. in contrast with counseling services which she noted is integrated into all public and private 4-year and 2-year programs. A second difference shown in the literature was the scope of their respective services. Coaches were not found to explore or treat serious emotional or behavioral problems. Emotions/behaviors were not ignored, but instead were considered by their impact on academic achievement (Schwartz et al., 2005). Instead, as Parker and Boutelle (2009) explained, AC focused on student *performance*, which involved developing EF functioning such as planning and organization and academic skills such as employing learning strategies and successful note-taking. These authors highlighted this connection between AC and performance with interview data from a student participant in their study to evidence AC's focus on achieving concrete academic progress. The student explained that "[t]he coaches are very concerned about your progress. And it's very intensely about how

you are doing... I suppose that *a coach is a specialist on the process of doing something*" (p. 2010). Parker and Boutelle (2009) also quoted the student to contrast traditional counseling with AC. The student noted how a counselor will provide recommendations on "what you need to do" while a coach "will tell you … how to approach a problem differently than anyone else, that most suits you" (p. 2010). Parker and Boutelle's (2009) inclusion of student testimony on how AC supports student performance at an individual level provided richness to Schwartz et al.'s (2005) observations on how AC specifically benefits student performance.

Taking Action to Improve Performance of Executive Functioning with Academic Coaching. Dupal et al. (2017) asserted that AC's strength stemmed from its targeting of the EFCs that impede students' ability to perform. Richman et al. (2014) concurred and argued that academic coaching's ability to increase the completion of goals through taking action rendered it more effective in helping students with EFCs than didactic models of support such as tutoring and the provision of accommodations. Parker and Boutelle's (2009) also elucidated this point on ACs' effectiveness in increasing goal completion among students. They quoted one college student participant with ADHD and EFCs, who reflected on ACs unique power to manifest student action in comparison to traditional counseling:

> [Therapists/counselors and academic coaches] are similar in the fact that they ask questions, trying to gain insight. But it's different [than AC] because a counselor isn't trying to get you to a point where you want to actually take action. And that, in a way, is the goal of the coaches – *to get you to take action in some way or another.* (Parker & Boutelle, 2009, p. 210)

Parker and Boutelle's (2009) qualitative data enriched the discussion, highlighting that AC's emphasis on taking action was why it outperformed other services for students with EFCs

because it supported point-of-performance deficits. In other words, SWNPs typically may need the impetus, modeling, structure, and accountability provided by AC to perform well, more so than a review of course content or an informative checklist of to-do items.

Furthermore, Weyandt and DuPaul (2013) discussed how AC, as a performance-targeted coaching intervention, included instruction in specific academic skills: studying for tests, taking notes, prioritizing, organizing, and planning, all of which are necessary for postsecondary success. Rothwell and Shields (2020) also confirmed a focus on these "adult study skills" that occurred during meetings after the primary tasks of sending accommodation letters, buying textbooks, and reviewing syllabi are achieved. White (2017) explained how AC targeted self-regulation by providing training in stress management, problem-solving, and personal goal-setting (White, 2017). In addition, the regular accountability provided by AC elicited the motivation to succeed and overcome cognitive obstacles (Rothwell & Shields, 2020). In these performance-focused ways, according to the literature, AC sought to increase the performance of EF within individual students with EFCs.

Reducing Contextual Challenges to Improve Executive Functioning Performance with Academic Coaching. The literature revealed that like PC, AC mitigated threats to proper EF by reducing ambiguity over policies, procedures, and information in the school context. For example, according to Salaman et al.'s (2014) report titled "Optimizing Academic Advising," at-risk students lacked knowledge of college processes (e.g., withdrawal deadlines, bookstore buy backs). To address these gaps in knowledge, they recommended the coaching practices of John A. Logan College, where students were trained on how to use institutional materials like course catalogs and online registration procedures through hands-on demonstrations to create semester plans for their majors. Salaman et al., (2014) also highlighted coaches at Spokane Community

College who provided students information and guidance on navigating administrative processes such as withdrawal deadlines and bookstore policies as beneficial to students' academic performance. As described, these AC practices worked to address the "how" of performing the tasks necessary to the broader postsecondary effort such as how to review course catalogs and how to register for classes. Furthermore, Fleming and McMahon (2012) wrote that a key strategy of AC in reducing contextual challenges to offset EFCs is "amplifying relevant stimuli" (p. 357). Their examples included concrete actions such as placing calendars and reminders in obvious places or using objects or sticky notes that were easily accessible and present to the student. These intentional and student-centered actions were shown to reduce challenges in context that compromise EF to improve academic performance.

Benefits of Academic Coaching for Student Success. AC was recognized as a preeminent student support strategy to address EFCs as it was associated with improved academic performance and a reduction in the contextual challenges that can compromise academic success (Dupal et al., 2017). For example, Richman et al. (2014) reported that students with ADHD who had received coaching experienced increases in academic success. Benefits included better grades, higher GPAs, higher quality writing, more on-time assignments, and more instances of maintaining full-time enrollment. In addition, "non-traditional" first-year college students who received AC demonstrated a statistically significant positive change in retention and graduation rates as well as significant gains in self-regulation (Clouder et al., 2020; Bettinger & Baker, 2011; Field et al., 2010).

Furthermore, the literature revealed that AC provided the additional benefit of reducing negative emotions. Parker and Boutelle's (2009) study on coaching for students with ADHD found that "coaching had a profound impact on [students'] ability to modulate negative emotions

that appeared to arise from their executive functioning difficulties" (pp. 212-213). They quote Erika, a college student with ADHD:

> I really love how relaxed I feel when I get out of coaching. How I know that I'm on top of everything. It's kind of like, through the week of doing everything and getting more assignments, it kind of feels like I'm holding up this big roof. Like I'm a pillar holding up all this stuff. After I go to coaching and I realize that I can get everything done, it's like this weight is released. I'm much more relaxed. (p. 213)

Richman et al. (2014) noticed the same benefit that coaching had in overcoming negative emotions. They a college student who stated that coaching had helped him with discouragement, thus improving his persistence toward success:

> I guess [coaching] may have removed the guilt. You know, you waste a Saturday, you play video games, you watch basketball, and you do absolutely nothing. That's not something to be humiliated over and you can't dwell and can't let yourself be damned for one bad day. (p. 41)

This additional benefit of reducing emotions that threatened students' goal completion was an extra layer of AC's ability to ensure the maximum level of proper EF for SWNPs' success.

Locally Recognized Benefits of PC and AC for Retention

Locally, both proactive advising and coaching were considered best-practices to improve success for underrepresented populations and to improve overall retention. For example, Daniels et al. (2019) listed both services as paramount in recommendations to Virginia Community College System (VCCS) on how to increase completion rates for underrepresented populations. The leading recommendation of the eight contributing authors, which included three academic deans, was entitled "The Solution, Part I: Proactive Advising." In addition, the use of "Student

Success Coaches" was their main recommended means of improving retention under a section entitled "What Works for Our Students." Daniels et al. (2019 described how academic coaches are able to tackle academic problems through active student monitoring, scholarship searching, developing SMART goals, and alerting students to exam study sessions. In addition, they provided the following results from the use of student success coaches at Paul D. Camp Community College:

> 70% of students with a GPA above 2.0; (b) 134 degrees, diplomas, certificates, or other credentials have been earned; (c) over $235,000 in scholarships awarded; and (d) 3-year average retentions rates: fall to spring (77.86%) and fall to fall (49.46%), which consistently exceed the VCCS and PDCCC rates by 7% to 18%." (Daniels et al., 2017, p. 6)

Furthermore, Daniels et al. (2019) explicitly called for an increased number of both success coaches and proactive advisors "system-wide." As evidence for this recommendation, the authors quoted a study by The Joint Legislative Audit and Review Commission (JLARC), a group that provides oversight of state agencies on behalf of the Virginia General Assembly: "Increasing the number of academic advisors or college success coaches was the most commonly identified approach to improve student success across the VCCS, selected from 14 approaches by 28 presidents and vice presidents" (Joint Legislative Audit and Review Commission, 2017, p. 21). In agreement with Daniels et al. (2019), Burge-Hall et al. (2019) also advocated for "proactive monitoring and response to barriers" and "pre-enrollment, post-enrollment and post-first year advising" in their report of recommendations to improve advising capacity in VCCS. These state-wide recommendations to VCCS to increase proactive counseling and academic

coaching aligned with the value placed on both services by the literature previously presented in this review such as Ableman and Molina (2001), Dupal et al., (2017), and Richman et al. (2014).

Environmental Barriers of Postsecondary Students with Neuropsychiatric Conditions

This section explores the literature regarding the postsecondary experience of SWNPs from a social model perspective, which takes into account society's unwillingness or inability to acknowledge and remove environmental barriers for those who experience disability, as well as misperceptions of individuals with impairments as being less able (Haegele, 2016; Forham, 2009). After a discussion of the environmental barriers of stigma, nondisclosure, and exclusion, strategies to combat these barriers such as raising faculty awareness, peer support, and improvement of services are presented.

Stigma

In general, social stigma of mental illness was seen in the literature as a common risk factor for people with neuropsychiatric conditions and represented the greatest barrier to psychosocial adaptation, more so than the psychiatric condition itself (Corrigan & Matthews, 2004; Gelbar et al. 2014). As McReynolds and Garske (2003) stated, "perhaps the greatest barrier for persons with a psychiatric disability to achieving psychosocial adaptation is not the disability, but rather the stigma attached to it by members of society" (p. 14). Public stigma has been shown to arise from an entanglement of social barriers encountered on college campuses that have the potential to negatively impact SWNPs' success (Trammell, 2009). For example, faculty and administrators were reported to have misperceptions regarding SWNPs' ability to function and thrive in the postsecondary environment (Gutman et al., 2009). Peers and faculty were shown to have advised them to discontinue studies if their neuropsychiatric symptoms or characteristics arose and some SWNPs were reported to have faced bullying or social exclusion

(Blacklock et al., 2003; Gelbar et al., 2014). In addition, public stigma was shown to involve a multiplicity of variables directed at the victim including social distancing, faculty attitudes of inferiority regarding SWNPs, exclusionary sentiments, negative affect, perceptions of dangerousness, and a belief that these students should keep their diagnoses secret (Pescosolido & Martin, 2015). Encounters with such stigmatic variables were shown to be associated with peer conflict and feelings of inferiority, alienation, and isolation in SWNPs (Megivern et al., 2003).

Furthermore, public stigma was associated with self-stigma in which individuals internalized the negative attitudes and shame held by society (Gorman et al., 2023). Students were shown to self-stigmatize, felt that they did not belong in advanced degree programs, and feared a lack of understanding along with stigma from staff, faculty, friends, and family (Getzel, 2008; Quinn et al., 2009; Storrie et al., 2010). In addition, these experiences and the internalization of stigma were related to negative impacts on academic performance and a general increase in student distress, whether stigma occurred inside or outside the classroom (Guarneri et al., 2019).

Recent studies have reported that stigma of students with psychiatric conditions remains a problem in postsecondary education. For example, although Gorman and Brennan (2023) stated that quantifying stigma on college campuses was considered difficult due to a multiplicity of variables involved, they nevertheless found a correlation between public stigma and lower self-help behaviors and confirmed a current prevalence of stigma at colleges. They also noted that while Lipson et al.'s (2019) study found increased utilization of MH supports on college campuses, a problem of stigma at universities regarding students with disabilities remained present. Eisenberg et al. (2009) postulated that a persistent pervasiveness of stigma could be due to "dangerous" and "unstable" stereotypes regarding MH that were related to campus violence

(Eisenberg et al., 2009). Overall, stigma was seen in the literature as a complex issue and was considered the most common and pervasive barrier for students with psychiatric conditions and best understood as an outcome of prejudice (Blacklock et al., 2003; Gorman & Brennan, 2023).

Nondisclosure

Influenced by Stigma. One significant consequence of stigma experienced by individuals with neuropsychiatric noted repeatedly in the literature was nondisclosure (Collins & Mowbray, 2005; Clouder et al., 2020; Trammel 2009b; DaDeppo, 2009). In fact, the fear of stigma was cited as the most frequent reason that students with psychiatric disabilities decided to not disclose their diagnoses in college (Collins and Mowbray, 2005). Similarly, stigma through the abnormalization of students with neurological conditions such as ASD and ADD/ADHD correlated to nondisclosure (Clouder et al., 2020). It was postulated that students who did not disclose may have been attempting to avoid negative stereotypes of disability, such as misperceptions regarding their academic ability, peer judgment, and/or increased anxiety and self-doubt (Trammell, 2009a). Furthermore, Wiener and Wiener (1997) hypothesized that students may perceive disclosure as a “punishment” and therefore chose nondisclosure, thereby forgoing the accommodations that could help them succeed (p. 5). Punitive associations with disclosure were tied to its public nature: The act of disclosing and the resulting accommodations essentially publicize a person’s “disability” and were seen as a metaphorical “red shirt” that immediately assigned a label of otherness (Trammell, 2009b). Within this context of potential othering, one study found that only 17% of students in postsecondary education with diagnoses actively sought and received accommodations compared to 94% of high school students (Cortiella & Horowitz, 2014).

Disparity in Support between K12 and College Environment. In addition to stigma, an additional reason given for low disclosure rates among SWNPs in postsecondary education was the requirement for self-disclosure on the part of the adult student, a new responsibility for them which had previously been handled by parents and staff during their K12 education (DaDeppo, 2009). Along these lines, Weyandt and DuPaul (2006) questioned whether the mature skills and confidence necessary to maintain a sophisticated disability identity were fully developed in college-age students, leaving them unprepared to shoulder their new responsibility to disclose. Overall, low rates of disclosure by SWNPs in college was considered a serious transition issue for these students as they entered the college environment (Boularian et al., 2018).

Invisible Disability. Furthermore, nondisclosure was seen to contribute to the phenomenon of invisible (hidden) disability *(*Megivern et al., 2003*).* An invisible disability is a physical, psychiatric, or neurological condition that can challenge an individual's activities, cognition, emotional state, or activities and is not visible to others (IDA, n.d.). Examples of invisible disabilities include conditions prevalent among SED clients, such as psychiatric conditions (depression, anxiety disorder, BPD, schizophrenia, PTSD) and neurological disorders (ASD, ADD/ADHD, dyslexia, dyscalculia, and specific learning disabilities) (Oslund, 2013). Studies found that students with these types of conditions far outnumbered other students who qualified for accommodations (Goodwin, 2020; Raue & Lewis, 2011) and yet only 17% of them nationally disclosed (Cortiella & Horowitz, 2014). Related, in a study on barriers to higher education for SED clients, it was found that only 3.5% of these student participants with hidden disabilities reported disclosing to their colleges (Megivern et al., 2003). As a result, these students' needs remained hidden and unsupported by their postsecondary institutions and faculty,

staff, and peers, all of whom were likely unaware that these students were experiencing unique challenges and may have considered them lazy or trying to cheat the system (Wiener & Wiener, 1997). To this point, Barnard et al. (2008) showed that faculty who were unaware of students' hidden struggles were not prepared to make informed decisions on implementing their accommodations. These students' struggles may not have been apparent to faculty, and they may not have fit into faculty members' "schemata of disability" (p. 169). Overall, there was a significant lack of understanding of these students' difficulties within the ecology of postsecondary education (Goodwin, 2020).

Exclusion and Lack of Integration

Discrimination. Historically, institutional policies in higher education have served to exclude students with psychiatric disorders. For example, Pavela (1985) addressed mandatory psychiatric withdrawal policies in the 1960s-1980s and references *Aronson v. North Park College* (1981) as a clear example of exclusion based on negative perceptions of personality test scores and psychiatric conditions. At the time, the college mandated personality tests for all incoming students, follow-up counseling sessions for those whose scores were "deviations from the norm," and possible dismissal according to the following policy:

> The institution reserves the right to dismiss at any time a student who in its judgment is undesirable and whose continuation in the school is detrimental to himself or his fellow students. Such dismissal may be made without specific charge. Students who have been suspended or expelled will receive no refund of money paid to the school. (*Aronson v. North Park College*, 1981)

These policies led to the forced dismissal of one student, Lillian Aronson, after she protested continued mandatory counseling related to her personality test scores. Based on her

protest and data collected via questionnaires and interviews, the school's counseling department declared Aronson to have a "pronounced, chronic paranoid condition which will be a serious detriment to herself and others [and her unwillingness] to involve herself in treatment [which] therefore at this time renders herself untreatable" (*Aronson v. North Park College*, 1981). This determination led to her forced withdrawal, and she was eventually awarded $22,321.60 due to a "violation of plaintiff's constitutional rights." (*Aronson v. North Park College*, 1981).

University policies specifically targeting students with MH concerns continued into the 1990s. In her defining and summative book on SED, the *Handbook on Supported Education: Providing Services for Students with Psychiatric Disabilities* (1998), Karen Unger consolidated court cases concerning the violation of the civil rights of students with psychiatric disabilities during this time. For example, in 1991, the Department of Education Office of Civil Rights (OCR) found the Pennsylvania State University to be in violation of Section 504 of the Americans with Disabilities Act (ADA) due to their policy of holding admission applications of students suspected of having a psychiatric disability and requiring medical records and a personal interview before admission (Kincaid, 1994, as cited in Unger, 1998). Similarly, in 1993, a dean at Skagit Valley College was found to be in violation of Section 504 when he denied the readmission of a student who had been disruptive, even after receiving requested documentation from the student's health care providers showing her healthy status. Other courts in the 1990s upheld universities' policies of requiring conditions upon readmission of students with behavior issues and/or psychiatric conditions which included psychotherapy, medication management, monthly physician reports, and reports of successful treatment (Kincaid, 1994, as cited in Unger, 1998).

During this time, Kessler (1995) reported that 4.29 million people with a psychiatric disability had dropped out of college, representing 86% of this population. This high dropout rate is in part explained by biases regarding the nature of MH and a belief that such problems should exclude a person from higher education: the removal of students with MH issues was considered the most therapeutically and educationally appropriate course of action at the time (Hoffman & Mastrianni, 1989). Other environmental barriers included interpersonal discrimination by faculty and peers, lack of provision for and information on MH services on campus, and nondisclosure due to fear of stigma (Loewen, 1993; Unger, 1994; Wiener & Wiener, 1996).

In the 2000s, however, the literature showed a shift on college campuses from discriminatory practices to concern over MH treatment which is attributable to advocacy efforts and administrative leadership (Collins & Mowbray, 2005). Studies confirmed that growing awareness and familiarity with SWNPs and their issues might contribute to a decrease in stigma and discrimination and more comfortability of faculty in working with students with psychiatric disabilites (Corrigan et al., 2003; Brockelman et al., 2006). Recently, MH support has increased on campuses due to a significant increase in the enrollment of students with preexisting MH conditions, a doubling in the utilization of on-campus MH services between 2007-2017, and a six-fold increase in counseling center appointments (Lipson et al., 2019; Xiao et al., 2017). Overall, it was estimated that one third of college students in the United States meet criteria for a significant MH problem (Lipson et al., 2019). However, while universities were shown to be demonstrating a willingness to include rather than exclude, the stigma at the root of exclusion was found to be pervasive on contemporary college campuses (Lipson et al., 2019; Gorman & Brennan, 2023). Attrition of SWNPs continued to be viewed as a problem as shown by dropout rates of 64% for college students with mental illness (NAMI, 2012), 37% for students with ASD,

38.8% for students with ADD/ADHD (Farmer et al., 2015), 47% for those with schizophrenia, and 70% for those with BPD; by comparison, the overall dropout rate is 27% (Farmer et al., 2015).

Lack of Faculty Awareness and Training. The literature revealed that a lack of faculty awareness, training, and negative attitudes were also factors that contributed to the exclusion of SWNPs and constituted major barriers to their success (Blacklock et al., 2003; Belcher, 2011). **S**cholarship from the 1990s-2000s identified factors that led to stigmatization, such as informational and attitudinal barriers that resulted in knowledge and understanding gaps in faculty regarding students receiving accommodations, a lack of awareness of the rights and needs of SWNPs, and the inability and unwillingness to accommodate them (Bento, 1996; Dowrick et al., 2005). Other barriers included faculty feelings of anger toward SWNPs, beliefs that they were incompetent and that they should be excluded from campus (Belch, 2011). Additionally, studies found an unwillingness among faculty to follow legal requirements of accommodation implementation (Dowrick et al., 2005; Kurth & Mellard, 2007). Along those lines, Wolanin and Steele (2004) noted specifically that "faculty [were] often ignorant about their responsibilities and about how to relate to students with disabilities" and resented being legally mandated to follow accommodations without being allowed to question their legitimacy (p. ix).

More recent studies continued to show a lack of awareness in faculty regarding SWNPs. For example, Brockelman and Scheyett's (2015) study to assess faculty knowledge on students with mental illness and use of strategies to support them found that 50% of faculty reported that they did not witness a single instance of common mental illness symptoms (such as withdrawal due to depression) in the entire past year, despite 15% of students having a MH condition. Furthermore, the same study found that over 40% of respondents reported little familiarity with

personality disorders, paranoia, and schizophrenia. The researchers concluded that faculty may not be able to recognize warning signs or symptoms of mental illness due to faculty knowledge deficits and that faculty ignorance regarding psychiatric conditions warranted further study. Tipton and Blacher (2014) found similar knowledge deficits in faculty as well as misinformation among them regarding students with ASD.

However, recent studies have also indicated an increasingly supportive stance and willingness of faculty to support SWNPs (Brockelman & Scheyett, 2015). For example, Sniatecki et al. (2015) found the presence of positive beliefs among faculty regarding the academic abilities of students labeled with disabilities across three student groups: 96.7% held positive beliefs for those with physical disabilities, 90.2% held positive beliefs for those with learning disabilities, and 82.9% held positive beliefs for those with MH disabilities. In addition, the doubling in the utilization of on-campus MH services between 2007-2017 noted by (Lipson et al., 2019) and the six-fold increase in counseling center appointments in recent years (Xiao et al., 2017) pointed to an increased awareness of and services for SWNPs. However, the contrast found in Sniatecki et al.'s (2015) data between positive attitudes toward physical disabilities (96.7%) compared to those with invisible disabilites such as SWNPs (82.9%) demonstrated a continued lack of awareness of the challenges of SWNPs among faculty and indicates that a systemic prejudice against SWNPs remains.

Significantly, a lack of faculty awareness and the inability to accommodate learner variance and their associated negative attitudes were correlated specifically to a lack of faculty training (Belch & Marshak, 2006). As one study's faculty respondent explained, "Due to the lack of training, most instructors do not understand how to work with students who have a psychological disability, and do not care to learn" (Collins & Mowbray, 2005). This lack of

training regarding SWNPs was shown to manifest as uneasiness and fear of violence in faculty and staff and increased hesitancy to work with these students. Gaps in knowledge of effective teaching strategies which could impact SWNPs' academic performance were also noted (Belch, 2011). Collins and Mowbray (2005) attributed these gaps in faculty knowledge to a lack of educational presentations for faculty and distribution of materials to the broader university community on SWNP. In fact, faculty members themselves reported that their training regarding students with SMI was inadequate (Brockelman et al., 2006; Collins & Mowbray, 2005). In addition, the need for training and resources was shown to extend beyond faculty to student affairs staff and administrators (Kitzrow, 2003).

Lack of Coordinated and Funded Resources. Dowrick et al. (2005) reported the need for improved coordination of support services across campuses as there tended to be a reliance on individual counselors for urgent matters. In addition, their study revealed a lack of coordination between service providers on and off campus for psychiatric services, health insurance, student affairs, and offices of disability support, which were seen to have a negative impact on students' functional experiences due to the extra effort required to seek out services (Blacklock et al., 2003). This lack of coordination between services was also described as "fragmented services" (Jaworska et al., 2016). In addition, the lack of connection between community MH professionals and campus staff was considered a significant threat to the success of SWNPs (Megivern, 2001). For example, the refusal to provide ongoing coverage for critical MH incidents by campus staff, as well as lack of knowledge on emergency services by faculty, staff, and students, were reported as problems for student support service delivery (Belch & Marshak, 2006).

In addition to a lack of coordination in services, the literature cited a lag in funding and capacity for MH services: an increased demand between Fall 2009 and Spring 2015 of 30-40% for services far exceeded a 5% increase in enrollment, and appointment averages per individual increased from 4.35 in 2019-2020 to 5.22 in 2020-2021 which represented an increase of 20% (CCMH, 2021). These increases were shown to heighten the Clinical Load Index (CLI), which is a ratio representing the number of clients per counselor per year. Higher CLI scores were reflected in negative impacts such as reduced treatment and less effective care, accompanied by assertions of a MH "crisis" at universities and a potential need to rely on external resources (CCMH, 2021). Furthermore, universities have been challenged in meeting the high demand for MH support due to piecemeal funding and budgetary constraints, particularly at smaller institutions (Jaworska et al., 2016). In general, Xiao et al. (2017) reported that compared to established and specific academic support programs for students with ASD and a small number of colleges, few postsecondary institutions provided MH and wellness support for them. In addition, recent studies showed that both human and financial resources were still insufficient on campuses, not efficiently promoted or accessible, and had few open time slots and long waitlists for counseling appointments (Giamos, 2017).

Environmental Support Strategies: Addressing Environmental Barriers to Increase Inclusion

Studies suggested that a multifaceted approach that included raising awareness through educational and environmental efforts and support for students, peers, and faculty within a community support model was required to overcome environmental barriers such as stigma, nondisclosure, a lack of faculty awareness and training, and uncoordinated/underfunded resources (Belch, 2011). The literature indicated that a multifaceted approach should include

campus-wide initiatives to raise awareness, faculty and staff training, peer support, improved coordination of services, and anticipatory instructional approaches, as discussed below.

Faculty Training to Reduce Stigma and Increase Awareness and Integration

Faculty and staff training regarding the needs and characteristics of SWNPs was considered a primary means of combating stigma. For example, training and workshops on disability issues and instruction such as universal design were shown to positively impact faculty perceptions of SWNPs (Lombardi et al., 2011; Dowrick et al., 2005). In addition, presentations on disability rights and the need for accommodations helped dispel low expectations of SWNPs (Sniatecki et al., 2015, Dowrick et al., 2005). It was postulated that faculty may simply be unfamiliar with resources and therefore education on available services for MH could enhance their confidence in their one-to-one dealings with SWNPs (Becker et al., 2002). To this point, Stein et al. (1994) asserted that the training faculty might be as important to SWNP's success as the provision of direct support services. In support of this notion, Becker et al. (2002) stated that the key to improving the postsecondary experience of students with disabilities was in "developing the will, dedicating the resources, [and] finding the most effective way of educating faculty and students" (n.p.). These authors also advocated the use of resources to integrate SED programs on campus as a means to increase awareness and reduce stigma through community education.

Peer Support to Reduce Stigma and Increase Awareness and Integration

Based on their findings of exclusion experienced by SWNPs, Megivern et al. (2003) recommended providing trained peer mentors for SWNPs who could build trusting relationships and help maintain motivation while also serving as de facto academic coaches by sharing their knowledge of study skills, course scheduling and selection, and problem solving. Hafner et al.

(2011) found that peer mentors could increase SWNPs' opportunities for social interaction and integration and thereby directly combat stigma and negative self-perceptions. In addition, Belcher (2011) found that peer mentorship programs increased awareness in faculty and the student body. Furthermore, peer support was associated with increased resilience and retention among SWNPs since it provides social support for adjustment to college (Hartley, 2010). Social adjustment, importantly, was found to be a predictor for graduation for students with psychiatric diagnoses (Collins, 2000; Knis-Matthews et al., 2007). Additionally, SWNPs reported boosts in self-confidence and self-worth and new social relationships from peer programs due to assistance with problem solving and information related to the college environment (Blacklock et al., 2003).

Instructional Initiatives to Accommodate Nondisclosure

An additional approach to dealing with the problem of nondisclosure found in the literature was to alter instructional approaches and adjust the learning environment to be more universally applicable to all learners. One approach is the "anticipatory duty" of the United Kingdom's Disability Discrimination Act (2010) which arose from an expectation that a portion of incoming students with disabilities will not disclose due to a fear of stigmatization. The duty requires universities to anticipate the participation of students with disabilities such as SWNPs even if a school may believe it has no current students with disabilites (Matthews, 2009). This anticipatory duty involves proactively identifying and removing barriers to success without reference to specific conditions to help students overcome disadvantages. Studies show that these efforts have resulted in an increasingly inclusive environment that promotes a sense of belonging that lessens the need for special accommodations and the associated stigma of disclosure. For example, between 2017-2019, professors who proactively provided audio/video recordings for

more than half of their lectures to all students, (as opposed to placing the responsibility to record onto students with accommodations), had increased from 23% to 39% and universities with written policies for inclusive curriculum design/ Universal Design for Learning increased from 51.8% to 42.9% (Williams et al., 2019). To enact these types of environmental changes, for example, at Oxford University, a “disability lead in each [academic] unit” was responsible for ensuring that issues of accessibility and inclusivity are considered in planning cycles (University of Oxford, n.d., n.p.). In addition, professors explicit adjustments in instruction to increase inclusion and offset potential nondisclosure included providing teaching materials in advance to students, flexible deadlines, audio and video recordings of lectures, note-takers, permitted absences, provision of materials in alternative formats, and designated seating arrangements (University of Oxford, n.d., n.p.). Similar to the anticipatory duty approach in the United Kingdom, that transition pedagogy approach to student success in Australia involved embedding study skills and academic coaching within first-year classes for all students to universalize EF and academic skill support for better academic performance (Kift, 2005). Implementation of transition pedagogy has been associated with a range of benefits for students, including increased retention, engagement, motivation, and empowerment through increased agency and self-efficacy (Kift et al., 2010; Krause & Coates, 2008; Kift, 2013; Kift, 2017).

Both the anticipatory duty concept and transition pedagogy provided frameworks that could be applicable to the training of American faculty. They could help incorporate principles of Universal Design for Learning in American postsecondary education, an instructional framework that can help promote the learning of students who choose to not disclose due to stigma (Lombardi et al., 2011; Dowrick et al., 2005). These approaches directly addressed the challenges in the postsecondary landscape and could “eradicate some disabled students' ‘special’

needs altogether" (Tinklin et al., 2004, 649). These strategies for success embodied the social model for student support and avoided reliance on diagnoses and the medical model by seeking to directly alter the environment for inclusion.

Improved Coordination of Existing Services

Dowrick et al.'s (2005) study involved focus groups of students and graduates with disabilities across 10 universities and revealed that a lack of coordination between the administration and schools' disability support services was a primary concern. Participants believed that better coordination could result in the minimization of physical barriers created by repairs and construction, ensure the delivery of required assistive technology, and better prepare faculty to provide appropriate accommodations. Participants also emphasized the need for medical professionals and disability support staff to utilize a common language on disability related issues to ensure prompt and appropriate support (Dowrick et al., 2005). In addition, increasing the collaboration of MH services in the environment such as counseling, campus health, disability support, and community MH services was considered a determinant in the success of SWNPs (Blacklock et al., 2003). Furthermore, it was shown that coordination between services could be improved by developing shared policies across agencies that address specific psychiatric issues such as medical leave, withdrawal, and parental notification over the initiation of hospitalization due to MH symptoms. Collaboration between agencies and the coordination of action was proposed as a means to help maintain the integration of the student in the landscape while they address personal challenges (Belcher, 2011).

Conclusion: Toward Empowerment and Inclusion

This literature review has taken a postmodernist approach that embraces the multidimensionality of disability at the intersection of the medical and social models of

disability. This inclusive theoretical lens has allowed an examination of both the individual/internal challenges and the environmental/external barriers faced by SWNPs as they encounter and interact with postsecondary education. The literature has shown that by honoring and recognizing potential areas for personal development in a student according to the medical model, such as acquiring effective EF skills, strategies such as PC and AC can empower them in their interactions with the environment. Simultaneously, by recognizing and attempting to remove barriers in the environment according to the social model, such addressing stigma in the environment, strategies such as faculty training and peer mentor programs can serve to equitize the landscape for an inclusive path toward student success.

Chapter 3

This research project utilized a descriptive case study design to understand the individual challenges and environmental barriers faced by SED clients in postsecondary education to identify support strategies for their success. Data collection included individual interviews with SED specialists, researchers, and scholars, follow up member-checks for clarification of interviewees' statements, and document collection. Analysis of the data generated findings that will help stakeholders of the local SED program better understand how to support their student-clients. The findings answered the following research questions and informed the recommendations provided in Chapter 5 for the local SED program.

- Research Question 1: According to Supported Education specialists and experts, what individual challenges do SED clients experience related to postsecondary education?
  - Research Question 1a: What support strategies do Supported Education specialists find helpful in mitigating these challenges?
- Research Question 2: According to Supported Education specialists and experts, what external barriers do SED clients experience in the postsecondary education environment?
  - Research Question 2a: What strategies do Supported Education specialists find helpful in overcoming these barriers?

Study Design

The descriptive case study approach of this project used interviews and document collection to describe the phenomena of SECs' challenges and barriers within the context of postsecondary education (Yin, 2013). This approach was appropriate for this project's exploration of the ongoing and natural context of SED and the steps that participants take to minimize student attrition (Creswell, 2009; Hancock & Algozzine, 2017). The inductive process

of the qualitative case study method allowed insight into the processes that help or hinder clients' school success by accommodating a complexity of viewpoints from which themes of significance for the Problem of Practice could be drawn (Creswell, 2009). As a final particular feature, this study represented change effort research which uses *naturalistic generalization*, research that evokes vicarious experience based on the emic issues of individual cases to produce recommendations for program improvement (Stark & Trumbull, 1982).

Study Context

Services of Supported Education

In Supported Education (SED), Supported Education specialists (SES) provide educational support services for individuals with Serious Mental Illness (SMI) in integrated postsecondary settings (Ellison et al., 2013). In SED, SESs assist clients in developing educational goals and provide counseling and supportive action (such as completing financial aid, applying to a school, and/or enrolling in classes) to help clients achieve these goals (Ringeisen et al., 2015). The model is derived from Supported Employment, a service that similarly seeks to assist clients with employment objectives as part of MH rehabilitation. The first SED program launched in the early 1980s through a federal demonstration grant at Boston University Center for Psychiatric Rehabilitation. This was followed by SED programs funded by the Massachusetts Department of Mental Health and the California community college system and Department of Mental Health in the 1990s (Waghorn et al., 2004). Programs then proliferated in the 2000s. For example, Virginia Commonwealth University piloted an SED program in 2001, which has since evolved into an individualized student support program called ACE-IT for persons with intellectual disabilities (ACE-IT, 2022). Likewise, the Michigan Supported Education Program test-piloted in the 1990s was implemented soon at Wayne County

Community College's downtown Detroit campus and Henry Ford Community College in Dearborn, MI (Mowbray, 2000). Additional examples during this time include the CAUSE and Career Advancement Resource (CAR) in Massachusetts, Supported Education Enhancing Rehabilitation (SEER) in Washington, Redirection through Education (RTE) in Ontario, Canada, New Beginnings School (NBS) in Kansas, and Tri County Scholars in Michigan. Together these programs included clubhouses, college campuses, and mobile services, and received funding from the state, community agencies, or educational institutions (Mowbray, 2004). Programs continued to be established over time, such as the National Institute of Mental Health's SED initiative as part of the Recovery After Initial Schizophrenia Episode (RAISE) project in New York in 2013 (Becker et al., 2015). In addition, there are currently SED programs in Oregon (11 programs within 11 counties) (OSECE, 2022), five regional SED providers recognized by the Department of Mental Health and Addiction Services in Connecticut (DMHAS, 2022), the Helping Youth on the Path to Employment (HYPE) at the University of Massachusetts Medical School (HYPE, 2022), as well as the local SED program of this project in Virginia.

The Local Program

The local SED program was founded in circa 2013 as an extension of a Supported Employment program that is administered through a contract between the county government and a non-profit. At the time of this writing, I serve as the one SES for SECs who are referred for education services by case managers in the county's Department of Behavioral Health. In addition to myself, one of the participants of this study, Chris, serves as an SES and a Supported Employment Specialist for county teens and young adults experiencing first-time MH crises. Additionally, we work alongside three other Supported Employment Specialists who provide employment services while we offer SED services. Together, we are part of an interdisciplinary

county team, collaborating with psychiatrists, psychologists, case managers, therapists, social workers, and other related staff to support county adult clients dealing with SMI. Our services take a case-management approach that requires the creation of case notes within 24 hours of all staff/client interactions, which notes are shared securely via the Welligent database and adhere to stringent HIPAA guidelines. Since its inception, the local program has seen substantial growth, expanding from 1-3 SED clients a decade ago to 15-30 clients in recent years, with the current count at 15 as of the time of this writing. The program's framework was developed using the SAMHSA Toolkit, as discussed in Chapter 1, and provides pre-enrollment and post-enrollment support to SECs. Pre-enrollment support includes helping SECs choose postsecondary goals and programs, apply to programs, and enroll in classes, access financial aid, and disclose for accommodations. Post-enrollment support includes helping SECs with calendaring, planning, and accessing campus resources; monitoring SECs' progress in classes; and providing academic coaching (SAMHSA, 2011b).

Participants

After receiving IRB approval, I selected participants due to their unique professional capacity, experience, and expertise to provide qualitative data regarding the individual challenges and environmental barriers of SECs in postsecondary education. No incentives were offered, and participants were identified through publicly available online information and contacted via email, resulting in 11 interviewees who are referred to throughout this project by pseudonyms shown here in Table 1:

Table 1

Summary of Study Participants with Pseudonyms and Descriptions

SES Practitioners	
Abby	Abby has a 37-year career encompassing a diverse background in MH, special education, and foster care. She has been an SES for four years, assisting SECs aged 22-68, many of whom have experienced homelessness or involvement in the court system. Her work includes providing educational support, such as GED and refresher courses, and developing clients' soft skills for social interaction. Her additional expertise includes harm reduction, crisis intervention, and non-violent restraint, with recent experience as a Work Incentive Practitioner (WIP). WIPs are certified professionals dedicated to helping individuals with disabilities navigate the complex world of disability benefits and work incentives. In this role, she provides personalized counseling and support to help individuals achieve their employment goals and maximize their financial well-being. She holds a B.S. in Psychology.
Chris	In his role as a Supported Employment and Education Specialist (SEES), Chris has worked with 32 clients diagnosed with schizophrenia and was actively assisting 15 First Episode Psychosis (FEP) clients in their pursuit of employment and education. Previously, he has served as a home-based counselor for young adults with emotional disorders and as a Therapeutic Day Treatment Specialist for elementary students, and held supervisory roles in a medical call center, an adult group home, and a juvenile shelter. Chris holds a B.A. in Psychology and completed additional graduate courses in education.
Julia	Julia is an experienced SES with five years in her current position, where she typically manages between 17-25 SECs on her caseload at any given time. This amounts to experience with approximately 100 SECs during her time working as an SES. In her previous role, she served as a counselor at a crisis intervention facility for children aged 6-17. This experience, she stated, significantly shaped her approach, endowing her with creativity and resilience that have been pivotal in her ten years in the field of MH. Julia holds a B.S. in Psychology.
Renee	Renee has one year of experience as an SES and is actively involved in two volunteer positions with psychology research projects at a university, primarily focusing on data work. In her previous role as a Teacher Assistant at a special education school for students with ASD she collaborated with teachers to implement students' individualized behavioral plans and modified instruction to accommodate students' different learning needs in subjects such as math, English, life skills (cooking, budgeting, shopping), and job coaching. In addition, she has previous experience mentoring individuals in various settings, including group homes, in-home, and in the community. Renee holds a B.A. in Psychology.

Supervisors of SES Practitioners	
Ann	Ann has worked for seven years as a supervisor of 10 county Supported Employment and Education programs. Together with Jackie, she supervises and supports a total of 15 SESs which include three of the other participants in this project: Abby, Julia, and Renee. She is also a Statewide Trainer with an Individual Placement and Support (IPS) Supported Employment team. She holds a B.S. in International Business and has previous employment as a Supported Employment Specialist for six years, with a focus on aiding rural communities.
Jackie	Jackie holds an M.Ed. in Special Education and Teaching and has completed postgraduate coursework in Vocational Rehabilitation Counseling. Like Ann, she is a supervisor for 10 county Supported Employment and Education programs in the Northwest. She is also a statewide Supported Employment and Education trainer for individuals and agencies. Her 30-year career in counseling and rehabilitation includes eight years as an SED and Supported Employment program supervisor in the Midwest and 17 years as a special educator facilitating assessments, Individual Education Plans, and developing individualized curriculums and skill-based programs.
SED Researchers and Scholars - University in the Northwest	
Diane	Diane is the co-developer and training director of an on-campus Supported Employment and Education program alongside Melissa. She holds a M.S. in Psychiatric Rehabilitation and is both a Certified Rehabilitation Counselor (CRC) and a Certified Psychiatric Rehabilitation Practitioner (CPRP). Her career includes experiences providing education, employment, and career support for individuals with SMI. She has also led projects funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) and SAMHSA at a major university’s Center for Psychiatric Rehabilitation. Additionally, she developed online training curricula and directed a psychiatric vocational rehabilitation program that won the 2002 RSA Commissioner’s Award. Her expertise also includes developing vocational peer support manuals and training practitioners, administrators, and peers in psychiatric rehabilitation.
Melissa	Melissa is the co-developer of an on-campus Supported Employment and Education program alongside Diane. She is also the Principal Investigator of projects funded by NIDILRR at a university’s medical school's Department of Psychiatry. She holds a Ph.D. in Social Welfare and an M.S. in Rehabilitation Counseling. In her previous work, she has directed Community Psychiatric Support Programs, focusing her work on interventions for college students with psychiatric conditions, standardizing MH support services, and evaluating cognitive remediation and career development strategies. In addition, Melissa has experience developing career services integrating Supported Education and Employment in New Jersey, New York, and Pennsylvania, and has consulted on program development and systems change internationally.

SED Researchers and Scholars - University in the Mid-Atlantic	
Kerri	Kerri recently launched a private practice providing counseling to college students with MH challenges and previously held positions as a Research & Intervention Coordinator and Community Inclusion Specialist for six years. Her research role involved collaboration with another participant, Matt, at a major Mid-Atlantic university, where she provided individualized support to students with SMI and acted as a facilitator and co-designer for a study on campus engagement. Kerri holds an M.S. in Therapeutic Recreation/Recreational Therapy and a B.A. in Theatre. Additionally, her personal experience with MH in higher education uniquely positions her as an empathetic expert on the experiences of SECs in postsecondary education.
Matt	Matt is a distinguished professor and former department chair at a College of Public Health. He is recognized for his significant contributions to supporting individuals, especially college students, with MH challenges. He holds a Ph.D. in Clinical/Community Psychology and has been the director of a notable Research and Training Center on Community Living and Participation for People with Serious Mental Illnesses since 2003. This collaborative initiative focuses on rehabilitation, integration, and community inclusion. Over his career, Matt has garnered over $30 million in federal grants and published over 150 works on students and others with psychiatric disabilities. Additionally, his media presence, including appearances on CNN and NPR, has raised awareness about MH in academia.
Former SES practitioner, Researcher, and Scholar	
Tom	Tom holds a Ph.D. in Social Welfare and an M.S in Social Work and has extensive expertise and experience in the field of Supported Employment and Education. He was a co-author of *The Supported Education Toolkit 3.0* (2009), produced by The Office of MH Research and Training at a major university where he continues to work as a consultant trainer. As a co-author, he was instrumental in creating the *SED Fidelity Scale*, which along with *The Supported Education Toolkit 3.0*, formed the basis of SAMHSA's federally provided SED toolkit. In addition, Tom co-authored a comprehensive research article in 2012 on the state of SED. His past experiences include serving as a SES, a Faculty Field Instructor at a school of social work, a therapist, clinician, and therapy technician at a state-funded department of juvenile corrections. Overall, throughout his career, Tom has advocated for MH research, training, practice, and the integration of SWNPs into schools.

The process of recruiting the participants in Table 1 unfolded without issue and most interviews were scheduled and completed within the two weeks following IRB approval. One thread of outreach began with SED scholar and former practitioner, Tom, and through his referral to SES

supervisors Jackie and Ann, I was able to recruit current SES practitioners Julia, Abby, and Renee, as well as SED scholar Matt and his former research assistant Kerri. A second thread of outreach led to the recruitment of SED researchers and program developers Diane and Melissa and in addition, current SES practitioner Chris, who works at the local SED program, agreed to participate.

Data Sources

Data Collection and Tools

Data collection consisted of interviews of the participants in Table 1, subsequent member-checks, and document collection. Member checks were conducted with: 1) SESs Julia, Abby, and Renee to clarify specifics on support actions they take (e.g., do they only help edit SECs' emails to faculty or do they write the emails with or on behalf of SECs?), 2) professor and SED scholar Matt and SES Chris on whether "empathy" was the correct term to describe their support for struggling students, 3) Diane on how she perceives 'invisible disability' playing a role in the exclusion of SECs on campus, and 4) SED supervisors Ann and Jackie on whether they use a particular training to support medication empowerment among SECs. Documents were provided by seven participants which included formal SED program documents such as a training manual and a fidelity scale, tools for time-management, a study on campus engagement, and a portion of an EF training curriculum. These documents are detailed in the following *Document Collection Protocol.* Data tools used for this study were the Interview Protocol for Supported Education Specialists (Appendix A), the Document Protocol (Appendix B), and the Codebook (Appendix C).

Sampling Methods of the Participants

Criterion-based and purposeful sampling was used to find participants who work in and/or are affiliated with SED as they are unique, privileged, and informed witnesses to the practice (Maxwell, 2005). The goals of the purposeful selection were to achieve representativeness and typicality of the setting practices and therefore purposeful selection was an appropriate method for the purposes of understanding SED strategies that can benefit SED clients (Maxwell, 2008).

Interview Protocol

For this qualitative research, I gathered data by recording interviews with participants that used a semi-structured interview approach with open-ended questions (Appendix A). Open-ended questions allowed participants to speak freely, maximized the potential for nuanced themes to emerge, and served to limit my bias (Maxwell, 2008). Interview questions were informed by the Conceptual Framework's primary categories of individual challenges and environmental barriers and their subcategories. First, interview questions explored individual challenges related to the cognitive, behavioral, and affective domains, as well as individual support strategies related to academic skill building, counseling, and coaching. Second, interview questions explored environmental barriers related to stigma, nondisclosure, and exclusion, as well as support strategies that involve faculty training, instructional initiatives, and the coordination of services.

The interview questions were meant to elicit the insights of SED professionals on SECs' individual challenges and on environmental barriers in postsecondary education. The participants in this study are uniquely positioned to understand SECs' challenges given their personal, direct, ongoing contact with and professional support of them. In addition, the participants in this study

were also uniquely positioned to assess levels of stigma, disclosure, and integration across the college environment, given that SED professionals' work also includes the promotion of integration practices on campus among staff and faculty.

Document Collection Protocol

As with the interview protocol, document collection and review was guided by the Conceptual Framework's primary categories of individual challenges and environmental barriers and their subcategories. The Document Collection Protocol is included as Appendix B. Inclusionary criteria were defined by documents' relevance to these challenges and barriers and their corresponding support strategies. For example, documents used by SESs that were relevant to clients' possible challenges with EFs, academic performance, and/or emotional well-being, as well as documents related to the support strategies of academic skill-building, counseling, and coaching aligned with the Conceptual Framework and therefore were included. Likewise, documents related to the environmental barriers of stigma, nondisclosure, and exclusion, as well as documents related to the support strategies of faculty training, instructional initiatives, and the coordination of services were included. Exclusionary criteria disqualified documents unrelated to the Conceptual Framework, those which contained any identifiers of participants or clients, and/or confidential documents. These inclusionary and exclusionary criteria ensured that the study was rigorous, relevant and focused on the research questions, Conceptual Framework, and purpose.

The purpose of collecting and analyzing documents in this study was to gain insights into the policies, procedures, and/or strategies used by SESs to record and monitor the individual challenges and environmental barriers experienced by clients. The types of documents that were collected included 1) example checklists, schedulers, and templates that assist SECs with time-

management and organization, 2) The University of Kansas Supported Education Toolkit 3.0 (2012), which included a *Supported Education Fidelity Scale 3.0 Protocol* (Manthey et al., 2012), 3) a *Supported Education Training Manual (2016*), and 4) a portion of a curriculum for executive functioning training. It was found during data analysis that the supplemental support materials of the toolkit produced in 2012 were incorporated into the training manual of 2016; these supplemental materials, such as menus of support strategies that SESs are directed to use in their work, are referred to throughout the findings of Chapter 4.

Documents were selected based on their relevance to SECs' individual challenges and environmental barriers in relation to their postsecondary educational experience and alignment with the research questions. The procedure for collecting documents was as follows: I 1) obtained permission to access documents and ensure confidentiality and privacy, 2) requested digital copies of documents from participants or instructions on how to access them through websites, 3) stored all documents securely to maintain confidentiality and privacy, and 4) used a securely stored spreadsheet to catalog and manage the collected documents.

Data Management Plan

Data Types and Storage

The types of data generated and used in this project included recorded semi-structured in-depth interviews with participants, collected documents, and field notes. Upon suggestion by the IRB reviewer, interviews were recorded using the Zoom app. Digital audio files were then downloaded and deleted from Zoom and then uploaded to the secure hosting system UVA Box and deleted from the computer. Collected documents were also uploaded to the secure UVA Box, and field notes were taken on Google Docs, without identifying information of participants, and were password protected with additional 2-factor authentication protection.

Data Organization and Documentation

To organize interview and document data, a file naming system was used to generate Participant ID numbers based on their role. For example, the first SES had an ID of "SES01." While my original plan for Participant IDs included adding dates to precede each file name and acronyms for each location, I realized during data collection that such information was unnecessary since dates were recorded in transcripts and locations were not relevant for cataloging the data. Therefore, the final Participant IDs were simply SES01-SES11. A secure list that included real names with the assigned Participant ID numbers was created and is currently stored with recordings and documents in UVA Box. A tracking sheet on Google Sheets was used to track the interview process including Participant ID, location, requested permission, date scheduled, date completed, coded, member check completed. This tracking sheet also proved useful during analysis for reference when citing the interview dates for Chapter 4's findings.

Data Access, Storage, and Archiving

Researcher is currently in sole control of confidential audio data, transcripts, and Participant IDs stored securely in UVA Box. Following standard UVA protocol, data will be preserved and archived for 5 years.

Data Sharing and Reuse

This study will be published solely as a Capstone. I do not intend to share the field data, but future researchers may follow standard academic protocol and reference the study's qualitative data and conclusions via citations.

Data Analysis

Interview Analysis

Transcript Preparation. The audio transcript of each interview was auto transcribed via the online Rev.com automated transcription service. Computer generated transcripts were downloaded as .txt transcripts delineated by speaker (interviewee and interviewer) and pasted into a Microsoft Excel project, a process which automatically split each response into a separate row. Each interview transcript within the project was given its own sheet and columns were created for Participant IDs, the interview text, *a priori* codes, as well as for anticipated *in vivo* codes to the right of the text. Regarding the Participant ID for each interview, I assigned a unique identifier for each row of text based on its row number. For example, the first row of the interview for SES01 was assigned SES01_1, row 2 was assigned SES01_2, etc. Assigning these unique row identifiers ensured that I could always restore the original order of the interview statements if needed due to any unintentional or intentional change in their order that might occur during analysis. In addition, the splitting of interviewee data into rows made it possible to group all finished codes by sorting them alphabetically for pattern recognition after the coding process. Once the Microsoft Excel project was prepared, I uploaded it, the interview .txt files, and the interview audio to UVA Box for storage and deleted them from Rev.com and my computer.

Coding. The Codebook (Appendix C) provided the *a priori* codes used in the coding process. Using a broad-to-narrow approach, which is an appropriate strategy to provide a deductively derived framework for analysis (Bazeley, 2013), the Codebook uses four main categories: individual challenges (IC), support strategies for individual challenge (SIC), environmental barriers (EB), and support strategies for environmental barriers (SEB). As shown in Table 2, each main category then is split into a second level of subcategories and then a third level of sub subcategories to provide for more focused coding of each area of concern.

Table 2

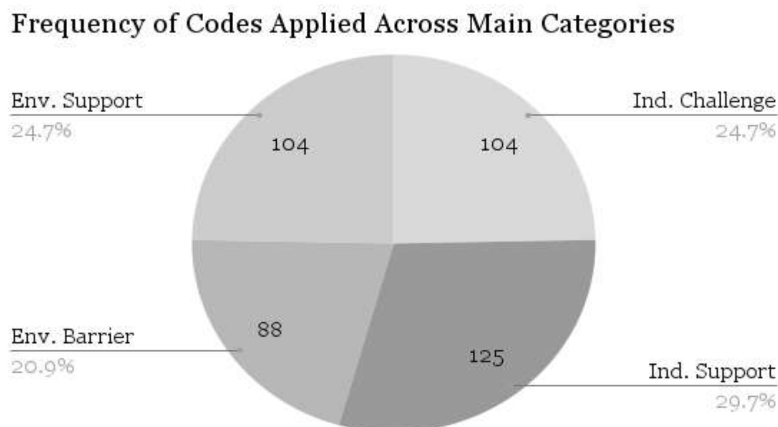
Broad to Narrow Code Structure of Codebook

Main Category	**Subcategory**	**Sub Subcategory**
Individual Challenges (IC) Or Support for Individual Challenges (SIC)	Cognitive (C)	Executive Functioning Challenges (EFC) Temporary Cognitive Impairment (TCI)
	Behavioral (B)	Poor Academic Performance (PA) Low GPA (GPA) Academic Probation (AP)
	Affective (A)	Anxiety (AX) Negative Sense of Self (NS) Lack of Coping Skills (LC)
Environmental Barriers Or Support for Environmental Barriers (EB)	Stigma (S)	Public Stigma (PS) Self-Stigma (SS) Peer Issue (PI) Faculty Issue (FI)
	Nondisclosure (ND)	Influenced by Stigma (IS) Invisible Disability (ID)
	Exclusion (EX)	Discrimination (D) Lack of Faculty Awareness/Training (LF) Lack of Integration (LI) Lack of Coordinated/Funded Services (LC)

These codes were used to develop the Codebook (Appendix C), which I employed row by row for each interview to maximize the data mining potential and also recorded *in vivo* codes in an additional column. After coding, to gain a broad understanding of results, I created the pie chart (Figure 4) to display the four main categories of individual challenges and supports and environmental barriers and supports.

Figure 4

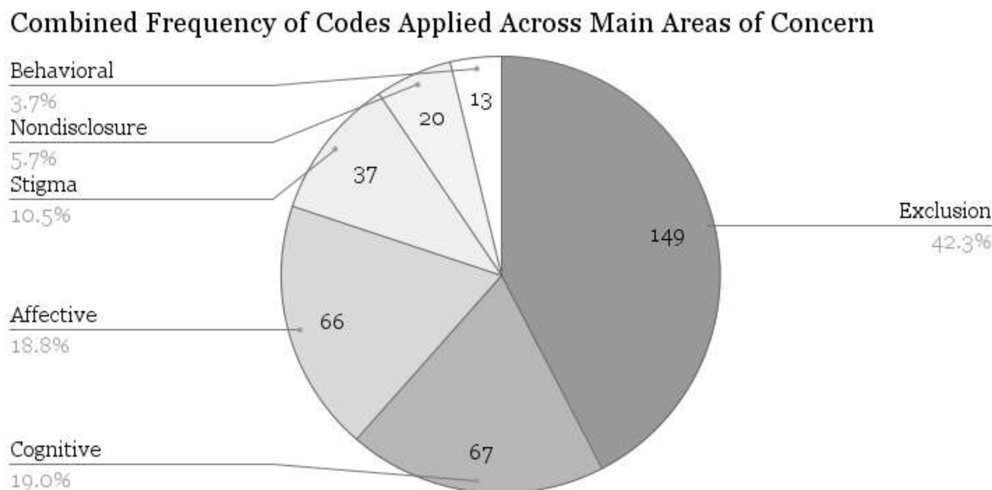
Frequency of Codes Applied Across Main Categories



Next, to deepen my analysis, I organized the data according to the frequency with which the codes were applied across the six main areas of concern (cognitive, behavioral, affective, stigma, nondisclosure, and exclusion), combining codes from the context of challenges/barriers and the context of supports. Combining the codes from the contexts in this manner revealed the frequency with which each area of concern emerged during the interviews shown in Figure 5.

Figure 5

Frequency of Codes Applied Across Six Main Sub-Categories

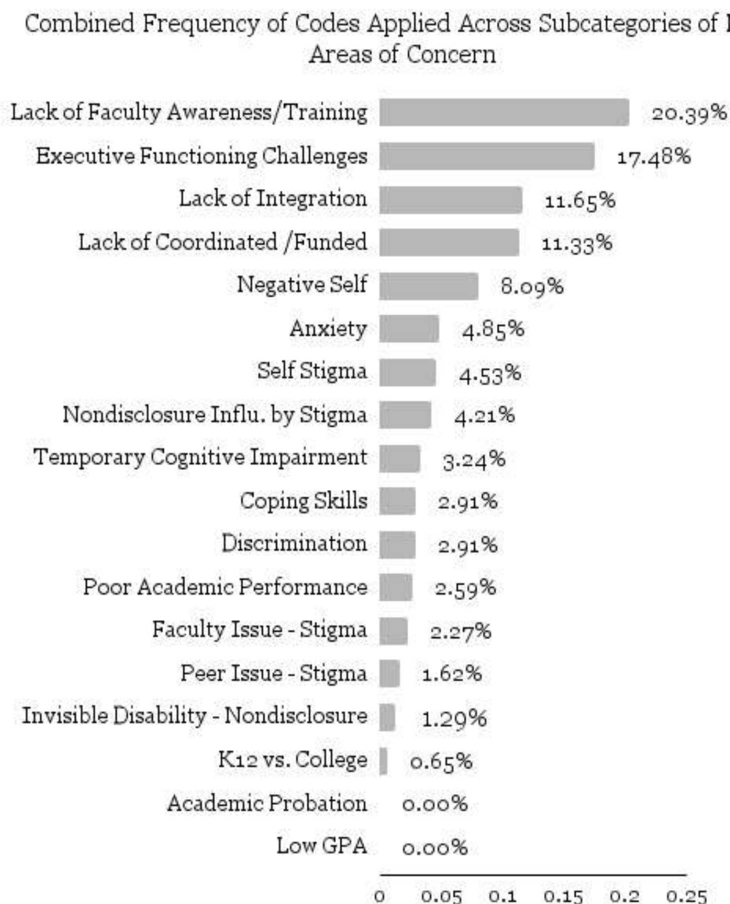


Firstly, the visual results of Figure 5 were surprising because I had not anticipated that Exclusion, at 42.3%, would outweigh the other categories to such an extent. As shown, the second largest category of concern, Cognitive at 19.0%, is less than half that of Exclusion. This observation in general highlighted for me a need to pay particular attention to participants' statements on exclusion during analysis. It also prompted me to further explore if there was a particular sub-category within the broader category of Exclusion that was especially important to interviewees and could explain Exclusion's predominance. Secondly, I also found the small showing for Behavioral challenges at 3.7% to be striking since I had anticipated that problems with effective academic behavior would have been coded more frequently.

Due to these insights, I decided to dig another level deeper into the subcategories of the six main areas of concern by producing a third chart, shown here as Figure 6. This chart detailed the frequency of each item's mention across participants and settings, which can suggest their pervasiveness and significance (Sands & Roer-Strier, 2006).

Figure 6

Combined Frequency of Codes of Subcategories of Main Areas of Concern



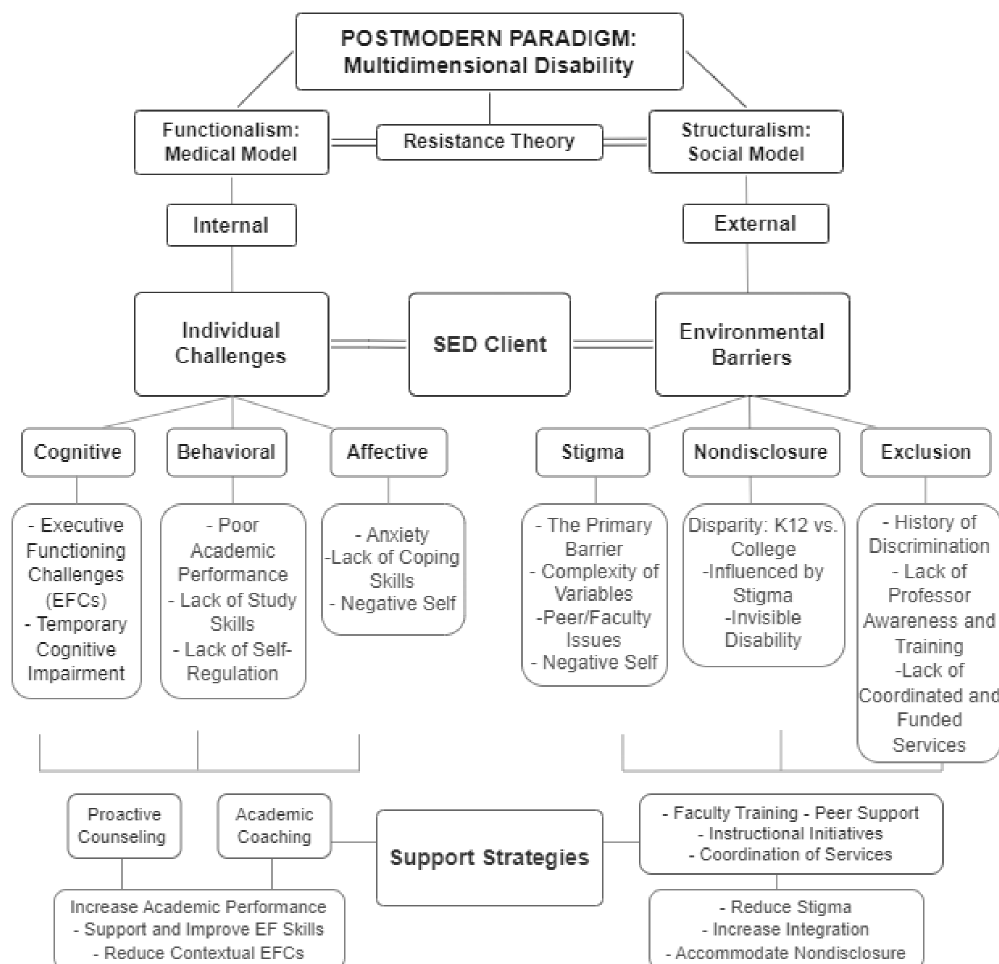
Overall, Figure 6 provided an enlightening picture of the various areas of concern that reflected a rather balanced mix of problems, with neither the individual challenges nor the environmental barriers outweighing when seen from a bird's eye view. Importantly, Figure 6 also answered my questions arising from Figure 5 regarding the large predominance of the Exclusion category (42.2%) and small representation of the Behavioral category (3.7%). Regarding Exclusion, Figure 6 revealed that the sub subcategory of "Lack of Faculty Awareness/Training" seemed to be the reason that Exclusion was predominated as a main category of environmental barriers for SECs. Figure 6 also revealed the absence of any instance of Academic Probation or Low GPA

with both at 0.0%. This observation led me to realize that these two items are not “behaviors,” but rather the negative results of poor academic behavior and, therefore, that they should not have been included as “behaviors” in the original Conceptual Framework or the Codebook.

Therefore, in order to appropriately structure the Conceptual Framework, I removed Academic Probation and Low GPA from the Behavioral Domain and added “Lack of Study Skills: and “Problems with Self-Regulation’ since the application of study skills and the ability to self-regulate are considered positive academic behaviors that SED clients may struggle with exhibiting (Carey et al., 2014). In addition, I noticed that the K12/College Disparity item was missing from the data of Figure 6. This item, discussed in the literature review, refers to a disparity between the K12 and college environments with respect to the level of support provided to help students navigate the accommodations process. Therefore, I also added that item to the Final Conceptual Framework, as shown in Figure 7.

Figure 7

Final Conceptual Framework



In addition to these revisions to the Conceptual Framework during analysis, a set of in vivo codes emerged during coding which subsequently produced findings that were not anticipated by the Conceptual Framework and Codebook. The list of *in vivo* codes is presented as Table 3. “Instances” represents the total number of times each code was mentioned throughout the interviews and “Percentage” reflects each item’s frequency percentage of the total.

Table 3

In Vivo Codes for Areas of Concern

Area of Concern	Instances	Percentage
Accommodation Process	28	13%
Student Overwhelm	25	12%
Prevention	22	10%
Resources	19	9%
Collaborative Relationships	11	5%
Functionalism	11	5%
Campus Belonging / Isolation	10	5%
Student Autonomy	8	4%
Students Uninformed	7	3%
Flexibility	6	3%
MH Symptoms	6	3%
Empowerment	5	2%
Student Fear	5	2%
Frequent Meetings	5	2%
Funding Issues	4	2%
Proactive Service	4	2%
Social Model	4	2%
EF Undergirds	4	2%
Empathy	4	2%
Accessibility	3	1%
Student Confidence	3	1%
Critique of EF support	3	1%
Depression	2	1%
Disability Office	2	1%
Dual Approach	2	1%
Integrated Treatment	2	1%
Loneliness	2	1%
Long Break from School	2	1%
Pressure on Students	2	1%
Total	211	100%

The data from Table 3, specifically issues surrounding the accommodations process, student-faculty communication issues, and the importance of forming collaborative relationships

with faculty, were found *in vivo* and produced unexpected findings that are discussed in Chapter 4.

Once I completed coding, I combined all of the 11 Excel sheets of the interviews into one master Excel sheet of all statements and codes that contained 415 rows of coded interview data. I sorted the data alphabetically using the "SORT" function in Excel according to main category, subcategory, and sub subcategory, which resulted in grouped sets of data for each area of concern. For example, all of the statements regarding cognitive challenges and the sub subcategories of EFC and TCI were grouped together. In addition, each statement row remained associated with each Participant ID in the first column of each row for later citing. I then copied and pasted each group of coded data onto a master Google document for further analysis. Each group provided related data for pattern recognition and the development of larger themes which shaped the findings of Chapter 4.

Document Analysis

To collect documents, I took opportunities during interviews to request copies of templates, forms, resources, publications, or SED program documents that participants mentioned in their statements. All documents were either sent by participants via email or accessed on publicly available websites. After downloading documents, I uploaded them to the corresponding participant's folder on UVA Box and deleted them from my computer. Throughout data analysis, documents remained in digital format and physical copies were never printed.

I began analysis of the documents after the interviews were coded, grouped by category, and organized onto a master Google Doc. To analyze the documents, I read through them to gain an overall understanding of their purpose and usefulness. As I did so, I copied or took

screenshots of text and pasted them, along with citation information, into the master Google Doc next to the relevant groups of interview statements. For example, next to statements regarding a Lack of Coordination of Services, I pasted relevant information from a study on the coordination of campus resources provided by Melissa and Diane. By doing so, interview data and document data were organized and grouped together according to categories and subcategories onto the master document. Data analysis and meaning-making from this document resulted in the findings of Chapter 4 and the recommendations of Chapter 5.

Ethical Considerations

Ethical considerations included potential ethical problems regarding the population such as coercion and violation of autonomy. These considerations influenced the Methods section and resulted in the interviews of only SED specialists and scholars.

Positionality

I recognized that my positionality as an SES may have influenced my interactions with participants and the interpretation of my data. I am aware of the potential for power imbalances in research relationships and I strived to mitigate these by building rapport with participants and creating a safe and supportive space for them to share their experiences. I also engaged in ongoing reflexivity throughout the research process, reflecting on my own biases and assumptions, and how these may have shaped my data collection and analysis.

Trustworthiness and Rigor

To ensure trustworthiness of my data collection I kept a reflexive journal of field notes and engaged in member checking which are strategies for trustworthiness and demonstrate "rigorous thinking" in this study (Merriam & Tisdell, 2015). Member checks conducted via email confirmed the meaning behind participants' statements when meaning was vague after

coding. In addition, triangulation of data was used across data and methodology to establish reliability and validity and to determine which themes qualified to be included as Findings and Sub-Findings in Chapter 4.

Triangulation of Data to Qualify Findings. To determine which themes qualified as Findings and Sub-Findings, I established a triangulation protocol. First, I created the triangulation table in Table 4 below, which allowed systematic comparison of findings from various data sources and methods. This approach enhanced confidence in the reliability and validity of converging data results (Campbell & Fisk, 1959). Reliability was represented in Table 4 by the agreement among attempts to measure the same trait using similar methods across different data sources, specifically participant interviews in various locations (p. 83). Similarly, validity was represented by the agreement between the different methods of interviews and document collection that are aimed at measuring the same trait (p. 83). This method of using a frequency table to track convergence of results from diverse sources and methods was similar to the triangulation projects of Sands and Roer-Strier (2006) and Farmer et al. (2006). Those studies, like this Capstone project, were small-scale, qualitative-methodology endeavors (Campbell et al., 2020). Furthermore, the frequency table of Table 4 established the "same story, same meaning" type of triangulation common in qualitative research (Sands & Roer-Strier, 2006).

Table 4 combines two methods of triangulation: 1) data triangulation of person (interviewee) and space (setting) from interviews and 2) methodological triangulation by the inclusion of both documents and interviews (Denzin, 2017). For data triangulation, Areas of Concern, aligned with the codes of the Codebook, were given one point each time they fulfilled the criteria for each column. Column P represents the number of participants who mentioned a

particular code out of 11 participants. Column S represents the number of settings in which a code was mentioned. There were eight possible settings:

1. Melissa and Diane's SED OnCampus program,
2. Matt and Kerri's research program
3. Jackie and Ann who work together and mutually supervise eight SED programs, 4
4. Tom who is an individual entity

5-8. Abby, Julia, Renee, and Chris, the four SESs who all work at different SED agencies.

To incorporate methodological triangulation, columns F, M, C, and T include the number of times a code is referred to in each document. The F column represents the *SED Fidelity Scale*, M represents the *SED Manual*, C represents the Campus Engagement Project manual created by Matt and Kerri, T for the 5 tools provided by SESs:

1. "Hourly All Day Schedule Template" (Figure 9)
2. "School Tasks Breakdown Template" (Figure 10)
3. "Weekly To-Do Checklist" and/or "Daily To-Do Checklist" (Figure 11 and Figure 12)
4. "Email Template to Request Change/Informal Accommodation" (Figure 13)
5. "Examples of Taking a Break to Reduce Anxiety" (Figure 14)
6. "Liaison Agreement"

Column E represents the Executive Functioning Training curriculum provided by Melissa and Diane (Figure 8). The results of the triangulation are shown in Table 4.

Table 4

Data and Methodological Triangulation Frequency Table

Note: P = Participants. **S** = Settings. **F** = Fidelity Scale. **M** = SED Manual. **CE** = Campus Engagement Study. **T** = SES Tool (scheduler, task breakdown sheet etc.)

Source	Area of Concern	P	S	F	M	C	T	E	Total
Codebook	Executive Functioning Challenges	11	8	0	1	0	3	2	25
In Vivo	Organization	9	7	0	1	1	1	1	20
Codebook	Lack of Integration (Exclusion)	11	6	1	1	1	0	0	20
Codebook	Anxiety	9	8	0	1	1	1	0	20
Codebook	Nondisclosure/Disclosure	9	7	1	1	1	1	0	20
In Vivo	Time-Management	9	6	0	1	1	1	1	19
Codebook	Lack of Faculty Awareness/Training	8	6	0	1	1	0	0	16
Codebook	Coping Skills	6	7	0	1	1	1	0	16
In Vivo	Collaborative Relationships	7	6	1	1	0	1	0	16
In Vivo	Accommodation Process	7	6	1	1	0	0	0	15
In Vivo	Student Overwhelm	6	5	0	1	1	1	0	14
In Vivo	Communication	6	5	1	1	0	1	0	14
Codebook	Negative Self	6	5	0	1	1	0	0	13
Codebook	Discrimination	6	5	0	1	1	0	0	13
Codebook	Public Stigma	6	5	1	1	0	0	0	13
In Vivo	Resources (Services)	5	4	1	1	1	0	0	12
Codebook	Poor Academic Performance	5	5	0	1	0	0	0	11
Codebook	Faculty Issue - Stigma	5	5	0	0	0	1	0	11
Codebook	Self Stigma	4	4	0	1	1	0	0	10
Codebook	Temporary Cognitive Impairment	4	4	1	1	0	0	0	10
Codebook	Lack of Coordinated Services	4	4	1	1	0	0	0	10
In Vivo	Students Uniformed	4	3	1	1	0	0	0	9
In Vivo	Campus Belonging / Isolation	3	2	0	1	1	1	0	8
In Vivo	Student Autonomy	3	3	0	0	0	0	0	6
Codebook	Invisible Disability - Nondisclosure	2	2	0	0	0	0	0	4
Codebook	Peer Issue - Stigma	1	2	0	0	0	0	0	3
Codebook	K12 vs. College	1	2	0	0	0	0	0	3
Codebook	Academic Probation	0	0	0	0	0	0	0	0
Codebook	Low GPA	0	0	0	0	0	0	0	0

In order to determine which of the Areas of Concern of Table 4 that I could qualify as findings and which could be disqualified, I applied four factors used in qualitative studies for the triangulation of data:

1. Multifaceted Data Points: A finding is more credible if it emerges across the two types of data sources in this project: interviews and documents (Campbell & Fisk, 1959; Denizen, 2017).

2. Repetition Across Participants and Settings: The frequency with which a specific concern is mentioned by participants and across different settings adds to its strength. A higher number of mentions by different participants and in varied settings implies that the issue is more pervasive and significant (Sands & Roer-Strier, 2006).

3. Consistency Across Methodological Tools: If a subcategory is consistently noted across different tools (like the Fidelity Scale, SED Manual, Campus Engagement Project manual, SES tools, and Executive Functioning Training curriculum), it indicates a broader recognition of the issue (Campbell & Fisk, 1959; Campbell et al., 2020).

4. Overall Frequency: A higher summative score, indicating the total of all the points that an Area of Concern receives across all criteria points to greater consensus between data and methods and suggests a stronger and more robust finding (Sands & Roer-Strier, 2006; McConney, et al., 2002).

In concise terms, these four factors determined that an Area of Concern was robust and valid if it was supported by multiple data points, mentioned by a substantial number of participants and noted across diverse settings, reflected in various documents and tools, and achieved a higher summative score. Ultimately, this protocol allowed the items with a score of 10 or above to be included as Findings or Sub-Findings into Chapter 4. Those with a score of 9 or below were disqualified. Table 5 provides examples of how the triangulation protocol was applied to make these determinations.

Table 5

Examples of Qualified and Disqualified Items

Qualified Item Examples
"Executive Functioning Challenges" with a total score of 25, having high participant mentions (11), noted across numerous settings (8), and referenced in several methodological tools (F, M, C, T, E) qualified as a strong finding. "Nondisclosure/Disclosure" is another example of a strong finding. It had a total score of 20, with substantial mentions by participants (9), noted in several settings (7), and referenced across different methodological tools (F, M, C, T).
Disqualified Item Examples
"Invisible Disability - Nondisclosure" with a low total score (4), limited participant mentions (2), fewer settings (2), and no references in methodological tools did not qualify as a strong finding. "Peer Issue - Stigma" with a low total score of 3, limited participant mentions (1), limited presence across settings (2), and no representation in the methodological tools. This lack of widespread recognition and low overall score indicate that it may not be a substantial finding in the context of your study.

To summarize, the Findings of Chapter 4 were determined by a triangulation protocol which used triangulation practices for reliability and validity across data and methods advanced by qualitative research scholars (Campbell & Fisk, 1959; Denizen, 2017) and similar to those used by previous triangulation projects of qualitive data that were similar in scope and size (Sands & Roer-Strier, 2006; Farmer et al., 2006; Campbell et al., 2020).

Delimitations

Sample size**:** The sample size of 11 interviewees provides a limited perspective on SED challenges and support strategies.

Generalization**:** A study based on interviews of SES at several agencies cannot necessarily be used to generalize to all agencies that practice SED.

Limitations

Sample Size and Generalizability: The study involved only 11 SED professionals with similar backgrounds, resulting in a small and homogeneous sample. This limits the study's generalizability of its findings and recommendations, which are specific to a local SED program (Creswell, 2013).

Subjectivity and Bias*:* This study's primary reliance on interviews as a data source meant it heavily depended on the participants' personal experiences and perceptions. This approach inherently introduced subjectivity, potentially limiting the representation of the full spectrum of SECs' experiences and needs. Additionally, the process of corroborating participant ideas with existing literature, coupled with the possible influence that my pre-existing beliefs may have had on literature selection, may have led to confirmation bias in the findings (Guba & Lincoln, 1989).

Lack of Direct Input from SECs: Due to ethical consideration and IRB requirements, the study focuses on the perspectives of professionals who have particular expertise in the experiences of SECs rather than directly involving the SECs themselves. This could have led to a gap in understanding with respect to the lived experiences, preferences, and needs of the SECs (Patton, 2002).

Chapter 4

This Capstone was designed to describe the individual challenges and environmental barriers experienced by Supported Education clients (SECs) in postsecondary education and the support strategies used by Supported Education Specialists (SESs) to help SECs succeed. The following research questions guided this study and form the basis for recommendations provided in Chapter 5 for the local Supported Education program:

- 1) According to Supported Education specialists and experts, what individual challenges do SECs experience related to postsecondary education?
    - 1a) What support strategies do Supported Education specialists find helpful in mitigating these challenges?
- 2) According to Supported Education specialists and experts, what external barriers do SED clients experience in the postsecondary education environment?
    - 2a) What strategies do Supported Education specialists find helpful in overcoming these barriers?

As outlined in chapter one, these questions are grounded in a Conceptual Framework (CF) that includes the medical model and the social model of disability. The medical model defines individual challenges while the social model defines environmental barriers facing SECs. The medical model directs attention to individual challenges in the areas of cognition, behavior, and affect and specifies each of these areas further. Cognitive challenges include executive functioning challenges (EFCs) and temporary cognitive impairment (TCI). Behavioral challenges include poor academic performance, low GPAs, and academic probation. Affective challenges include anxiety, a lack in coping skills, and a negative sense of self.

Regarding environmental barriers, the CF's social model proposes inquiring into the environmental barriers of stigma, non-disclosure and exclusion. More precisely, the social model makes the following connections. Public stigma related to peers and faculty can negatively impact SECs' relationship with themselves in the form of self-stigma. Nondisclosure, a choice which can limit support options, is related to dynamics of stigma and the invisibility of MH disabilities. Exclusion of SECs can include discrimination and relates to a lack of faculty training and awareness, a lack of integration, and the poor coordination of on-campus services. Findings on individual challenges and environmental barriers form the first half of this chapter. The second half presents SED strategies that work to meet those challenges by empowering SECs and overcome those barriers by increasing SECs' inclusion in postsecondary education.

Additionally, the CF displays primary *environmental barriers*, which include stigma, non-disclosure and exclusion: Stigma is present publicly and can be internalized by SECs' as self-stigma; Nondisclosure is linked to dynamics of stigma and to the concept of invisible disability; Exclusion is related to discrimination, to a lack of faculty training and awareness, a lack of integration, and the poor coordination of services. The CF's structure of individual challenges and environmental barriers gives order to this study's data collection, data analysis, and presentation of findings.

Each area covered by the CF has a corresponding findings section that addresses whether participants offered evidence for or against the CF's detailed profile of challenges and barriers. Generally speaking, participants offered wide ranging evidence confirming the CF's validity as a profile of SECs' challenges and barriers. To explore the nature and degree of challenges and barriers faced by SECs in postsecondary education and the support strategies used by SESs to help them succeed, I collected in-depth qualitative data from interviews with SESs and

documents used by SED programs. Table 6 provides the list of participants and brief descriptors for reference:

Table 6

Final List of Study Participants Using Pseudonyms with Descriptors

Pseudonym	**Descriptor**
SES Practitioners	
Abby	Active SES employed at a state-funded SED program.
Chris	Active SES employed at a state-funded SED program.
Julia	Active SES employed at a state-funded SED program.
Renee	Active SES employed at a state-funded SED program.
Supervisors of SES Practitioners	
Ann	Supervisor of active SESs at multiple state-funded SED programs.
Jackie	Supervisor of active SESs at multiple state-funded SED programs.
SED Researchers and Scholars - University in the Northwest	
Diane	SED researcher, former SED practitioner, and SED program trainer at a major university.
Melissa	SED researcher and published scholar, former SED practitioner, and SED program trainer at a major university.
SED Researchers and Scholars - University in the Mid-Atlantic	
Kerri	SED researcher and current private SES.
Matt	Professor, published scholar, and researcher on inclusive postsecondary practices related to students with MH challenges, including SECs and SED programs.
Former SES practitioner, Researcher, and Scholar	
Tom	Former SES, SED researcher, published scholar, and developer of the SAMHSA *SED Toolkit* and SED Fidelity Scale.

This case study design was used to investigate the challenges and barriers experienced by SECs in college and the strategies used to support them in an SED context. As a result, I was able to generate findings to answer the research questions for this study which constitute the remainder of this chapter.

Findings: Individual Challenges: Cognitive Domain

Finding 1: SECs May Experience Executive Functioning Challenges

All 11 interviewees indicated that executive functioning challenges (EFCs) pose significant challenges among Supported Education Clients (SECs) in postsecondary education, though Matt indicated that EFCs are not unique to SECs as explained below. Julia, a current SES practitioner, described EFCs among her student clients as being common and coming in many forms, including “struggle with executive functioning challenges, time-management difficulties, task juggling, note-taking while listening, and finding balance between work and school” (Interview, 4/25/2023). Also highlighting the significance of EFCs, SED researcher, scholar, and former SES practitioner Tom explained that “Executive functioning skills are one of the primary things that impacts many people with learning disabilities and mental health disabilities, whether it's anxiety, depression, or dyslexia, all of these conditions directly affect executive functioning” (Interview, 4/19/2023). He elaborated that SECs often need assistance with “breaking down tasks” for easier cognitive processing and with time-management to avoid missing tutoring appointments. He stated that helping students “manage their executive functioning is a big part of what you end up doing” (Interview, 4/19/2023). Adding another important concern, current SES practitioner Renee said that she has witnessed memory problems related to learning disabilities and symptoms of ADHD which can affect SECs' academic performance (Interview, 4/27/2023). Jackie, a SES supervisor, echoed this sense that her students often struggled with

memory problems, such as forgetting material covered in their classes (Interview 4/25/2023). She also echoed Tom's point that MH conditions are often linked to cognitive difficulties: “[MH symptoms] have a cognitive impact on students’ ability to organize themselves, to retain information they've learned in the classroom, and to get homework done” (Interview 4/19/2023).

All interviewees except Matt, a university professor, scholar, and SED researcher, indicated that it is common for SECs to experience EFCs that manifest in a variety of ways, including difficulty with time-management, multi-tasking, note-taking, organization, information processing, and memory. Three sub-findings below discuss specific areas of EFCs that were emphasized by interviewees: (1) organization, (2) time-management, and (3) a connection between EFCs and increased anxiety. A fourth sub-finding presents Matt's point of view, which is distinct from the other participants' and suggests that while SECs experience EFCs, this phenomenon is not unique to them. He asserted that it represents a small challenge in comparison to environmental barriers to be discussed in the next section.

Sub-Finding 1.1: Organization is a Common EFC. Four participants reported that organization is a common EFC among their SECs. For example, Melissa, a SED researcher, scholar, and SED program trainer, stated that in her experience, SECs “struggle with organizing their work, both their personal work, such as how they are going to approach a task, as well as the actual assignment or the task itself” and referred to “personal and work plan organization” as the “primary barrier” for these students (Interview 4/17/2023). Chris, a current SES practitioner, emphasized organization in his observations on SECs' challenges: “Organizational skills are an area that many of my clients struggle with … these individuals didn't learn some basic steps with how to function in a way that all of us have been taught.” He described “organizational skills” as one of the “critical components that some of these individuals lack” (Interview 4/18/2023).

Similarly, current SES practitioner Abby explained that she frequently spends time with her clients "working on organization" because she has witnessed students having a hard time juggling multiple school tasks. She further noted that organizational problems are a "big issue" that regularly affect students' ability to access and navigate financial aid, the accommodation process, and class registration, and can increase when symptoms of depression, anxiety, mania, and psychosis surface (Interview 4/27/2023). Similarly, Jackie stated that MH symptoms "definitely have a cognitive impact on [SECs'] ability to organize themselves" and that medication can negatively affect "organizational skills" (Interview 4/25/2023). Additionally, Melissa brought up how these organizational challenges might disempower students in academic settings. She stated that when students cannot organize themselves, they "are still very much at the whim of other people" (Interview 4/17/2023). Her statement suggests that without strong organization skills, students might be vulnerable to losing focus and risking their success due to changes or challenges in the environment, such as sudden changes in assignment due dates. A similar sense of SEC disempowerment associated with disorganization can be gleaned by Abby's frequent efforts at improving the organizational skills of her clients to prevent them from becoming overwhelmed (Interview, 4/27/2023).

In addition to interview data, document review also provided evidence of organizational challenges among SECs. For example, the "Weekly To-Do Checklist" (Figure 11) and "Daily To-Do Checklist" (Figure 12), presented in the following section on support strategies, are mock to-do lists which exemplify how to help college students organize broader weekly tasks (e.g., write paper, review group project, study for exam) and separately organize daily tasks (e.g., write intro to paper, find email regarding group project). Since these checklist templates are presented

in a SED training course as a main example of strategies to help SECs organize their tasks, their presence suggests that some SECs can have trouble with organization.

Sub-Finding 1.2: Participants Considered Time-management to Be a Common EFC Among SECs. Four participants expressed that time-management is a specific concern among SECs, while one participant – Matt – asserted that time-management is a concern for most college students and is not unique to SECs. Of the four, Chris expressed that some of his student clients struggle to maintain schedules that balance competing demands of school, work, and family, struggles which can lead to them becoming "overwhelmed." He also listed "time-management, scheduling, and prioritizing" as critical skills that "many" of his SECs lack (Interview, 4/18/2023). Current SES practitioner Ann related time-management problems to symptoms, stating that helping students "keep on top of classes while managing mental health symptoms" is one of her most frequent activities (Interview, 4/25/23). Emphatically, Abby stated that "time-management is huge" for SECs, adding that she frequently works to support these skills as a strategy to reduce MH symptoms and overwhelm in her SECs. In addition, she noted that one student with above average grades still requests weekly meetings with her to help him stay on track with his schoolwork (Interview, 4/27/2023). Finally, Julia stated: "Some students I work with struggle with executive functioning challenges [such as] time-management difficulties" and added that she wished there were more structure provided in higher education around "soft skill building" such as time-management (Interview, 4/25/2023).

In addition to interview data, the "Weekly To-Do Checklist" (Figure 11) and "Daily To-Do Checklist" (Figure 12) mentioned above, which address organization, also address time-management by exemplifying how to prioritize tasks according to weekly and daily checklists. The weekly checklist enumerates long-term tasks that a student needs to keep in mind and the

daily checklists enumerates smaller chunks of those long-term tasks that require priority. The provision of this tool within SES training indicates that time-management is deemed to be consequential challenge among SECs which an SED strategy can mitigate or remedy. Another document, the *Supported Education Training Manual (SED Manual),* also identifies time-management as a support area for SECs. This manual, currently in use by supervisors Ann and Jackie, as well as SESs Julia, Abby, and Renee, was developed in part by Tom with fellow researchers at a major research university circa 2016. This document provides several "menus" of possible follow-along supports that SESs should be ready to provide for SECs in the postsecondary environment and it includes support for time-management. Specifically, *Follow Along Supports - Menu of Possibilities* lists "Helping with time-management," "Setting up study times," and "Setting alarms" under the Managing Classes section, and "Keeping track of class schedule/calendar," "Tracking homework assignments and deadlines," and "Waking up on time alarm clock/phone call" under the Daily Supports (Unger, 2016, p. 62). In addition, *Pre-Enrollment - Menu of Possibilities* lists "Navigating Class Schedule" as a possible follow-along for support under the Other Logistics section (p. 57). All of these menu items are related to assisting SECs with time-management and therefore implicitly suggest that time-management can be a challenge for SECs.

Sub-Finding 1.3: Participant Statements Indicated that EFCs and Anxiety are Related. Six participants described a relationship between EFCs and anxiety. On the one hand, anxiety appears to be associated with an increase in the intensity of EFCs. For example, SES practitioner Chris described one of his students feeling anxious because of a "disharmony" with others in the classroom. The student's feelings of social anxiety compromised his focus on academic work: "He tends to focus on being worried about being unheard [by peers] as opposed

to the lesson. The lesson sometimes gets lost. As a result, he may suffer for grades" (Interview, 4/18/2023). Chris' account suggests that social anxiety disrupted the student's executive functioning. Also emphasizing the impact of anxiety on EFCs, SES supervisor Ann stated that anxiety was the most frequent threat for SECs in "keeping on top" of assignments and classes (Interview, 4/25/2023). In Ann and Chris's accounts, anxiety seems to increase EFCs by triggering difficulties with focus, attention, and task completion. On the other hand, there are also instances that describe the reverse, in which EFCs seem to spur on anxiety. For example, Ann described how sudden changes in due dates of assignments by professors adds to stress experienced by some students who have accommodations related to time-management: "When the professor just changes when things are due, it can be really stressful on the part of the student" (Interview, 4/25/2023). In another example of EFCs seemingly increasing anxiety, SES Abby told of some students who will "panic if they realize they haven't been paying attention," and described EFCs such as inattention and distraction as "factors that can trigger or worsen anxiety" (Interview, 4/27/2023). Finally, researcher Melissa described the overall relationship between EFCs and anxiety as one in which overwhelm from ineffective time-management can create an "overflow" of stress: "Once a student is late in one class, it starts to overflow. So, you have this overflow effect of stress and things building up behind you" (Interview 4/17/2023). In general, collected interview data reveals a pattern of EFCs and anxiety being mentioned together, pointing to a synergistic relationship between the two.

Sub-Finding 1.4: Not all Interviewees Emphasized EFCs as a Primary Challenge. While ten out of eleven interviewees expressed that EFCs can be a critical individual challenge for many SECs, Matt decidedly did not. Though he stated that "cognitive issues are definitely a factor in college success," Matt directly countered questions regarding the cruciality of EFCs as

a primary individual challenge for SECs (Interview, 4/26/2023). For example, he stated that "it's important to remember that cognitive factors like time-management, studying skills, organization, and problem-solving are challenges for 70% of college students, regardless of cognitive issues. It's not unique to these populations." Furthermore, he asserted that the benefits of EF training "are small" and not "going to be a game changer" (Interview, 4/26/2023). Matt self-admittedly takes a social model of disability perspective and stated that an emphasis on EFCs and EF training as central to SECs' success overemphasizes the medical model of disability: "To me, [cognitive remediation] continues to point to the person as the problem. It suggests that you need to fix your brain, instead of others adapting to your brain." Overall, he is an "advocate of Supported Education" and "believer that Supported Education can be effective, but not if it just focuses on individual issues" (Interview, 4/26/2023). Matt's perspective challenges the notion that EFCs are primary obstacles for SECs, emphasizing instead the need for a broader approach to student support based on the principles of inclusivity and universal design.

Finding 2: SECs May Experience Temporary Cognitive Impairment

Four of the participants articulated that temporary cognitive impairment (TCI) is an additional cognitive challenge for many individual SECs as discussed below. TCI is a temporary condition that can compromise concentration, short-term memory, planning, and organization in individuals. These symptoms can negatively impact academic performance and are produced by naturally fluctuating MH symptoms and/or the temporary cognitive effects of medications to control those symptoms (Hartley, 2010; Muckenhoupt, 2000; Hembree, 1988, Dobson & Kendall, 1993).

Sub-Finding 2.1: TCI can be a Result of Fluctuating Symptoms. Four interviewees mentioned a relationship between MH symptoms and academic performance that appear to reflect TCI. Professor Matt explained that the fluctuating symptoms of MH conditions such as “depression, anxiety, mania, or psychosis [can impact] someone's college experience in a lot of different ways,” and include having difficulty with “meeting academic goals and timelines, getting things done, procrastination, following through with assignments, and motivation” (Interview, 4/26/2023). His statements described how MH symptoms variably affect individuals and can compromise academic performance, thus reflecting TCI. Similarly, SES Renee explained that “a lot of different mental illnesses or symptoms get in the way of school sometimes” and she mentioned ADHD, schizophrenia, BD, and PTSD as examples of conditions whose symptoms fluctuate, surfacing sometimes without warning and severely affecting memory and other EFs. Ann also remarked that schizophrenia and BD were conditions whose symptomatology was especially problematic and can at times greatly reduce students’ ability to manage their classes. She reasoned that the mental energy needed for academic performance can be depleted during the time periods that a student is grappling with the symptoms of schizophrenia and/or BD (Interview, 4/25/2023). Additionally, Jackie explained that EFs and memory are “impacted by mental health issues, particularly if someone has a severe persistent mental illness,” adding that, in her experience, when students with schizophrenia are symptomatic they are especially vulnerable to TCI: "[actively symptomatic schizophrenia] definitely has a cognitive impact on a student’s ability to organize themselves, to retain information they've learned in the classroom, and to get homework done” (Interview, 4/25/2023). Also referencing the diagnosis of schizophrenia among students, Renee recounted that one of her clients sometimes experienced distressing auditory hallucinations on campus and in class due to

schizophrenia. In that case, the student feared attending class due to an auditory hallucination of someone whistling and an associated paranoia that someone was following him both in and outside of classes (Interview, 4/27/2023). This collection of participant statements suggests the presence of TCI in some SECs as they describe how MH symptoms can negatively impact cognitive functions such as memory, organization, and concentration, which are in turn connected to poor academic performance such as being unable to complete homework and meet academic timelines.

Sub-Finding 2.2: TCI can be a Result of Medication Side Effects. Two participants, supervisors Ann and Jackie, described how medication side effects can compromise in some clients, thus suggesting TCI. For example, Ann stated specifically that "a lot of medication side effects include grogginess and include memory issues” which can result in “a lot of people who struggle with getting to class, getting up, getting out of bed, or having the time to do assignments again because of their medications” (Interview, 4/25/2023). Jackie made similar observations regarding the negative impact of medication side effects on students’ cognition: “Medications can really impact someone's ability to maintain their schedule, to concentrate in class, maintain [organizational skills], ability to get homework done and remember what the assignment was” (Interview, 4/25/2023). Both Ann and Jackie explicitly used the word “medications” and directly connected their use by SECs to compromised academic performance such as being unable to concentrate in class, remember assignments, and/or complete homework. Their statements support the notion that TCI is a significant individual challenge facing SECs who rely on medications in the treatment of their MH conditions.

Implications

Based on the data presented on Findings 1 and 2 regarding individual challenges in cognitive domain for SECs in postsecondary education, it appears that some SECs can experience EFCs and TCI, challenges that appear to involve particular problems with organization and time-management and can compromise SECs' academic performance. These are key takeaways in that they connect to and are supported by the literature which identify EFCs and TCI as individual challenges among SWNPs that can negatively impact their academic performance (Salehinejad et al., 2021; Elias & White, 2018; Fleming & McMahon, 2012; Petcu et al., 2021). In addition, studies also specifically point to the areas of time-management (Boularian et al., 2018; Weyandt & DuPaul, 2006; Reaser et al., 2007) and organization (Kern et al., 1999; Gregg et al., 2002; Prevatt et al., 2015) as particular challenges for SWNPs. Therefore, it appears that it is important for interventions to identify the sources and address the impacts of EFCs and TCI to provide appropriate support and resources. Based on the findings, improving EF skills, particularly in the areas of organization and time-management, and/or securing accommodations that take TCI into account could improve SECs' academic performance and overall well-being. These key implications for potential support strategies are supported by studies which have found that SWNPs benefit from improving EF skills and learning time-management and organizational strategies (Fleming & McMahon, 2012; Adreon & Durocher, 2007; Rothwell and Shields, 2021).

Findings: Individual Challenges: Behavioral Domain

Finding 3: SECs May Demonstrate Poor Academic Behavior

Ten of the interviewees indicated that some of their students have problems utilizing effective academic behavior, which are behaviors that promote school success such as

completing readings and homework, maintaining good attendance, coming prepared to class, demonstrating on-task behavior, and participating in class conversations and activities, (Snipes & Tran, 2017; Raspberry et al., 2011). Some interviewees (SESs Abby, Chris, and Renee, supervisor Jackie, and researcher Melissa) described the underutilization of specific academic success skills as a root cause of students' problems with employing effective academic behavior. Other interviewees (SESs Julia and Abby, supervisor Ann, professor Matt, and researcher Melissa) emphasized patterns of falling behind as being particularly critical and needing attention from SEC professionals.

Sub-finding 3.1: Participants Indicated that Academic Success Skills are Underutilized by Some SECs. Academic success skills are positive academic behaviors that lead to student engagement and the attainment of educational goals and can be grouped into three critical skills sets: 1) the use of cognitive skills (e.g., setting goals, monitoring progress, memory skills), 2) the use of self-management skills (e.g., maintaining attention, motivation, and controlling anger), and 3) the use of social skills (e.g., listening, social problem solving, and teamwork) (Carey et al., 2014). Ten of the participants described challenges in the use of all three of these skill sets among their student clients. In terms of cognitive skills for academic behavior, it should first be noted that there is an overlap between the previously discussed cognitive domain and the currently discussed behavioral domain. For example, the topic of time-management shows up in both. It can be seen as a cognitive skill that enables a student to consider prioritized to-do lists and a calendar and understand how to develop and use them, and also as the behavioral skills of physically creating prioritized lists and calendars, taking action to follow them, and as a result completing assignments and showing up to class on time. Related to the behavior of using cognitive skills, SES Abby described how many of her clients do not use

time-management in their academics and their day-to-day living, such as setting multiple alarms to make sure they take their medication at the proper time before bed so that side-effects do not affect their ability to show up to class on time (Interview 4/27/2023). Similarly, SES Chris stated that some of his clients have not learned basic steps related to daily functioning “in a way that all of us had been given lessons” (Interview, 4/18/2023). Regarding the use of memory, there is a similar overlap between the cognitive domain and behavioral domain in which cognitively-based memory deficits can impact the behavior of remembering to complete an assignment which can lead to poor academic performance. For example, supervisor Jackie stated that “some clients have difficulty retrieving important information for assignments which leads to late or unfinished homework" (Interview, 4/25/2023).

According to interview data, this underutilization of cognitive skills for effective academic behavior impacts the second academic skill set of self-management, particularly in terms of setting routines, paying attention, and controlling emotions. For example, the lack of scheduling and prioritization skills noted by Abby and Chris can negatively impact an individual’s management of their routine, such as “showing up on time” (Abby Interview, 4/25/2023) and “breaking down a daily routine: getting up in the morning, getting dressed, getting prepared, getting to work on time, getting to school, and taking responsibility for their actions“ (Chris Interview, 4/18/2023). Or, as researcher Melissa emphasized, students may have difficulty managing their attention in class and not consider “what professors are asking for or when [assignments are] due” and therefore do not manage to ask for clarification (Interview 4/17/2023). Or, if they do attend to instructions, SES Renee remarked that some students are not able to manage their emotions and can become overwhelmed due to the cognitive load of processing instructions, not taking enough breaks, or not seeking support from tutoring(

Interview, 4/27/2023). Similarly, SES Abby explained how reactions to school tasks can elicit extreme emotional responses such as panic and shaking in some SECs simply from looking at instructions for a task (Interview 4/27/2023). She also reported student difficulties in the self-management of emotions during communication with professors, peers, and also with their SESs. Abby recounted instances of students being unaware that they were “coming in aggressive, yelling, [and] demanding" (Interview 4/27/2023). Likewise, interactions with professors around the clarification of an assignment can be fraught with anxiety, fear, and frustration and, as Abby described, students therefore can display emotionally unregulated behavior that professors may find challenging.

Furthermore, interview data indicate that in addition to gaps in cognitive skills and gaps in self-management skills, SECs experience gaps in the third area of social skills that can negatively influence their academic performance. For example, SES Chris described how social difficulties can compromise students’ participation and teamwork, explaining how some students may find it “arduous” to meet the requirements of class projects that require input and team participation due to peer misunderstandings. He also noted possible internalized challenges in which specific discussion topics in a group setting “trigger [students] and give them reminders of something that may have been traumatic” which can “shut down” a student’s ability to participate with peers (Interview 4/18/2023). Correspondingly, researcher Melissa emphasized the difficulty some students experience in balancing personal relationships with academics, and SES Julia discussed the “reactive attachment” that some might have to class ‘friendships,’ misreading friendliness as deeper friendship and steering their attention away from academic performance (Interview 4/17/2023). Meanwhile, other students may have an almost opposite perspective on peer relationships; for example, Renee described one client who views social

relationships at school as distracting and does not see the potential academic value of interacting with peers (Interview, 4/27/2023). Finally, to be discussed more in the next section on the affective domain, isolation can be a key challenge for SECs, who often are bereft of the many academic benefits that come from positive, ongoing communication about classwork with professors and peers.

Sub-finding 3.2: Participants Indicated that Attendance and Participation can be Problematic Among SECs. Five of the participants indicated that class attendance and participation can be problematic for their SECs and that at times these struggles are related to MH symptoms of depression. Regarding attendance, Abby stated that she "[has] people who are [academically capable], but their symptoms are so chaotic that week to week [the students may not be able to] get out of bed, attend class, or get homework done" (Interview 4/27/2023). Likewise, Renee stated that one student, "because of the depression, would miss a class and then it would cause them to miss several classes and then several weeks of classes" (Interview, 4/27/2023). Both of these statements suggest that MH symptoms can cause attendance problems among SECs, and as Renee highlights, those attendance problems can quickly escalate and become chronic, with students being absent for several weeks at time.

In terms of participation, Chris described how SECs may experience profound social anxiety in the classroom which can lead them to "shut down" and disallow their collaboration and engagement in group work with peers. In addition, he reported that some SECs feel a sense of isolation in the classroom setting, remaining passive while other students are participating actively in small group and large group class discussions (Interview, 4/18/2023). Matt also discussed SECs' struggles with participation and stated that while some may have this challenge, participation requirements as a whole are unjust: "Forcing students to do presentations in front of

the class is a crock. Faculty will argue that as professionals, students will need to speak up in front of people, but that is not a valid justification." He added, "It's hard to participate if you have dry mouth [due to medication]. Requiring classroom participation penalizes students with anxiety, depression, or shyness. It's a one-size-fits-all approach that excludes and penalizes someone for who they are" (Interview, 4/26/2023). Kerri, Chris, and Matt also expressed significant concern regarding difficulties with peer communication and the associated experience of isolation on campus (Interview, 4/17/2023; Interview, 4/18/2023; Interview, 4/26/2023) and as Julia remarked, SECs "kind of feel sometimes a little bit dissociated from aspects of the community." In sum, interviewee statements suggest that both attendance and participation can be significant individual challenges for SECs.

Sub-finding 3.3: Participants Indicated that Achieving Effective Communication with Faculty can be Difficult for Some SECs. Sub-finding 3.3, which reveals SEC's problems surrounding communication, emerged unexpectedly from interview data as six participants emphasized the critical importance of effective student-to-professor communication. For example, SES Abby listed "communicating with the professor" as a critical skill needed by her student clients. Researcher Melissa also considered effective communication with faculty to be a crucial skill for students, especially since faculty may have "300 students in a class and don't necessarily want to hear all of their problems" (Interview 4/17/2023). As well, Melissa's colleague Diane highlighted the challenge some students have in communicating with professors: "Emailing a professor means responding to what might be very implicit hidden expectations within a communication. Same with talking to a professor. I think the young adults that we work with sense this is true but don't know how to respond to these unknown expectations." Melissa further emphasized that expressing one's needs is "a real skill that every

adult needs to develop” and especially for this population of students seeking accommodations so “that they have language to use when they need it.” She concluded her interview, in fact, by saying that for students with special circumstances, “being able to tell their story to get their needs met is really important” (Interview 4/17/2023).

On the theme of communication between students and professors, three participants, all current SES practitioners, described how some of their SECs can have negative reactions due to misinterpretation or misunderstanding. For example, Renee explained that some of her clients misinterpret professors’ emails and at times take offense (Interview, 4/27/2023). Likewise, Abby stated that some of her clients will misunderstand the instructions or the meaning in emails from professors, as well as difficulty in formulating responses to them. These scenarios, in which they are not able to communicate their questions and their needs effectively to their professors, can lead them to feel unheard. (Interview 4/27/2023). Often, these communication challenges can occur in the accommodations process. For example, Julia described how some students can have a hard time initiating discussions around accommodations and some students do not send in their accommodations letter in time, potentially evoking a faculty response such as, “Well, tough luck kid. You didn't do the things that you were supposed to do as an adult to hold yourself accountable [for getting accommodations.] And now I can't help you" (Interview, 4/25/2023). Renee also noted significant gaps in communication between students and their advisors and professors regarding accommodations (Interview, 4/27/2023). In sum, SECs often struggle in their relationships with faculty because of difficulties with communication, which may involve misinterpretation, difficulties responding to professors, and a lack of proactive, self-advocating communication.

Sub-finding 3.4: SECs can Fall Behind in Coursework. According to five of the interviewees, the EFCs and poor academic behavior present in some SECs is associated with them falling behind in classes. Participants emphasized that keeping up with assignments can be challenging for students who are managing MH conditions while taking classes. For example, supervisor Ann noted that the sustained effort needed to manage MH symptoms can lead some students to being "behind in class." (Interview, 4/25/2023). Similarly, professor Matt stated that MH symptoms can result in poor academic behaviors such as not meeting academic goals or deadlines due to procrastination and a lack of motivation in students (Interview, 4/26/2023). Likewise, SES Julia explained how recent MH "episodes" can render students unable to complete assignments and/or turn them in on time. She added that there can be layers of struggle with symptoms, new assignments, and trying to catch up on late work: "The students are struggling on top of struggling on top of struggling." (Interview, 4/25/2023). As noted earlier in the discussion of EFCs and anxiety compounding one another, Melissa made the point that difficulties accumulate: "Once a student is late in one class, it starts to overflow. So, you have this overflow effect of stress and things building up behind you," suggesting that falling behind can become an experience that quickly compounds itself (Interview 4/17/2023). Finally, Kerri's statements correspond: "In terms of students keeping up, living with a disability and keeping up with academics and all the things is so incredibly draining," which she added can impact students' ability to connect with peers as the energy needed to be social is depleted (Interview, 5/25/2023).

In addition, participants' statements regarding their approach to working with clients also indicate a concern that SECs are falling behind. For example, in her work as an SES in a state-funded SED program, Julia expressed an ongoing need to "catch students in time" before they

give up on a course (Interview, 4/25/2023), and her colleague Abby emphasized that her focus on time-management is due to students needing to “catch up.” Abby also highlighted the importance of preventing the “second or third-week drop” by ensuring that “people are submitting everything. Because once midterms hit, that's when they tend to quit. That's when they give up” (Interview 4/27/2023). Overall, participants in this study expressed significant concern regarding the dynamics involved in students falling behind, often noting that without proactive supported education strategies, many students become overwhelmed past the point of return.

Implications

Based on the data presented on Finding 3 regarding the individual challenges for SECs in the behavioral domain, some SECs appear to struggle with utilizing academic skills (cognitive skills, self-management skills, and social skills) in postsecondary education, which can compromise their time-management, emotional control, and engagement. These are key takeaways in that they reflect the literature, which indicates that time-management (Boularian et al., 2018; Weyandt & DuPaul, 2006; Reaser et al., 2007), emotional control (Dupal et al., 2017; Turnock et al., 1998; Reaser et al., 2007), and engagement (Turnock et al., 1998; Weiner & Weiner, 1996; Pedersen, 2020) can be particular challenges for SWNPs.

These findings imply that support strategies which identify and provide targeted interventions and support to help SECs develop and improve critical academic behaviors may help them increase their academic performance; the research literature suggests this too. For example, Jozsa et al. (2022) found that support strategies that develop cognitive skills to improve time-management and organization behaviors, regulate emotions, and help with focus and engagement correlate to increased motivation. In addition, supports that focus on improving

academic behavior during the first year have shown benefits that include increased retention, engagement, motivation, through increased agency and self-efficacy (Kift et al., 2010; Krause & Coates, 2008; Kift, 2013; Kift, 2017).

In addition, data presented on Finding 3 suggest that SECs' compromised academic behavior can correspond to a sense of falling behind, feeling overwhelmed, and failing to achieve academic objectives, findings that connect to studies which found overwhelm and cognitive overload in SWNPs (Van Hees et al., 2015, Turnock et al., 1998; Bolourian, 2018). These findings highlight the importance of addressing academic issues proactively and effectively to prevent SECs from experiencing a continuous cycle of setbacks and frustration, support practices which are found to be beneficial in studies on proactive counseling (PC) and academic coaching (AC) (Varney, 2012; Higgins, 2003; Schwartz et al., 2005). Finally, data presented on Finding 3 also suggest that non-attendance, non-participation, and lack of effective communication can also contribute to SECs' non-engagement and compromised academic success, which connects to similar observations on SWNPs in the literature (Hartley, 2010; Weiner & Weiner, 1996). These negative academic behaviors suggest that support strategies that focus on promoting attendance, active participation, and communication skills among SECs may improve their engagement, strategies that studies show to be beneficial for SWNPs as they increase their connectedness and intentional interaction with the environment (Brown and Coomes, 2016; Higgins, 2003; Jansen et al., 2017).

Findings: Individual Challenges: Affective Domain

Finding 4: SECs May Experience Anxiety

Six interviewees viewed anxiety as a pervasive emotion among SECs. For example, SES Julia stated that for her student clients, "anxiety is everywhere, it doesn't matter what the base

diagnosis is … anxiety is at the base of everything." Abby described clients who "always live with anxiety" and some who can panic and begin shaking "just by looking at a new task." Tom stated that a current concern over the pervasiveness of anxiety is due to an increase in its diagnosis as well as its comorbidity with a wide range of MH conditions such as depression (Interview, 4/19/2023). The sub-findings below detail three particular areas that participants focused on when discussing anxiety: anxiety's amplification of academic challenges, anxiety's origins in self-pressure and fear of failure, and anxiety as produced by misunderstanding and miscommunication.

Sub-Finding 4.1: Anxiety Amplifies Academic Challenges. SES scholar Tom and current practitioner Abby expressed that anxiety in SECs can heighten the academic challenges that are common to all college students. For example, Tom highlighted that difficulties with attendance and test taking are amplified in the experience of students who experience anxiety at heightened levels: "[a common challenge] is helping someone manage their anxiety symptoms in order to attend class or to take a test, and for someone diagnosed with some anxiety, [those challenges] are going to be amped" (Interview, 4/19/2023). Abby described one particular client for whom the anxiety can lead her to self-sabotage, recounting the following: "I have one person who is three terms away from graduating and said, 'I just realized that every time I try school, I get so anxious the fourth week that I tend to almost sabotage myself'" (Interview 4/27/2023). Abby's comments expand on Tom's point—that challenges any college student might experience are often "amped" in the experience of SECs and, more specifically, that SECs can be particularly vulnerable to triggers of anxiety—including those that accompany success.

Sub-Finding 4.2: Anxiety is Rooted in Self-Pressure and Fear of Failure. Three participants remarked on how some of their clients place intense pressure on themselves to

perform which can increase anxiety. In addition to her anecdote on self-sabotage due to anxiety, Abby noted perfectionistic tendencies in some of her clients: “I have other folks that are 4.0, and if they got a B, it would be devastating.” Renee described one client with OCD who “will spend like five hours straight studying, and I'll have to tell them to take a break.” She elaborated that OCD “comes with a lot of anxiety and a lot of pressure that students put on themselves” and she expressed concern, saying that they “are likely to burn out” (Interview 4/27/2023). Similarly, Julia described another student who experiences pressure due to societal expectations: “I have one student in her early twenties who feels like she needs to graduate yesterday because she's in her early twenties and she's like, ‘I didn't meet that mark.’” She stated that for these students, “There's always going to be some difficulties [with self-pressure] because, for the most part, their reality is different from a lot of their peers” (Interview, 4/25/2023). Finally, Matt emphasized anxiety’s roots in the process of disclosure: “The concern with disclosure is that some of these students have experienced failure and that creates an added level of anxiety. The process of disclosure creates added anxiety” (Interview, 4/26/2023). Finding 4.2 highlights how clients' intense self-imposed pressure to perform can lead to increased anxiety, as observed by three participants who mentioned perfectionistic tendencies, OCD-related anxiety and pressure, societal expectations, and the anxiety caused by the process of disclosure.

Sub-Finding 4.3: Anxiety is Related to Misunderstanding and Miscommunication. According to SES practitioners Renee and Chris, anxiety can result from a lack of understanding related to communications or directions from professors. For example, Renee described anxiety arising from student-professor communications in the following manner: “A lot of times, certain clients will misinterpret an email, and then they'll get very anxious about it, or they'll think their professor is mad at them or something” (Interview, 4/27/2023). Misunderstanding of professors’

directions and assignments can also trigger anxiety, particularly among newer students: "A lot of my newer students do not understand what's being asked of them. So, it's the anxiety around not understanding, not knowing. I have a couple of people who dissociate [to cope with the anxiety]" (Interview, 4/27/2023). In addition to professors, Chris's statements regarding the "disharmony" between some SECs and their peers point to additional potential worry over social issues for SECs (Interview, 4/18/2023). Overall, findings shed light on the pervasive and fundamental challenge of anxiety faced by SECs in postsecondary education. The sub-findings reveal distinct aspects of anxiety: a constancy of anxiety, its amplification of academic difficulties, its roots in self-pressure and fear of failure, and its connection to misunderstanding and miscommunication.

Finding 5: SECs Can Experience a Negative Sense of Self

Statements by six of the participants suggest that some SECs experience a negative sense of self. The following sub-findings describe how it can permeate SECs' college experiences through pervasive feelings of inadequacy, impacts on self-efficacy, a belief that they are not entitled to support, and its roots in fear.

Sub-Finding 5.1: The Negative Sense of Self can Manifest as Inadequacy and Low Self-Efficacy. According to interview data, SECs can experience the negative sense of self as pervasive feelings of inadequacy and self-doubt. For example, Matt stated inadequacy can arise from perceived failure which can compromise a student's self-confidence: "Confidence for self-efficacy is a big individual-level issue. These students have experienced a lot of failure over time, have been demoralized, and told that they can't do things for so long that they've kind of given up and lost a great deal of confidence." Matt added that on one occasion he "had to actually beg the student to work with him to help them complete the course" and concluded that perceived failure due to demoralization was a root cause of these feelings of inadequacy and self-

doubt (Interview, 4/26/2023). Correspondingly, Julia described that feelings of inadequacy can result in a self-fulling prophecy if students are left to struggle too long without support: “If you don't catch [the students] in time, they kind of see it as a self-fulfilling prophecy. They'll say, ‘See? I knew that was too hard of a class. College isn’t for me’” (Interview, 4/25/2023). This resistance to feelings of self-worth indicates a deep-rooted hopelessness regarding the possibility of academic success.

In addition, self-deprecating thoughts and feelings of unworthiness and shame can underlie students’ MH struggles and contribute to a sense of inadequacy. Renee describes the mix of negative feelings and thoughts in the following words: “Anxiety, that anger, that frustration [and] the feeling of, ‘I'm not worthy, I'm not worthy enough to at least ask [for help]’ that gets in the way” (Interview, 4/27/2023). This “embarrassment or shame” can be related to the newness of the college environment, “a new challenge that's come on that's very foreign to them and requires more clarity” (Chris, Interview, 4/18/2023). Julia remarked that such shame can arise in students who “have been bullied or have been told that they aren't able to succeed.” Overall, a negative sense of self that manifests as feelings of inadequacy “renders an individual feeling very defeated and unheard: devalued” (Chris, Interview, 4/18/2023). Collectively, participants emphasized the importance of the self-perceptions of students, particularly in relation to feelings of inadequacy that may be long-standing, that may include a sense of being unworthy, and that may be experienced as increasingly demoralizing and shameful over time.

Furthermore, these feelings of inadequacy can lead to low self-efficacy. Matt noted that students’ experiences with demoralization and perceived failure have “taken a toll on their self-efficacy and on their perceived autonomy. They've almost had to give up that sense of autonomy that they can do things on their own” (Interview, 4/26/2023). As an example, he recounted how

one student in a university SED program decided to withdraw based solely on self-doubt and fear of failure, even though she was passing her courses at the time. Similarly, Julia stated that some students “are afraid of succeeding, so they kind of sabotage themselves.” In general, interviewees described the harmful impact that a negative sense of self has on students’ self-efficacy, leading to a lack of motivation, hopelessness, and fears of failure that present serious challenges to their academic success (Interview, 4/25/2023).

Sub-Finding 5.2: The Negative Sense of Self can Negatively Impact the Belief of Entitlement to Support and Accommodations. Researcher Diane and SES Renee expressed that some SECs may believe that they are not entitled to support and accommodations. One reason for this unrecognition of entitlement appears to stem from unwarranted guilt, or a belief that it is their fault for needing the flexibility and understanding that accommodations proffer. For example, Renee described how one student experiences guilt over recent frequent hospitalization. She explained how the student “constantly feels the need to explain themselves” and will write her professors emails such as “I really want to do well in class, but I’m in the hospital right now. Can I have an extension on this?” Renee stated she feels the client is being overly apologetic and emphasized that she is doing school projects from a hospital bed and therefore deserves accommodations. Yet, the student has little confidence that she should or could be offered accommodations (or extensions) that would help her through this particularly difficult period of time (Interview, 4/27/2023). A second reason for the lack of entitlement among students are gaps in understanding and education regarding accommodations for MH conditions. For example, Diane stated that “[The students] don’t want to take up a spot that somebody else who has a ‘real disability’ could take up.” Diane believes that students need to be more educated on “what they have the right to, what they have access to, and what is possible.”

She added that the students are “not realizing that they actually may have a disability that could warrant accommodations in certain situations” (Interview, 4/17/2023). While this unrecognition of entitlement was not widely reported among participants, it does subtly point to a sense among some that they do not deserve assistance or understanding from the environment, perhaps that their value as individuals does not warrant special circumstances.

Sub-Finding 5.3: The Negative Sense of Self can Originate in Fear. Four interviewees expressed that fear is a factor in the formation of a negative sense of self in some SECs. Participants’ comments reveal how fear contributes to feelings of self-doubt in students regarding their abilities and feelings of vulnerability within the environment, especially in their relationships with peers and professors. For example, Julia stated that a lack of confidence and anxiety over the accommodations process can be a result of “being afraid of judgment, being afraid of being perceived as different, being afraid of not doing well, and of succeeding” (Interview, 4/25/2023). Melissa stated that fear of the unknown can contribute to not pursuing accommodations and as mentioned above, Julia stated that some clients exhibit a fear of success. Melissa also mentioned the presence of fear in communications with professors: “the fear of having to have that conversation [over accommodations] or the fear of having to shut down a question from someone who's going to give you a grade is real” (Interview 4/17/2023). In addition, according to Chris, clients in the beginning stages of MH recovery may fear additional embarrassment and shame over requesting accommodations. Finally, Matt explained that fear learned from experiences of failure was linked to low self-efficacy and learned helplessness among recent students of his. He recounted that one of his students withdrew not from poor performance, but rather from fear of failure (Interview, 4/26/2023). Overall, fear appears closely

intertwined with a negative sense of self and an erosion of self-confidence. It creates self-doubt and hinders individuals from reaching their full potential.

Finding 6: Participants Indicated a Lack of Positive Coping Skills Among Some SECs.

Six of the participants described a lack of coping skills among SECs in relation to postsecondary education. Positive coping skills, or coping strategies, are various adaptive or maladaptive actions, thoughts, and processes used to navigate stressful or threatening situations. They are conscious actions taken in response to stress that involve problem-solving or emotion-focused conscious psychological adjustments that reduce stress and anxiety (APA, 2023). The following sub-findings for Finding 6 provide evidence of a lack of coping skills. They describe instances of students negatively responding to stress as well as the prevalence of overwhelm and anxiety in students' college experience. Participants revealed that, as a result, SED specialists are frequently called upon to provide emotional support as students navigate the environmental challenges and stressors in their college experience which indicates a gap in students' coping skills.

Sub-Finding 6.1: A Lack of Positive Coping Skills can Lead to Overwhelm. Five participants denoted that some SECs experience overwhelm and that this feeling is rooted in a lack of coping skills. To experience overwhelm is to be "engulfed, defeated utterly, overcome or overpowered "with an excess of work, responsibility, etc."(OED Online, 2023), and it is an affective response that can be the result of an emotional cascade that is akin to anxiety (Hughes et al., 2019). Abby related this overwhelm to MH symptoms: "[The demands of school] become too overwhelming. And then with depression, becoming suicidal and the mental symptoms become too overwhelming" (Interview, 4/27/2023). Similarly, Ann stated that "people get overwhelmed" due to spending significant energy on managing symptoms and, as a result,

becoming unable to perform consistently at the same academic level. Speaking from the student's perspective, Ann reveals the student's predicament in the following manner: "I've put energy into dealing with this distressing voice, and now I'm behind in class" (Interview, 4/25/2023). In extreme cases, Julia reported that some of her clients have undergone “complete overwhelm and giving up and just never come back” (Interview, 4/25/2023).

In addition, participants observed that students may experience overwhelm because they are trying to cope with too many competing demands. Chris, for example, attributed students “being overwhelmed" to their struggle with "balancing their emotional and intellectual challenges while maintaining the social component of everyday living” (Interview, 4/18/2023). Renee further noted that coping with competing demands was particularly difficult for students who had information processing challenges; for some of her clients, just trying to understand professors' instructions can be "overwhelming.” According to Chris, students' difficulties grasping instructions can be exacerbated when those instructions are given in the classroom, where SECs' attention can be hijacked by social anxiety. He further described how classroom setting can be a struggle for some SECs because of the large number of inputs that one needs to juggle, for example: the need to attend to the professor's lecture and instructions, the need to respond to the pressure to participate, and the need to manage the social anxiety that comes with being amongst peers in a public setting. Expanding his reflection to students' wider life on campus, Chris sees his students struggling to cope with "a myriad of different scenarios that create layers of confusion and may bring the individual to a point of overwhelm where they just shut down and they cannot function” (Interview, 4/18/2023). Along these lines, focusing on the global experience of SECs in college, Melissa spoke of her students having "five different bosses," referring to juggling five different classes; it is “incredibly challenging” for students to

manage the different expectations and deadlines of multiple professors, especially given that professors will often have assignments due en masse during certain weeks of the semester. As a whole, Sub-Finding 6.1 reveals how a lack of coping skills among SECs in managing MH symptoms and competing academic demands that are compounded by multiple inputs, particularly in classroom settings where social anxiety may be present, can lead to overwhelm and the inability to function effectively.

Sub-Finding 6.2: A Lack of Coping Skills for Emotions Exists in Relation to Anger and Frustration. Statements by SES practitioners Abby and Renee suggest that some SECs lack the positive coping skills for emotion in regard to anger and frustration. For example, as previously discussed in Sub-Finding 3.1 related to the self-management of emotion, Abby stated, “Some of our folks legitimately get angry easily. So, when something goes wrong, they don't think of speaking in a regular tone and [are not aware that] they're coming in aggressive, yelling, demanding” (Interview 4/27/2023). Related, Renee stated that she has had to deal with aggression from clients and “you really have to judge whether it's even safe for them to be on campus because they have to be stable in order to be in that setting. It's dangerous for other people” (Interview, 4/27/2023). While references to anger and aggression were minimal in the study, these comments provide some evidence that emotional-coping can be an individual challenge for some SED clients. While Abby and Renee provided examples that were rather extreme, other participants described seeing many SECs needing to develop coping skills in relation to peers and professor relationships. Collectively, participants expressed the basic concern that emotional regulation was a challenge with which SECs struggled and to which they attended through various support strategies.

In conclusion, two main insights summarize Sub Finding 6.2 regarding coping skills. First, participants observed that many SECs experience overwhelm because they struggle to manage their MH symptoms while trying to fulfill academic and social demands and while trying to abide by the normative expectations on the college campus. Second, emotional regulation was revealed to be a critical challenge among SECs and participants emphasized that SES's need to employ strategies that help SECs manage their emotions.

Implications

The data presented on Findings 4-6 regarding individual challenges in the affective domain for SECs in the postsecondary environment provide multiple observations and implications. First, it appears that anxiety is a common experience among SECs and can play a significant role in amplifying academic challenges for these students. Fear of failure and self-pressure seem to contribute to increased anxiety levels, which can adversely affect SECs' academic performance and overall emotional well-being. This presence of anxiety and its negative effects are key takeaways from the data and connect to previous studies which found anxiety to be a leading cause of college attrition for SWNPs (Bettis et al., 2017), as well as high correlations between anxiety and EFCs that can negatively impact academic performance (Snyder et al., 2014; Petersen et al., 2014; Bettis et al., 2017). These findings suggest that strategies that would identify and mitigate the sources of students' anxiety could be beneficial for SECs' academic achievement, which could involve the collaboration between SESs and SECs' therapists or using curriculums that help develop positive coping skills. Such strategies, that identify and seek to mitigate anxiety, represent services which are additional to the problem-solving, task-completion and academic skill development strategies of PC and AC as discussed

in the literature review (Rothwell & Shields, 2020; Parker & Boutelle, 2009; Richman et al., 2014).

Second, the data presented in connection with the findings regarding the affective domain suggest that SECs may develop or already have a negative sense of self in the postsecondary environment which can manifest as feelings of inadequacy, low self-confidence, unworthiness, and shame. It appears that these feelings can originate from past academic struggles and stigma and can be accompanied by a lack of belief in their entitlement to support which can hinder their ability to seek help and access the necessary resources available to them. Additionally, negative self-perception can further undermine SECs' academic success and overall confidence in their educational abilities. These key takeaways connect to previous studies which reveal a negative sense of self among SWNPs that include low-self-esteem, self-doubt, and a lack of confidence (Megivern et al., 2003; Muckenhoupt, 2000; Clouder et al., 2020) that can originate from past difficulties with academic performance, bullying, and stigma (Lysnyj et al., 2020; Clouder et al., 2020; Dupal et al., 2017; Weiner & Weiner, 1996; Shmulsky et al., 2021).

Therefore, these findings suggest that in response, effective support strategies might include those that could offset feelings of inadequacy and stigmatization, such as the development of meaningful and empathetic relationships with SESs, confidence building, and advocacy. These strategies reflect the practices of PC and AC as presented in the literature review, which provide the meaningful relationships with counselors and coaches that can build students' confidence and reduce feelings of inadequacy by improving academic skills (Miller, 2010; Schultz et al., 2001; Parker & Boutelle, 2009; Richman et al., 2014). However, these findings on challenges in the affective domain appear to call for emotional support that actively addresses personal issues, such as negative self-perception, through therapeutic methods that are

not emphasized in PC and AC. Such support methods are in the realm of possibility for SESs due to the team-centered approach of SED that incorporates SESs, social workers, therapists, and psychiatrists into teams who are required to share notes in county databases and collaborate in their support of SECs (Julia Interview, 4/25/2023, Jackie Interview, 4/25/2023). In other words, SESs could leverage their collaboration with mental healthcare providers to inform their support of SECs emotional well-being in addition to the improvement of academic skills and task completion that are emphasized in PC and AC.

Findings: Environmental Barriers: Stigma

Finding 7: Stigma is a Barrier in the Postsecondary Environment

Six of the participants asserted that stigma is a barrier in the postsecondary environment for SECs. For example, professor Matt stated that “[t]hese students experience prejudice and discrimination and stigma from pretty much every stakeholder group that's on college campuses" and added that fears of violence and disruption and a focus on “medical model topics rather than how to create a welcoming and embracing academic environment” contribute to stigma (Interview, 4/26/2023). In her work as a SES supervisor across eight counties, Ann also addressed the prevalence of stigma, stating that of all barriers to success in the college environment, “stigma is the biggest one, and it's attached to either professors or the university or school staff in general, and then classmates" (Interview, 4/25/2023). Furthermore, in addition to interview data, the *Supported Education Training Manual* provided evidence of public stigma in the postsecondary environment. This training manual for SESs explains:

> Some consumers [SECs] are reluctant to tell anyone on campus that they have a disability. Even though they may have trouble in their classes, they are afraid they will experience discrimination if they disclose the diagnosis. Such fears are based in reality.

> While some campuses and campus personnel are open and welcoming to students with psychiatric disabilities, others still have reservations about them. (Unger et al., 2016, p. 22)

Regarding this stigma, the sub-findings below include the presence of public stigma, self-stigma, and faculty as a significant source of stigma against SECs.

Sub-Finding 7.1: Public Stigma Against SECs is Present in the Environment. Five participants reported public stigma against SECs in postsecondary education. For example, SES Chris stated, “There is a bit of shame in our society. There's still the stigma or many stigmas against individuals who are struggling with intellectual and emotional challenges. So we have a long way to go” (Interview, 4/18/2023). Public stigma can also extend beyond the college campus to other forms of postsecondary education, such as trade schools. For example, SES Renee described that during an interview with a local beauty school for a client with ASD, she perceived the admissions counselor to be uninterested: “You could tell the person on the phone was ready to get off of the phone and just sounded not really interested in [the student’s] responses. … You could tell that they were judging [the student]. It just felt off” (Interview, 4/27/2023). Former SES practitioner and SED scholar Tom also remarked that “stigma piled on top” of perceptions of being judged can create additional hesitancy for some students during the decision-making process of whether or not to disclose to the institution in order to receive accommodations (Interview, 4/19/2023).

Other participant responses suggested that students themselves perceive public stigma from the campus community. As SES supervisor Ann explained, “The education specialist might offer to meet [students] on campus to help them get a service or navigate a system and they might say, ‘I don't want to be seen with you because people know you work for the mental health

agency.'" Ann suggested that students are not as concerned with stigma from their professors, but of "the reaction of the classmates [to accommodations] and the stigma from the classmates" (Interview, 4/25/2023). Likewise, Matt stated that "some students don't want their supported education specialist to come to campus, meet with faculty with them, meet with officers, students with disabilities, meet with the Associate Dean for Student Affairs to be an advocate and an ally … because it's just embarrassing to have them there" (Interview, 4/26/2023). Furthermore, Matt noted that faculty with disabilities can experience public stigma: "I know that faculty with disabilities broadly speaking and in particular with mental health issues also feel prejudice and discrimination in the academic communities." To support this statement, Matt cited a study he published that found that "faculty with mental health issues are very uncomfortable talking or disclosing" (Interview, 4/26/2023). Collectively, interviewee statements reveal a presence of stigma in the postsecondary environment that can be expressed by faculty, the administration, and peers, and can also be perceived by students and faculty with disabilities.

Sub-Finding 7.2: Interaction with the Environment may Result in Self-Stigma. Interview data revealed that some SECs experience self-stigma in their interactions with the postsecondary environment. According to researcher Melissa, students may experience a "hyper-personalization of failure" and view themselves as uniquely failing due to their MH condition instead of understanding that many other students have MH challenges. She described how students might doubt themselves as they wonder, "Is it me or is it them?" and blame themselves for their struggles. This self-blame can contribute to self-doubt about their right to support: "There is the self-perception by some students that it is unfair they receive accommodations, as if it is their own fault for needing support" (Melissa, Interview, 4/17/2023). Matt attributed such self-stigma to past experiences that have negatively impacted students' motivation to succeed:

"Students who have heard that maybe they can't be successful, maybe they shouldn't be here. … It impacts their motivation, and not just motivation but [their] being able to persevere." He added that even seeking help can be self-stigmatizing: "Asking for help within this environment of judgment is a hard thing to ask for. For some people it is a sign of failure" (Interview, 4/26/2023). Overall, participant interviews reveal the presence of self-stigma as an environmental barrier among SECs and highlights its detrimental effects in the academic environment as negative self-perception which can negatively impact students' motivation to succeed and/or ask for support.

Sub-Finding 7.3: A Primary Source of Stigma Against SECs is Faculty. Multiple participants mentioned faculty as a significant source of stigma against SECs. As Ann explained, stigma from faculty can manifest as skepticism of SECs' needs: "I've had people who have gotten accommodations through accessibility services and the professor just says, 'I don't really believe you have a disability. I don't believe this is necessary.' And, the student has really had to fight for their right to have those accommodations." Similarly, Tom stated that in his role as a SED program fidelity reviewer, he has heard "horror stories of professors who would push back or wouldn't provide accommodations in the mandated way, sometimes to the level where they could have been sued. Other times just being jerks, but not quite breaking any federal law or anything" (Interview, 4/19/2023). In addition, Melissa remarked that faculty skepticism of students' diagnoses and needs is "a real thing" and that while "some professors are excellent [at accommodating], some of them are not." She stated that full-time faculty professors do not necessarily possess understanding or expertise in supporting SECs: "It is not like you'll get a better response from a faculty professor [than from an adjunct professor or teaching assistant]. They'll say very messed up things to students" (Interview, 4/17/2023). Interestingly, she

observed that in her interactions with faculty as a SEC advocate, “there's a very different level of supportive conversation that you have with STEM professors compared to faculty in social and behavioral sciences who may have some of the worst impressions of people with mental health conditions” (Interview, 4/17/2023). To understand these statements further, a follow up member-check was conducted with Melissa’s colleague Diane, since Melissa was not available. Diane suggested that Melissa, in her observation of these professors, was pointing out that we cannot assume any special expertise or understanding of SECs’ needs from social and behavioral science professors (such as in education or psychology) or full-time faculty (instructors with experience teaching different types of learners). In other words, Melissa was asserting that stigma can be present even among those who would presumptively be the most supportive and empathetic. Diane connected this to studies which found that “mental health professionals may have the most stigma (of anyone) about psychiatric disability/mental health conditions” (Member Check, 8/28/2023). One such study is Knaak et al. (2017), which found that MH-related stigma among healthcare providers can be a major barrier to accessing treatment.

Similar to Melissa, Professor Matt also remarked on faculty stigma regarding SECs in the admissions process: “Faculty are inclined to be skeptical about the capabilities of students with mental health issues especially if disclosed in the application process. There is a real skepticism about the capabilities of students with mental health issues” (Interview, 4/26/2023). He added that there are concerns about violence from SECs, a sense that their presence is a hassle, and that these students “get in the way.” These accounts suggest the presence of pervasive faculty stigma towards SECs that manifests as skepticism and misconceptions regarding SECs’ diagnoses and needs and faculty resistance to providing necessary accommodations.

Implications

Based on the data presented on Finding 7, it appears that stigma can be an environmental barrier for SECs and can derive from faculty, administration, and peers. Five interviewees reported evidence of public stigma from multiple groups on college campuses with faculty emerging as a primary source of stigma due to descriptions of skepticism over SECs' conditions and need for accommodations among some of them. These are key takeaways that connect to previous scholarship and studies which demonstrate public stigma on campuses against SWNPs as a contributing factor to their exclusion (Trammel, 2009; Gutan et al., 2009; Blacklock et al., 2003; Gelbar et al., 2014). Data collected during this study also reveal the presence of self-stigma, in which SECs internalize their struggles and blame themselves for needing support, a finding that aligns with studies that have found self-stigma among SWNPs in postsecondary education (Getzel, 2008; Quinn et al., 2009; Storrie et al., 2010; Guarneri et al., 2019).

These findings on stigma imply that student support strategies which address and counteract stigma in the postsecondary environment could foster a more inclusive and supportive academic culture for SECs. Since these findings point to faculty as a primary source of stigma, initiatives that focus on increasing faculty expertise and knowledge of SECs' conditions and needs could reduce the prevalence of public and self-stigma as barriers to SEC success in the postsecondary environment. These types of initiatives are supported in the literature, as studies have found that faculty and staff trainings regarding the needs and characteristics of SWNPs are considered a beneficial means of combating stigma by positively impacting faculty perceptions of SWNPs (Lombardi et al., 2011; Dowrick et al., 2005) and helping to dispel low faculty expectations of SWNPs (Sniatecki et al., 2015; Dowrick et al., 2005).

Findings: Environmental Barriers: Nondisclosure

Finding 8: Nondisclosure is a Barrier in the Postsecondary Environment

Nine of the participants indicated that nondisclosure of disability by students is a barrier in the postsecondary environment that excludes them from receiving accommodations. As SES supervisor Ann put it succinctly, the decision to disclose is a significant issue for students: "Disclosure is huge, because it involves disclosure to your classmates, disclosure to your teacher, disclosure to disability services" (Interview, 4/25/2023). The related sub-findings present factors that can influence students' decisions to disclose which include: 1) new challenges associated with obtaining accommodations in college vs. in K12, 2) a distrust of the accommodations process among SECs, 3) the negative influence of stigma, and 4) the 'invisible disabilities' of SECs as a contributing factor in the presence of stigma.

Sub-Finding 8.1: SECs May Distrust the Process of Disclosure. Five participants indicated that SECs may distrust the disclosure process due to a variety of factors. First, as context, it is important to understand that the transition from K12 education to higher education represents a sea change in the disclosure process and a less supportive environment for SECs. As explained by DaDeppo (2009), the protections of the Individuals with Disabilites Act of 1990 (IDEA), which ensures special education and related services to eligible children with disabilities, ends for students when they graduate from high school or at the age of 21. Therefore, without that legal mandate in place for adult postsecondary students, the counselors, staff, and administrators who are required to help provide accommodations for them in K12 are no longer beholden or present to support them. Alluding to this lack of support, researcher Kerri stated, "Oftentimes, [SECs] might be coming from high school environments where their parents were

really involved, or they had an IEP and it's a totally different ball game in college. Students really have to initiate the entire process." She added that obtaining accommodations in college is "not straightforward" and can be difficult for students due to the newness of the environment and absence of parental support (Interview, 5/25/2023).

Participants further described that within this new environment of fresh responsibilities, SECs may experience distrust with the disclosure process due to a variety of feelings. For example, as Melissa explained, SECs can feel uninformed and suspicious: "One concern for students is that they don't know where the information about their diagnosis goes and will ask 'Who do I share this information with? Who has access to this? Why am I telling you this? What can I get?' And, they don't know how to use accessibility or disability services" (Interview, 4/17/2023). As further evidence of students feeling uninformed, Kerri described one student who stated they had no idea whom to contact about a recent MH episode or how much confidential information they might be required to divulge (Interview, 5/25/2023). In terms of suspicion, both SES Abby and SED scholar Tom pointed out that paranoia, either diagnosed or as an underlying symptom of other conditions, can create a resistance to disclosure in some SECs (Interview, 4/27/2023; Interview, 4/19/2023). In addition, Julia articulated that students might be suspicious of what others may do with their information, since "information is power" and students may feel that anything they disclose might be "used against [them]," thus adding to distrust of the disclosure process (Interview, 4/25/2023).

In addition to feeling uninformed and suspicious, some SECs might be hesitant overall due to being recently diagnosed. As Melissa explained, "Students who did not receive accommodations in high school are reluctant to receive them, and for students who acquire mental health conditions that might blossom in college, [nondisclosure] is a real thing"

(Interview, 4/19/2023). Tom echoed this uncomfortability for students who are unfamiliar with disclosure: “Disclosing can be really difficult for some people depending on if they have been in institutions a lot in their life.” He added that disclosing might not be “a big deal” for those who are used to it, but for students new to the process “there is a lot of hesitancy” (Interview, 4/19/2023).

Sub-Finding 8.2: Stigma can Contribute to Nondisclosure. Participants’ comments also suggested that stigma can influence whether or not a student decides to disclose their conditions in order to receive accommodations. For example, supervisor Jackie described that when discussing the pros and cons of the disclosure decision with SECs, “Oftentimes, one of the cons is stigma,” which she explained can come from professors, staff, or classmates (Interview, 4/25/2023). Perceptions and fears of stigma can also stem from past experiences, as SES Julia articulated, “I have several students who are worried about prejudice and judgment and have been put in certain boxes because of disability disclosure in their prior education” (Interview, 4/25/2023). Former SES practitioner and current SED scholar Tom also conveyed the same sentiment, stating that SECs can be negatively influenced by “secondary educational experiences, where they haven't had good support or they've had negative experiences at school” (Interview, 4/19/2023). In addition to past experiences, Melissa pointed out that the current environment as well can warrant a fear of stigma in students: “At some colleges, they still make the student physically hand their accommodation letter to their professor. So, then they have to answer questions from their professor when they do that.” Her statement suggests that in this situation, the chances and students’ fear of stigma can be increased due this public display of disclosure and the threat of the student being put on the spot by the professor (Interview, 4/17/2023). Furthermore, as articulated by SES Chris, students might “steer away” from

disclosing to professors in person out of a fear of “embarrassment and shame” due to “taboo that still lingers, even in 2023, regarding individuals with mental, emotional, and intellectual challenges” (Interview, 4/18/2023).

Participants made several additional observations regarding stigma’s influence on the choice of whether or not to disclose. For one, Matt stated that students may avoid disclosing in order to “prove to themselves and other people that they can make it without help,” a choice that he said is “probably more common than we realize” (Interview, 4/26/2023). Additionally, as highlighted in Sub-Finding 5.2, which discusses the adverse impact of the negative sense of self on SECs' belief in their right to support, Diane indicated that some students may avoid disclosure because they do not identify as students who have a “real disability” (Interview, 4/17/2023).A t hird additional observation, by professor Matt, was that stigma can impact the decision to disclose due to practical concerns surrounding admission. Based on his experience with the admissions process as a faculty member, Matt stated forthrightly that he advises students applying to graduate school to not disclose in their application due to “some risk of not getting admitted” because of potential discrimination by faculty (Interview, 4/26/2023).

A final connection between stigma and the decision to disclose relates to the negative consequences of choosing nondisclosure. Tom pointed out that “If students don't disclose, that does limit their options. It's harder for them to get accommodations from individual professors. It's hard to access certain support. It does create barriers if people are unwilling to disclose” (Interview, 4/19/2023). SES Julia echoed how choosing to not disclose can create a self-imposed limitation on support, telling SECs: “You're allowed to make that decision, but I will be limited in what supports I can provide if you choose not to disclose, and the school will be as well”

(Interview, 4/25/2023). In addition, Matt described that SECs often arrive to SED programs after experiencing failure and having chosen to not disclose:

> They have had a problem and they get hospitalized, they have to withdraw, maybe they get kicked out. Maybe they've been required to take an involuntary leave of absence of some sort. These students, [who have not disclosed in the past], have sought help from Supported Education in particular." He added that at this point, their situation essentially forces students to disclose to obtain the support they need to be successful. (Interview, 4/26/2023)

Sub-Finding 8.3: "Invisible Disability" can Increase Stigma and therefore Nondisclosure. According to interview data, the 'invisible disabilities' of SECs can increase stigma and further hinder disclosure. Melissa explained that support for individuals with an invisible disability can be met with skepticism, even among SECs themselves, who might question their right to accommodations and feel that they are "cheating the system" (Interview, 4/17/2023). Regarding faculty, Diane expressed that since they "cannot see [the disability, they might] want proof" even though, she added, the accommodation letter itself is proof of disability. In addition, Diane wondered if the invisible nature of SECs' conditions "may lead faculty and staff not to suggest accommodations or connect people to appropriate services and supports on or off campus" (Member Check, 5/25/2023). Similarly, Kerri explained that "there's a really unfortunate attitude that is prevalent in higher education, where 'if I can't see it, there must not be a problem.' So, students with mental health challenges and ADHD and autism are sort of blamed for the challenges that they're having rather than being supported" (Interview, 5/25/2023). To this point, Melissa speculated that faculty skepticism could also be attributed to SECs' fluctuating need for accommodations. She explained that SECs do not always use their

accommodations since their symptoms ebb and flow, so on the occasions that they do request to use them, it can be perceived as fabricated (Interview, 4/17/2023).

Furthermore, according to Kerri, stigma can be more impactful against people with invisible disabilities than those with physical disabilities. She noted that colleagues of hers have done studies which looked at prejudice, discrimination, and stigma of students with invisible disabilities and "found that students with invisible disabilities actually face more prejudice and discrimination from faculty and administrators than students with physical disabilities." Because of this stigma, Kerri mentioned that some of her students will "mask," meaning camouflage, their authentic selves[1]: "There is also a lot of masking that might take place, which requires alot of energy and makes it hard for students to keep up with academics and all the things" and can "interfere with their ability to connect with other students" (Interview, 5/25/2023).

Data revealed two other observations of note regarding stigma's connection to invisible disability. First, Diane explained that students themselves might buy into the "there is no disability if I cannot see it" myth, as if their condition is invisible to themselves: "Maybe one of the things that students with mental health conditions often say to themselves is, 'Well, I don't use a wheelchair. I'm not blind. I'm not deaf. That's not for me.'" She added that these students do not realize that they "actually may have a disability that could warrant accommodations in certain situations" (Interview, 4/17/2023). A second point of note, made by Matt, is that whether a student's disability is visible or invisible should not matter. Faculty "should not have to know someone has a specific diagnosis in order to provide support." Instead, he said, "faculty should simply need to be aware of any student's needs to be successful, for example 'I get very anxious

[1] Masking/camouflaging are consciously or unconsciously adopted strategies used by individuals to hide or suppress neurodivergent traits and behaviors in social situations to conform to social norms and expectations (Hull et al., 2020).

when I speak in public,' and use that information to provide alternative classroom participation or other assignments. They do not need to know that the student has been diagnosed with social anxiety disorder" (Interview, 4/26/2023). With these statements, Matt sweeps away the notion of 'disability' as being important, as it is in the medical model, and places the onus for student success onto the faculty in the environment, thus reflecting his self-expressed embrace of the social model of disability.

Implications

Based on the data presented on Finding 8, it appears that nondisclosure is an environmental barrier for SECs in postsecondary education. SECs may not feel confident with the newness of the disclosure process at the postsecondary level and lack the parental and K12 staff support available to them previously. In addition, they may be hesitant to disclose due to feeling uninformed and/or suspicious about the process, having concerns about privacy and the potential misuse of their information, experiencing fear of stigma from professors, staff, and classmates, wanting to prove their independence, not identifying as needing accommodations, and/or attempting to avoid potential discrimination during the admissions process. These key takeaways reflect the literature which finds that SECs can be challenged by the newness of the disclosure process (Weyandt & DuPaul, 2006; Boularian et al., 2018), may avoid disclosure due to fear of stigma (Collins & Mowbray, 2005; Trammel 2009a) and experience stigma that can negatively influence disclosure for SWNPs (Collins & Mowbray, 2005; Clouder et al., 2020; Trammel 2009b; DaDeppo, 2009). In addition, Finding 8 suggests that the invisible nature of SECs' disabilities is associated with skepticism and misperceptions in faculty that can compound stigma and SECs' fear associated with disclosure, concepts that are supported by studies that

report faculty skepticism and misperceptions regarding SWNPs in the literature (Collins & Mowbray, 2005; Megivern et al., 2003; Belch & Marshak, 2006).

These findings on nondisclosure as an element of exclusion imply that strategies to support SECs which enhance faculty awareness of SECs' needs, work to reduce stigma, provide clear and accessible disclosure processes, and emphasize inclusive practices in the classroom could be beneficial. These types of supports connect to previous studies which found that beneficial strategies in combating nondisclosure in the environment include campus-wide information campaigns, faculty training, peer involvement, and inclusive instructional strategies, actions that have been shown to alleviate stigma and correlate to higher confidence in SWNPs who decide to disclose (Beckerman et al., 2003; Blacklock et al., 2003; Belcher, 2011; Hartley, 2010; Collins & Mowbray, 2005; Megivern et al., 2003).

However, these findings also suggest that an additional strategy which assists clients with the initial decision to disclose could be beneficial, since the choice to not disclose has been identified here as a major limiting factor that can exclude students from support. Such a strategy, which would support decision-making around disclosure, was not found in the literature regarding on-campus support services such as PC and AC. These services do not appear to grapple with the problem of nondisclosure but are instead provided for students who officially disclose and are receiving accommodations or who fail courses and are placed on academic probation (Rothwell & Shields, 2021; Vander Shee, 2007). This means, ironically, that in one sense PC and AC seem to be functioning as reactive strategies that are triggered when a student either overcomes exclusive barriers such as stigma to self-identify or has already failed several courses. Therefore, these findings appear to identify a gap in preventative on-campus support for students who choose not to disclose but who have conditions that warrant accommodations.

Finally, it would be remiss not to mention here that Kift's transition pedagogy, which takes into account student diversity and promotes the integration of proactive academic support into the curriculum of all first-year students, could be beneficial in that it seeks to avoid stigma by exposing all students equally to all available support during their transition from secondary to post-secondary education. Therefore, its application on an institutional level could catch students who might otherwise fall into this gap in support due to nondisclosure (Kift et al., 2010; Krause & Coates, 2008; Kift, 2013; Kift, 2017). However, that said, its application on an institutional level is not in the sphere of influence of SED programs or individual SESs.

Findings: Environmental Barriers: Exclusion

Finding 9: Exclusion of SECs is an Environmental Barrier

Interview data from all 11 participants revealed that exclusion of SECs is an environmental barrier in the postsecondary environment. The following sub-findings describe how exclusion can manifest as instances of discrimination, a lack of faculty awareness and training, a lack of integration of SECs, and a lack of coordination of services.

Sub-Finding 9.1: Exclusion of SECs can Manifest as Discrimination. Participants' reports of discrimination against SECs in the college environment are stark. For example, as mentioned above, professor Matt stated point blank that SECs "experience prejudice and discrimination and stigma from pretty much every stakeholder group that's on college campuses." He also added that "Upper administration doesn't do well in [combating stigma and discrimination], so it's not just faculty and there's still prejudice and discrimination amongst students as well" (Interview, 4/26/2023). As an illustration of this, SES Julia described her experience of one professor who actively attempted to bar a SEC from her academic program: "[The professor] was trying to rule the student out for her program, basically saying that her

program was too rigorous and that they wouldn't cut it if they had any kind of mental health related difficulty" (Interview, 4/25/2023). Matt also recounted similar actions by professors: "I've definitely heard faculty and administrators say to students that maybe this isn't the right place for you. You need to go somewhere where they provide those extras, or maybe you should be in a community college or a trade school, or this environment is not right for you." Matt further articulated that discrimination by faculty creates barriers to SECs' college success by demoralizing students and leading to their uncomfortability around other people, isolation, and non-engagement on campus (Interview, 4/26/2023).

Sub-Finding 9.2: A Lack of Faculty Awareness and Training Contributes to an Environment of Exclusion. Participant statements reveal a lack of faculty awareness and training on the needs of SECs and were equally as frank as those regarding discrimination. For example, researcher Melissa stated that, "Professors are not trained or knowledgeable regarding mental health, and sometimes they say really messed up things to students … and do not really know the difference between different mental health conditions." She elaborated that professors' gaps in knowledge can heighten students' fears of conversations with them over the use of accommodations (Interview, 4/17/2023). Matt was equally straightforward: "I think faculty are just not trained to work effectively with students with differences … there's a lack of motivation to work with students who are unique and that is a big barrier." He added that this lack of training may lead them to say to certain students, "'You [the student] require additional things that I wasn't trained to deal with'" (Interview, 4/26/2023). Tom conveyed that this gap in faculty training occurs "primarily in research institutions, where you've got professors who are great at the research, but not necessarily trained in teaching." He also noted the additional problem of faculty "shunting classes to their teaching assistants. So, then you have students who are teaching

students who are not trained on how to manage accommodations and the needs of Supported Education clients” (Interview, 4/19/2023).

Matt further articulated that sometimes “outright resistance to students with mental health challenges gets played out actually in the accommodation process, where some faculty actively resist providing any sort of accommodation or flexibility partly because they view it as a hassle and a time suck.” As a faculty member himself, Matt admitted that “faculty members are busy. I'm a faculty member. I'm busy. And, when a student requires more individualized support, it is a hassle even for me. But I always reframe it as not being a hassle and not every faculty member does this” (Interview, 4/26/2023). Taking an administrative angle, Kerri asserted that faculty are not aware of the “administrative nightmare” and the “pain and hassle” for students in the process of securing accommodations. She stated that if professors were aware of this struggle, they might be more considerate and attentive to the seriousness of SECs’ situations and their responsibilities as educators to be supportive of their students with accommodations (Interview, 5/25/2023). Overall, these statements by interviewees underscore a pressing concern in academic institutions, particularly research ones: a gap in faculty awareness training and awareness regarding the needs and challenges faced by SECs which can lead to inadvertent insensitivity, misunderstandings, and barriers in the accommodation process.

Sub-Finding 9.3: There is Inconsistency in the Implementation of Accommodations. Interview data indicate that when faculty do implement accommodations there can still be inconsistency across settings. For example, Julia emphasized that faculty members will most likely differ in their interpretation of accommodations and therefore students need to communicate with their professors regarding expectations as to how the accommodations will be implemented. She remarked that some professors will allow students to “have extended time on

assignments, but it's just on a case-by-case basis." Others might require notification of the need for an accommodation before the deadline of an assignment, for example "within two days of the due date." Or some professors might be more flexible and decide that extended time means turning in assignments by the next class period. Finally, others might "be fine" if late assignments are turned in by the end of the term (Interview, 4/25/2023). These descriptions of a wide and unpredictable variety of how the same accommodation might be implemented by different professors suggest a level of inconsistency in the process of implementing accommodations.

Statements made by Matt, Chris, Julia, Melissa, and Kerri confirm that professors are the final-deciders of when and how accommodations are implemented and suggest that their determinations often involve unique negotiations between students and professors (Interview, 4/26/2023; Interview, 4/18/2023; Interview 4/25/2023; Interview 4/17/2023; Interview 5/25/2023). Further research revealed that this role of professors as final-deciders originates from Title 49 27.7(e) of the Code of Federal Regulations entitled "Reasonable accommodations" which describes the duties of the "recipient" of accommodation requests:

> A recipient shall make reasonable accommodations in policies, practices, or procedures when such accommodations are necessary to avoid discrimination on the basis of disability unless the recipient can demonstrate that making the accommodations would fundamentally alter the nature of the service, program, or activity or result in an undue financial and administrative burden. (U.S. Department of Transportation, 1979)

In such situations, professors, as the acting agents of the "recipient" (the institution), are the deciders as to whether or not an accommodation would fundamentally alter the "nature" of their teaching and/or curriculum. According to the interview data of this project, this implementation

is based on professors' personalities, preferences, or other unknown factors and not necessarily on any heightened awareness or training regarding SECs' characteristics or needs. In sum, interviewee statements and Title 49 27.7(e) support the notion that the interpretation and implementation of accommodations by professors is a necessary element in the delivery of accommodations in American postsecondary education, but their interpretations and implementations are also variable and not based on any known or consistent standards.

Sub-Finding 9.4: A Lack of Faculty Awareness and Training Can Lead to Misunderstandings and Misperceptions of SECs Needs. Additional interviewee statements point to a lack of awareness and training of faculty on how to respond to SECs' conditions and needs. For example, Ann noted that some professors will change due dates without realizing the impact on some students: "If somebody has an accommodation where they need to know certain assignments ahead of time so that they can space them out differently and then the professor just changes when things are due, that messes with the accommodation" (Interview, 4/25/2023). In these cases, faculty appear unaware of how their unpredictability can create an additional barrier in the environment for SECs. Another example of a lack of awareness and training is Julia's account of the professor who pressed her on the types of MH conditions that a particular student was experiencing (Interview, 4/25/2023). In that instance, the professor's probing represents an attempted violation of the student's right to confidentiality and privacy under the Health Insurance Portability and Accountability Act (1996) (HIPAA), which aims to safeguard the privacy and confidentiality of medical data (HIPAA, 1996). The professor's questions suggest a lack of awareness on the rights of people with disabilities and an ignorance regarding the type of students' personal information to which she is entitled. As a third example, Kerri described a community college where the accommodations were being restricted due to a perception by

faculty that students with disabilities were "abusing the system" based on what she described as "assumptions" and personal opinions regarding the students' integrity (Interview, 5/25/2023). By attempting to block accommodations, which originate as *legal documents* based on *medical diagnoses* that protect *civil rights*, these faculty were demonstrating a lack of awareness and training on the legal, medical, and civil rights status of letters of accommodations.

Sub-Finding 9.5: The Can be a Lack of Awareness and Training within Offices of Disabilities. In addition to problems associated with professors, participants also noted that staff in offices of disabilities (ODS) may also have gaps of awareness and training on how to adequately support SECs. For example, Melissa stated that "Disability services for the most part are not set up for people with mental health conditions" (Interview, 4/17/2023). Similarly, Matt stated that "the people who should be most helpful, the offices of disabilities, are typically not very helpful." He added that such agencies, "which are supposed to be allies and supportive, are not allies and supportive - especially of students with significant mental health issues. They focus on medical model topics rather than how to be a welcoming and embracing environment, academic environment" (Interview, 4/26/2023). As an explanation as to why this is the case, Diane postulated that "disability and accessibility services may not be educated in the kinds of accommodations that can be most helpful to students with mental health conditions due to the lack of preparation to serve students with these conditions" (Member Check, 5/25//2023). Finally, Kerri's description of the process of gaining accommodations as an "administrative nightmare" and "a pain and a hassle" suggests clunky and cumbersome systems in ODSs that theoretically, should instead be bastions of support for SECs. As a counterpoint to these statements, it should be noted that in Tom's experience as a former SES and a published SED researcher and scholar, "disability offices have been pretty great [and] I've had a lot of success

with disability services" (Interview, 4/19/2023). Therefore, participants' statements should be qualified as pointing to gaps in awareness and knowledge of some ODSs, but not all.

Sub-Finding 9.6: A Lack of Integration Contributes to an Environment of Exclusion. An additional factor that can contribute to the exclusion of SECs is a lack of integration into the campus community. For example, Matt expressed that some SECs "do not feel treated well by fellow students, faculty, administration [and as a result] they aren't engaged on campus." He further explained that these dynamics of exclusion and isolation are "a big negative factor in success for college students." He felt that SECs are particularly vulnerable to those dynamics, explaining that "the experience of prejudices and discrimination on campus" compounds SECs' social inhibitions and anxieties and becomes "demoralizing" (Interview, 4/26/2023). Likewise, Kerri mentioned that students can feel "a general sort of discomfort of 'I don't belong here and other people do.'" She further explained that SECs have a "general sort of attitude that the college itself is not supporting students to engage or to feel a sense of belonging and there is a lack of resources and a lack of support." Discussing MH and engagement initiatives, she added that students feel that "there's a lot of talk, but there's not much action to back it up." For example, students have expressed to her that they may avoid campus events because there is a lack of maps and information on the type of environment that they can expect to encounter (Interview, 5/25/2023). Matt also described a disconnect between SECs and the environment: "There's a mismatch between the person and the environment, and typically academic environments. Colleges are not willing to bring more of a match between what they do and so either the student has to fit the environment, or that's it." He added that this mismatch can "lead students to be disengaged and disconnected and that leads to dropout and academic failure." As a result, students are "much less engaged in the classroom, in the campus

environment, and in the campus community. They're not talking to faculty, they're not talking to students as much" (Interview, 4/26/2023). As Julia put it, SECs can "fall off the radar" (Interview, 4/25/2023).

An additional factor in SECs' lack of engagement and integration can be their lack of knowledge on how to complete necessary tasks and find resources. For example, Tom conveyed that he has spent "significant time with each individual student, helping them navigate things and manage other barriers that they need to take care of. Whether that is navigating how to fill out forms, and applying for different aid, or just walking with them to an appointment, or helping them get in touch with the right kind of tutoring for them" (Interview, 4/19/2023). Likewise, Julia expressed that her SECs need support to "get connected to the resources on campus, and then accept their accommodations and then be comfortable with the accommodations that they've requested and then start class" (Interview, 4/25/2023). Primary resources that require integration, according to interviewees, include admissions counselors, ODSs, advisors, financial aid, the registrar's office, tutoring, the cafeteria, the bookstore, clubs, the gym, and apprenticeships (Ann, Interview 4/25/2023; Abby, Interview 4/27/2023; Julia, Interview 4/25/2023; Renee, Interview, 4/27/2023; Tom, Interview, 4/27/2023). In Melissa's and Diane's interview, in fact, they revealed that they consider SECs' integration into these resources crucial and therefore had recently conducted a study on how SECs' access to these supports correlated to their college success. Diane explained that the need for the study arose because they could not identify any specific type of campus employee who served to compile and coordinate these resources for students. Instead, they find that campus resources are provided in a piecemeal fashion and students are on their own to find and understand how to use each one (Interview, 4/17/2023). Matt considered this challenge for students and stated that there needs to be a shift of resources

to aid in integration and engagement efforts toward resources that is accompanied by "a shift in attitudes and beliefs about, around inclusion in particular and being a welcoming, embracing environment" (Interview, 4/26/2023).

Sub-Finding 9.7: A Lack of Coordinated Services Contributes to an Environment of Exclusion. Responses of five participants point to a lack of coordinated services on campuses. For example, SED researcher Diane explained that her and Melissa's recent study on how to adequately coordinate campus services to support SECs at a university in the Northwest resulted from a recognition that no one was coordinating on-campus services. As part of the study, graduate students were trained on how to handle disconnected services, specifically to "try and coordinate [on campus] services because it is a huge deal—with mental health over there and disability services over here and questions such as, 'Who's talking to tutoring?'." The study addressed students' needs comprehensively, including access to food and other basic needs, asking, "Is there any kind of coordination of helping this young person to get the food that they need or anything else that they need in order to be successful?" (Interview, 4/17/2023). In addition to a lack of service coordination on campus, Diane investigated a lack of acknowledgement of students' MH needs on campus and a lack of connections with disability services off-campus, such as with local SED programs. She summed up the investigation of on-campus student support services with the statement, "Everybody is sort of in their own silo" (Interview, 4/17/2023).

As a result of this disconnectedness, Diane explained, students may have to repeatedly state their needs to different agencies on campus and may also be unaware of all available resources: "[Due to uncoordinated services], the student is having to explain themselves over and over or may not [know] how to tie these different pieces together, or know that resources even

exist" (Interview, 4/17/2023). As evidence, Diane recounted one student saying, "I had no idea all these services existed" after they were introduced to their campus's resources during her and Melissa's study (Interview, 4/17/2023). Professor Matt's statements affirmed students can be unaware of available resources: "One contributing factor is a lack of knowledge and utilization on the students' part of academic resources, including accommodations, such as offices of students with disabilities and other campus resources for time management skills, even counseling centers" (Interview, 4/26/2023).

Diane attributed this lack of knowledge to the fact that "students with mental health conditions and students in general do not have all of the resources that are available to them at their fingertips." While she believes that colleges try to inform students by having "wellness days" that raise awareness of MH issues and on-campus resources, she stated that it can be difficult for students to figure out how to source medications and therapy while also attending to their academics. She added that "since campus counseling services don't usually do long-term therapy, really getting access to the things that they need is quite difficult" (Interview, 4/17/2023). Likewise, for SES practitioner and SED scholar Tom stated that while there are "CAPS [Counseling and Psychological Services] programs and different things" on campus for mental health counseling, there is little coordination for students with "higher needs." "If it's a severe mental illness, often it's not coordinated well. It kind of gets shunted to community mental health centers as campus services are like, 'We don't want to touch it.' So, it doesn't get coordinated" (Interview, 4/19/2023).

Finally, one of SES Julia's accounts pointed to a lack of coordination of services between on- and off-campus services that she has noticed during her role as a SES. She described occasions in which a student has been accepted, obtained financial aid, and enrolled in classes,

but is still not connected to ODS for accommodations - even though the student has the intention of disclosing and desires accommodations (Interview, 4/25/2023). Therefore, on the cusp of the semester, ODS can be unaware of SECs' needs even though they are accepted and enrolled. In these cases, Julia, a third-party provider outside of the university, is the only person aside from the students themselves who is aware that they need and want accommodations and do not yet have them. This situation exposes a disconnect between on and off-campus services that are tasked with the identical role: ensuring accommodations for enrolled students. Overall, participant statements indicate a lack of a centralization of information on services and a lack of coordination between the services themselves and "hence the need for good Supported Education programs that can help braid some of that together and better coordinate [those services]" (Tom Interview, 4/19/2023).

Implications

Based on the data presented on Finding 9 regarding exclusion as an environmental barrier for SECs, it appears that discrimination against SECs exists in the postsecondary environment and originates from multiple stakeholders, with faculty identified as a primary source. According to the data, this discrimination can have detrimental effects on SECs' morale and lead to feelings of discomfort, isolation, and non-engagement on campus, all of which can be barriers to their college success. Discrimination is linked to a lack of faculty and ODS staff awareness and training regarding the needs of SECs, particularly in regard to MH conditions, which can further undermine students' confidence in seeking support. These key takeaways connect to previous studies which reveal a history of and continued discrimination against students with neuropsychiatric disorders on college campuses (Pavela, 1985; Unger, 1998; Kincaid, 1994; Lipson, 2019; Clouder et al., 2020; Schniedermann et al., 2022).

In particular, the findings on faculty's lack of training and unwillingness to provide accommodations reflect a long-term and continuing barrier found in studies dating back to the 1990s as identified in Toutain's (2019) meta-study on barriers to accommodations for students with disabilities in higher education. Similar to the findings of this study, Toutain (2019) found a common theme in the studies of Beilke and Yssel (1999) and Dowrick et al., (2005) of students with disabilities encountering "faculty who were reportedly unable or unwilling to provide the accommodations students had been granted" (p. 301). In addition, other studies found that students reported their "greatest concern about the campus environment" was the unwillingness of professors to make accommodations (Houck et al., 1992; Lyman et al., 2016). The alignment between these previous findings and the findings herein suggest a pervasive and entrenched barrier for SECs in the postsecondary environment that is connected to a lack of awareness, training, ability, and/or willingness among faculty to effectively support them.

Additionally, based on data presented on Finding 9 regarding exclusion, it appears that equitable inclusion of SECs can be threatened by variability and unpredictability in the accommodations implementation process, which points to the following specific implications:

- The evidenced variability and unpredictability present in the implementation of accommodations appears to produce the opposite of the intended effect of accommodations: Instead of experiencing consistency and predictability in their engagement with instruction which accommodations help to provide, some SECs seem to be subjected to the opposite conditions of variability and unpredictability. This variability can leave them vulnerable to experiencing inappropriate implementation of accommodations due to a lack of professor awareness and training. For example, as recently covered by *The Daily Camer*a, Colorado University students are reporting

"barriers [to] accessing accommodations." According to the source, one student with accommodations stated that he was unaware of a centralized testing center on campus available to him, since his professors, who are in charge of reserving the room and proctoring his exams, did not provide him this information. In another instance, a professor had the student "take a test in a room right next to a field where a marching band was playing," which compromised his ability to adequately perform on the exam. A negative impact of which the professor was oblivious (Doack, 2023).

- As described by the participants, the varied approaches to accommodation implementation taken by faculty based on their perceptions and preferences do not appear to include "demonstrating" how their service (teaching) would be compromised. Therefore, as agents of the "recipient" (the institution), they do not adhere to Title 49 27.7(e) of the Code of Federal Regulations which requires demonstration. This widespread practice of letting faculty decide how accommodations are implemented appears to create the potential for widespread violation of Title 49, "Reasonable Accommodations" by neglecting the duty to "demonstrate."
- The practice of having faculty determine how accommodations are implemented appears to place potentially untrained individuals in charge of executing legal mandates that are based on medical diagnoses intended to ensure students' protection from discrimination based on disability status. Furthermore, this practice seems to place colleges and universities at the risk of formal complaints and sanctions due to potential violations of students' civil rights due to discrimination based on disability.

In recent years, there have been notable cases of legal complaints regarding disability accommodations in educational institutions. One instance occurred at Asnuntuck Community

College in 2016, where a student with a hearing impairment and dyslexia filed a complaint due to the lack of provided accommodations (OCR, 2013). The subsequent investigation by the Office of Civil Rights (OCR) highlighted the college's inadequate process of facilitating accommodations, leading to a mandated policy overhaul and staff training. Similarly, at the University of California San Diego in 2017, a student with ADHD faced challenges with syllabus clarification, which prompted the OCR to intervene and the university to revise its accommodation procedures (OCR, 2019). Additionally, online platforms like Avvo.com reveal numerous student grievances about insufficient disability accommodations in educational settings, with legal experts often advising students to file formal complaints through channels like the OCR (Avvo, 2016; Asked in San Mateo, CA, 2021). Furthermore, personal accounts, such as a Johns Hopkins University student's experience with hearing impairment accommodations (Maurey, 2022), further illustrate the widespread nature of these issues. These cases collectively underscore the complexities and legal implications of disability accommodations in higher education, emphasizing the need for institutions to maintain compliant and effective processes.

The overall implication here is that a significant opportunity exists to mitigate the exclusion of students with disabilities by providing education and training of faculty and ODS staff on the needs of these students and the appropriate policies of accommodation implementation. Training for faculty could help avoid these conflicts between students and professors over accommodations and would have the added benefit of saving the time and resources that the parties and the institution are spending on addressing them. To put it simply, training and educating professors and staff on how to appropriately respond to the needs of students with disabilities could avoid a whole host of problems for all stakeholders.

These findings regarding accommodations are key takeaways that connect to previous studies which identified informational and attitudinal barriers within faculty that: 1) resulted in knowledge and understanding gaps regarding students receiving accommodations (Bento, 1996), 2) revealed a lack of awareness of the rights and needs of students with disabilities (Dowrick et al., 2005), and 3) pointed to the inability and unwillingness of some faculty to accommodate students and/or follow legal requirements of accommodation implementation (Kurth & Mellard, 2007).

Therefore, the data on Finding 9 regarding both discrimination and variability in accommodations implementation appear to demonstrate a need for the increased training of faculty to better prepare them to support SECs through appropriate accommodations. Studies have shown that such training can enhance faculty confidence in one-to-one dealings with students with disabilities, positively impact their perceptions of these students, and dispel low expectations (Becker et al., 2002; Lombardi et al., 2011; Dowrick et al., 2005; Sniatecki et al., 2015). Additionally, training faculty on students' conditions and needs has been deemed just as crucial for their success as offering direct support services (Stein et al., 1994).

In addition, the data presented on Finding 9 regarding exclusion also suggest a lack of coordination between on-campus support services and off-campus community services which represents an environmental barrier to SECs' access to support. Data suggest that due to a lack of coordination of services:

- ODSs can be unaware of students who want to disclose their status to receive accommodations. These students have enrolled in and in some cases have begun classes without starting the process of requesting accommodations. This points to a disconnect between ODSs and registrar offices and a lack of the opportunity to opt into the

accommodations process during course registration. Being able to opt into the accommodations process while registering for classes would alleviate the problem that Julia described in which students can be on the cusp of starting classes but not yet be connected to on-campus services (Interview, 4/25/2023). This situation also implies a disconnect between third-party services such as SED agencies who, on some occasions, are aware of the need for accommodations and ODSs on campus who are not.

- The disconnect between standard college counseling and higher-level services for students with MH issues suggests a lack of standard processes to refer students to more supportive services which may place students at risk of missing out on crucial MH support.

These key takeaways connect to previous studies which identify a lack of coordination of on-campus services and community providers (Dowrick et al., 2005; Blacklock et al., 2003; Belcher, 2011). These findings imply the need for improved coordination and centralization of services on campus, stronger connections between college services and off-campus support programs, and initiatives to better inform students of available resources. Addressing these needs, according to the literature, could boost students' success by improving coordination between on-campus services such as counseling, campus health, disability support, and with off-campus community MH services (Dowrick et al., 2005; Blacklock et al., 2003; Belcher, 2011).

Findings on Support Strategies for Individual Challenges and Environmental Barriers

Interview and document data identify support strategies that address the individual challenges and environmental barriers presented in the previous Findings 1-9. These support strategies constitute Findings 10-15 which address individual challenges in the cognitive,

behavioral, and affective domains and Findings 16-20 which address the environmental barriers of stigma, nondisclosure, and exclusion.

Findings: Support Strategies for Individual Challenges: Cognitive Domain

Finding 10: EFCs Were Viewed as Important Targets for Intervention

Interview and document data suggested that strategies which aim to support EF are important to SECs' success. These strategies seek to mitigate the individual challenge of Finding 1, "SECs May Experience Executive Functioning Challenges" Supporting data are presented under the sub-findings below and include: (a) general statements from participants on the importance and effectiveness of EF support, (b) specific attention to time-management and organization, and (c) a discussion of a 12-week curriculum for EF skill-building developed and used by SED researchers Melissa and Diane in their on-campus SED program. Their program, referred to in this paper as "SED OnCampus," aims to improve the retention of students with MH conditions by providing support for their academic and employment needs. The program bridges the gap between disability services, counseling services, and career services to provide students with the resources they need to succeed. In addition, it is designed to strengthen their ability to navigate and manage the information rich postsecondary environment through EF skill training (Interview, 4/17/2023).

Sub-Finding 10.1: Participants Indicated that Support Strategies for EFs are Crucial to SECs' Success. Six participants referred in general to the importance of supporting EF among SECs. For example, former SES and SED scholar Tom also asserted that supporting EF in clients through providing reminders and "setting up structures" or just "getting people started and then walking away" in order to help them manage EFCs related to MH symptoms is "a huge part of what Supported Education services should provide" (Interview, 4/19/2023).

Likewise, SES Abby emphasized throughout her interview that one of her primary activities is assisting clients with organizing, prioritizing and scheduling tasks for school and work (Interview, 4/27/2023). Both SES Chris and SES Julia pointed to the need for more access to EF skill training and supports. Chris suggested that some of his clients could benefit from assistance with EF lessons that could be provided through SED programs (Interview, 4/18/2023). Similarly, Julia noted a need for EF skill-building among her clients but remarked that she had noticed a “lack of research and tangible resources for working on cognitive skills" and expressed her wish for books or worksheets to help with this, adding that “there doesn't seem to be much structure around soft skill-building, and I wish there was” (Interview, 4/25/2023).

Related to these calls for EF training, Melissa and Diane explained how their SED OnCampus program provides the type of EF training that SESs Chris and Julia are seeking through the use of a customized 12-week EF curriculum adapted from Huckans et al. (2018). However, when asked in their interviews, Chris and Julia were not aware of the existence of SED on campus nor of Melissa’s and Diane’s associated EF curriculum. Melissa explained that they emphasize EF training as a critical intervention area for student success “because [EF skills] help orchestrate all other aspects of college academics.” She further explained that EFs “serve as the foundation, like a weight belt or support, that allows students to handle multiple tasks. Without these foundational skills, they’re likely to drop the ball on various responsibilities” (Interview, 4/17/2023). Their curriculum is designed to provide students with “skills, strategies, and tools” to improve their “cognitive skills, such as attention, concentration, learning, memory, organization, and problem solving” (EF Training Manual, 2023, p. 3). Figure 8 provides an overview of the specific EF areas that are targeted for intervention in their curriculum according to its Table of Contents and listing of modules.

Figure 8

EF Curriculum Table of Contents and List of Modules

Cognitive Skill Training Sessions

Session 1: Introduction to [Curriculum] and Time Management
- Goal Setting, Time Management, Introduction to Calendaring

Session 2: Prospective Memory (Remembering to Remember)
- Calendaring, Lists, Linking Tasks and Prioritizing

Session 3: Short-Term Prospective Memory
- Weekly Calendar Planning, Short-Term Memory Strategies

Session 4: Task and Conversational Attention
- Strategies for Improving Focus and Attention

Session 5: Attention Skill Practice
- Attention Strategies and Skill Practice, Sequence Ordering

Session 6: Verbal Learning and Memory/Name Learning
- Memory Process and Encoding Strategies, Name Learning

Session 7: Verbal Learning and Memory/Retrieval
- List Learning, Study Skills, Retrieval Strategies

Session 8: Verbal Learning and Memory/Note-taking
- Note Taking

Session 9: Cognitive Flexibility and Problem-Solving/Method
- Brainstorming, Problem-Solving Method

Session 10: Cognitive Flexibility and Problem-Solving/Practice
- Categorizing, Hypothesis Testing, Strategy Verbalization

Session 11: Cognitive Flexibility, Problem-Solving, and Planning/Strategies
- Self-Monitoring, Set-Shifting, Managing Distractions

Session 12: Skills Integration, Review, and Next Steps
- Review of all Skills and Strategies, Connecting to Goals

Module 1

Sessions 1 – 3: Prospective Memory
- Remembering to remember: The ability to remember to do and plan things in the future
- Includes organization strategies, calendaring, time and task management, weekly planning, and short-term memory strategies

Module 2

Sessions 4 – 5: Attention and Concentration
- Maintaining your ability to focus and take in important information
- Includes conversational and task attention strategies

Module 3

Sessions 6 – 8: Learning and Memory
- Your ability to encode (take in) and retrieve information

• Includes encoding and retrieval strategies, skills for learning new information, and note taking strategies
Module 4
Sessions 9 – 11: Problem-Solving and Cognitive Flexibility • The ability to be flexible in your thinking and solve problems • Includes brainstorming, strategies for solving problems, self-monitoring, and set-shifting
Session 12
Skills Integration, Review, and Next Steps • Putting it all together!

Note. Adapted from Table of Contents and list of modules of the EF Curriculum provided by participants and SED researchers Melissa and Diane during data collection.

Figure 8 lists the EF skills taught in Melissa and Diane's curriculum that align with findings from the literature review which state that skills such as time-management, prioritizing, short-term memory, attention, self-monitoring, and set-shifting are critical for success in postsecondary education (Fleming & McMahon, 2012; Roberts & Pennington, 1996). Taken together, participants' statements, document collection, and the literature review align and suggest that EF skill-building is an important element of supporting SECs in college.

Sub-Finding 10.2: Time-Management and Task Organization Were Identified as Key Areas for Intervention. Five interviewees underscored the importance of time-management and task organization to help SECs accomplish tasks and achieve goals related to their academic performance. SED researcher Melissa stated that one main benefit to SED OnCampus is that students learn how to develop and follow work plans to accomplish tasks, further explaining:

> [I]t's about organization, self-organization, and task organization and figuring out what needs to be done on certain days to accomplish specific tasks. Creating a plan for the

week is crucial, and that's where prospective memory, to-do lists, and calendaring play critical roles. (Interview, 4/17/2023)

Melissa’s statements reflect studies which have found that college students who plan their time and do not procrastinate demonstrate higher academic success and increased perseverance and that the self-regulation of time and the study environment provides a critical pathway to students’ displays of grit (Wolters & Hussain, 2015). Moreover, a number of studies have found that strategies for the self-regulation of time are malleable and open to improvement through instruction and well-designed interventions in postsecondary contexts (Pintrich & Zusho 2007; Richardson et al. 2012; Robbins et al. 2004). In other words, SED OnCampus’s focus on improving students’ time-management and task organization skills, as described by Melissa and Diane (Interview 4/17/2023), provides “a key pathway through which grit leads to academic success” (Wolters & Hussain, p. 305).

In addition, Diane revealed that the SED OnCampus’s 12-week EF training curriculum focuses heavily on time-management and task organization as preventive interventions. The curriculum, presented in more detail below, focuses on “preemptive measures like scheduling the semester, breaking down projects, and starting them early to avoid last-minute rushes” (Interview, 4/17/2023). Likewise, SES Renee and SES Abby both discussed the importance of breaking down projects, or chunking, as important strategies which they have witnessed help SECs complete assignments on time and be successful in their coursework (Renee Interview, 4/27/2023; Abby Interview, 4/27/2023). Their statements align with studies that show chunking, which breaks down large and complicated task into achievable steps, helps build momentum and can quickly produce positive results and prevents overwhelm and procrastination by reducing fixation on the larger complex task (Abbasi & Alghamdi, 2015; Wessel et al., 2021).

Renee and Abby's supervisor, Ann, confirmed their statements regarding their use of chunking and added that the use of time-management and organizational strategies, such as helping SECs create weekly schedules to set aside time for reading and homework, are beneficial for SECs in college. She also stated that SESs ensure that clients plan their wake-up times accordingly so that they can catch the correct bus to be on time for classes, adding that she has seen SESs "go so far as to help people ride the bus" to be on time (Interview, 4/25/2023). Finally, Julia suggested that it is beneficial for SESs' to be particularly aware of their clients' class schedules. She explained, for example, that for clients with online classes that begin on Monday at 12:00 a.m., she ensures that the clients log in that Monday morning to "read through any announcements from the teacher, and if they need to pre-study, to do that before their first class" (Interview, 4/25/2023). Likewise, if clients have a Tuesday/Thursday class, she schedules meetings with them on Monday or Wednesday to ensure that they are aware of announcements and assignments (Interview, 4/25/2023).

However, while the large majority of participants espoused the importance of time-management and task organization skills, SES Chris and SED scholar and professor Matt de-emphasized the impact of these skills on the success of SECs. While Chris acknowledged that time-management can help boost confidence and independence in clients, he stated that "the emotional aspect that comes through interpersonal contact with team members, family, and friends which reinforces an individual's desire to live a productive life" is more crucial than EF skill-building in supporting their persistence in college (Interview, 4/18/2023). Likewise, Matt acknowledged that time-management skills can "reduce the disability a little bit" but "only a little bit because the environment still has a lot of problems" (Interview, 4/26/2023). The "problems" that Matt was referring to are the stigma, lack of integration, and lack of resource

coordination put forth in Findings 7 and 9 regarding environmental barriers. Therefore, while interview data suggested that beneficial support strategies should include a focus on increasing EF skills such as time-management and task-management among SEC clients, the conflicting emphasis provided by Chris on emotional relationships and by Matt on problems in the environment indicated that these EF skills are only one piece of a greater puzzle in efforts to support SECs.

In addition to interviews, data from document collection indicated that SED programs and individual SESs widely employ EF support strategies to promote success among SECs. The primary source for EF strategies from the data was the *SED Manual* that SED scholar Tom helped develop at a major research university in the Midwest circa 2016 and is now being used by SES supervisors Ann and Jackie, and SESs Julia, Abby, and Renee in their current SED programs. The manual provides an extensive framework for SES duties including "menus" of supports for SESs to use during the pre- and post-enrollment period for SECs. Below, Table 7 presents an abbreviated version of the "Pre-Enrollment - Menu of Possibilities" that recommends items, actions, and areas that SESs should help SECs complete during the enrollment process and when preparing for the semester. The full menu appears in Appendix A.

Table 7

EF-Related Support Actions from the Pre-Enrollment Menu of Possibilities

Category	Items, Actions, and Areas that SESs Should Support SECs in Completing During Enrollment
Application	Turn in all relevant applications/resumes and associated materials (transcripts, letters of recommendation, personal essays, etc.). Turn in FAFSA if appropriate. Reading appropriate policies and procedures
Enrollment	Financial planning Registering with student services Navigating school website and technology Choosing classes Getting a student ID
Plan for Transportation	Planning for transportation to classes. Planning for transportation to other educational events (orientations, social events, clubs etc.)
Barriers to Learning and Accommodations	Planning for anticipated needs - such as getting a tutor. Finding a place to study
Other Logistics	Managing meds at school Navigating class schedule

Note. Adapted from the Pre-Enrollment - Menu of Possibilities in Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual*, p. 57.

The items in Table 7 were chosen verbatim from the full menu of pre-enrollment support options due to their connection to EF as evidenced by action verbs such as *planning*, *navigating*, *turn[ing] in*, *registering*, *managing*, and *choosing*. The verbs *planning* and *managing* align with the EF skills of time-management, scheduling, and prioritizing. The verbs *navigating* and *choosing* echo the EF processes of working memory and information processing, and the verbs *turn[ing] in* and *registering* relate to the EF skills of following-through and task completion. These action verbs, aimed at supporting EF among SECs, reflect the importance of EF skills for

student success which has been evidenced in the literature (Fleming & McMahon, 2012; Adreon & Durocher, 2007; Rothwell & Shields, 2021).

Similarly, a second menu in the manual, "Follow-Along Support Menu of Possibilities," recommends EF-related items, actions, and areas for which SESs should provide support. The full menu appears in Appendix B and an abbreviated version that recommends itemized actions to support EF is presented in Table 8.

Table 8

EF-Related Support Actions from Follow-Along Support Menu of Possibilities

Category	EF Related Items, Actions, and Areas that SESs Should Support Among SECs Enrolled in College
Daily Supports	Keeping track of class schedule/calendar Tracking homework assignments and deadlines Waking up on time alarm clock/phone call
Transportation	Bus pass/ travel training Help with Bicycle or Gas Voucher Obtaining Driver's license
Financial Aid	Searching for new financial aid opportunities Resubmitting FAFSA as needed
Disclosure Support	Who to tell When to tell How to tell
Managing Classes	Setting alarms Helping with time-management Setting up study times

Note. Adapted from the Follow-Along Support Menu of Possibilities in Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual*, p. 61.

The items in Table 8 were chosen from the follow-along support menu due to their connection to EF skills through their references to time-management, and accessing, interpreting, and using information (cognitive processing). The direct mention of "Helping with time-

management" and the references to keeping track of schedules, calendars, assignments and deadlines, setting alarms, and setting up study times all pertain to the EF skills of time-management, prioritizing, and organization. The support actions regarding travel, financial aid, and disclosure relate to facts and information that need to be cognitively gleaned from the environment for use which implies the need for attention, working memory, and possibly note-taking. For example, in order to get to school, a client might need to access, interpret, and understand how to obtain a bus voucher and then understand, plan, and utilize the correct bus routes. Support for this bus transportation issue is reflected in Ann's statement that some SESs will accompany SECs on their bus rides to campus (Interview, 4/25/2023). As another example of the need for EF skills, "Disclosure Support" in Table 8 relates to SECs' need to access and understand the disclosure process and then plan out and follow the process to obtain accommodations. This need connects to interview data, as it was emphasized by Melissa, Diane, Julia, and Tom. Melissa, in fact, specifically used the term "accommodation education" to describe the SED OnCampus program's education of students on the disclosure and accommodation processes (Interview, 4/17/2023). Overall, both of the support strategy menus above recommend items, actions, and areas that directly support various EF skills that can help SECs overcome possible individual challenges related to cognition.

Aside from these support menus, three other documents were reviewed that relate directly to EFs: an Hourly All Day Schedule Template and a "School Tasks Breakdown Template" provided by Abby, and the mock To-Do List referenced earlier that Melissa and Diane use in their SES training. Abby stated that she uses the hourly scheduler template, represented below in Figure 9, with all of her clients during weekly planning sessions in which they can opt to plan the upcoming week or the entire month.

Figure 9

Hourly All Day Schedule Template

Times	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Notes
8-8:30		Drop of kids	Drop of kids	Drop of kids	Drop of kids	Drop of kids		Yoga, exercise before 7:30
8:30-9		drive	drive	drive	drive	drive		Get kids up, out by 8
9-9:30		Work	work	Work	work	work		Make lunch night before
9:30-10		Work	work	Work	work	work		
10-10:30		work	work	work	work	work		Journal before bedtime
10:30-11		work	work	work	work	work		Bedtime by 10pm
11-11:30		Work	work	Work	work	work		
11:30-12		drive/lunch	drive/lunch	drive/lunch	drive/lunch	Drive lunch		Open areas are times
12-12:30		Class	homework	Class	homework	homework		To catch up with any
12:30-1		class	homework	class	homework	homework		Assignments or
1-1:30		homework	Therapy by	homework	homework	homework		Work ahead
1:30-2		homework	doxy	homework	homework	homework		
2-2:30		Class	Class	Class	Class	homework		Goal- spend weekends
2:30-3		class	Class	class	Class	homework		With kids
3-3:30		drive/store?	Class	drive/store?	Class	drive/pu kids		
3:30-4		Pick up kids	drive/pu kids	Pick up kids	drive/pu kids			Credits 11, 7 hours
4-4:30		Family	Family	Family	Family	*Try to have		Study time goal up to 21 hrs
4:30-5		Family	Family	Family	Family	All		Scheduled 8 hours
5-5:30		Family	Family	Family	Family	assignments		Work 13.5 hours
5:30-6		Family	Family	Family	Family	Done and		
6:00-7		Family	Family	Family	Family	Ready to		
7:30-8		housework	homework	housework		Turn in		
8:30-9		housework	homework	housework				

Note. Provided by participant and practicing SES Abby during data collection.

This template is a combined hourly/daily scheduler for supporting time-management and task-organization. Abby explained that during the planning sessions, she and her clients take into account all items that require attention in addition to school, such as doctor appointments, therapy sessions, and family responsibilities, and that this tool allows her SECs to “visualize all the free time they have” as well as “factor in work and commute time, spotting those moments where they can pencil in study time twice a day, and if possible, a third time. If they can't study during the first two slots, they aim for the third” (Interview, 4/27/2023). She attested that this scheduler has produced benefits for her clients as it allows them to “see where they can shift and reschedule when there is disruption, crisis or heavier assignment load” to successfully manage

such events (Interview, 4/27/2023). Abby also explained that using this scheduling template helps her understand the broader picture of her clients' lives and allows her to help them prioritize and organize. Once tasks are identified, organized, prioritized, and entered into the scheduler, she then uses her “School Tasks Breakdown Template,” shown in Figure 10. In this example, the template was used to help an SEC plan out the steps needed to complete a term paper.

Figure 10

School Tasks Breakdown Template

Task	**Steps Needed**	**Supplies/Info Needed**	**Due Date**	**Notes**
(example) term paper	Research topic, taking notes	Review citations: see notes, using recipe cards is helpful		https//www.example.com
	Create outline	Organize Information		MLA or the APA format is a wise decision
	Work on compelling introduction	Hook your reader		
	Conclude with ROCC method			Restate your standpoint, having One vital and leaving a Clincher for a reader to think about
	Select Citation Style	Review proper citation		
	Proofread	Make two copies		Have someone else read if possible

Note. Provided by participant and practicing SES Abby during data collection.

Referring to Figure 10, Abby articulated how she helped a client first break down the task into “chunks” and then establish a time frame for completion by starting from the due date and working backwards to create a plan of action in a manner similar to the high-quality instructional technique of backwards design (Sideeg, 2016). She added that this “approach can be applied to

anything" as she "once helped someone move who was overwhelmed by the entire process." In that instance, the plan involved sourcing moving boxes, separating donations, taking items to Goodwill, and prioritizing the packing order as "[they] should know what to pack last. The last box packed should be the first one opened, so you have your essentials like toilet paper and light bulbs first" (Interview, 4/27/2023). Abby's templates are similar to the daily and weekly mock to-do checklists included in the "To Do List for Presentation" provided by Melissa and Diane and mentioned in the previous section. These checklists are given to SESs during training as examples of how to support time-management in SECs. The weekly checklist shown in Figure 11 aims to organize longer term projects and concerns, such as term papers, group projects, studying for exams, and semester course selection. It also represents the emphasis on chunking mentioned above as an important support strategy for time-management and task organization.

Figure 11

Weekly To-Do Checklist

Things I need to accomplish this week:

- Write paper for Psych- Due Friday
- Review Group project for Econ- Due Tuesday 9am
- Study for Geo exam- Exam Thursday
- Confirm placement for Fall- email Program Director
- Find time for zoom call with group members- Wed

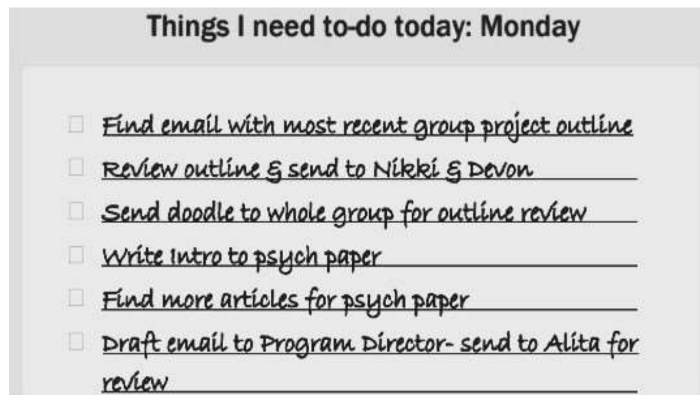
Note. From Powerpoint presentation for SED training provided by participants and SED researchers Melissa and Diane during data collection.

The daily checklist, shown below as Figure 12, is similar but aims to organize more immediate concerns, such as emails and communications to fellow students and professors that

require attention, research, readings, and chunks of longer tasks, such as writing an introduction to a term paper.

Figure 12

Daily To-Do Checklist



Note. From Powerpoint presentation for SED training provided by participants and SED researchers Melissa and Diane during data collection.

These simple checklists are designed to capture tasks that could be lost due to inattention, disorganization, or memory issues and therefore directly address the challenges of time-management and task-organization revealed in Sub-Finding 1.2, "Participants Considered Time-management to be a Common EFC Among SECs." In addition, these templates and checklists provide the basic lessons that Chris mentioned that some SECs need for "staying organized and maintaining schedules" (Interview, 4/18/2023).

Finally, as further evidence of their importance, time-management and task organization are the first topics of Melissa and Diane's EF Curriculum. The first topic in Session 1 is "Organizational Strategies and Permanent Places" and highlights the importance of having permanent places for one's keys, wallet, cell phone, and homework for the lesson is to decide on and begin using permanent places. The second portion of Session 1 introduces calendaring as a foundation of time-management, provides practice, and the homework asks the student to choose

a calendar that suits them and bring it to the next session with a class syllabus and a list of events and activities that should be added to it. Therefore, as Finding 10 demonstrates, data from multiple documents align with interviewee statements and the literature on the importance of EF as an area of intervention for SECs.

Finding 11: Participants Indicated that They Consider and Provide Support for the Potential of TCI Among SECs

Finding 2, titled "Temporary Cognitive Impairment (TCI) as a Cognitive Challenge," suggested that SECs may face TCI due to fluctuating symptoms or medication side effects, which can impact cognitive functions such as concentration and memory. In light of this, an examination of document data indicated that SED practices aim to identify the impact of these MH symptoms on individual SECs to plan educational support. For instance, the Barriers to Education Check Sheet (Appendix C), utilized in client intake, seeks to identify individuals' problems related to "Symptoms (e.g., Depression gets in the way, voices make it hard to listen in class)" and "Side effects from medication (e.g., Medication makes it hard to concentrate)." As shown in Appendix C, each item also includes a blank space labeled "Strategy" to generate ideas and take notes for a support plan based on intake interviews of the clients (Manthey et al., 2012, p. 84). The references to impacts of depression, hallucinations, and medication on concentration convey a recognition of and concern over how fluctuating symptoms and medication side-effects can affect academic performance (Hartley, 2010; Muckenhoupt, 2000; Hembree, 1988, Dobson & Kendall, 1993).

In addition, while examining SECs' symptoms and medication side effects to devise supportive intake strategies, the *University of Kansas Supported Education Toolkit 3.0* (Manthey et al., 2012), henceforth referred to as the *SED Toolkit*, advises SESs against screening out

clients based on "symptoms" or "medication compliance" : "Consumers are not screened out of Supported Education Services based on formal or informal educational or non-educational eligibility requirements such as literacy, substance use, language barriers, symptoms, perceived readiness, motivation, age, hygiene, medication compliance, etc." (p. 31). According to the "Definition and Rationale" for universal acceptance, "there are no criteria, other than a desire to pursue educational goals, for acceptance to the SED program [as t]here is no evidence that characteristics, symptoms or behaviors are reliable predictors of educational success." (p. 31). The claim that there is "no evidence" of MH symptoms and behaviors as predictors of educational success is made without reference to formal studies to support this assertion. Regardless, the statement signifies an emphasis on promoting equitable access to postsecondary education for SECs and an unwavering intention within SED practice to support their success despite any individual challenges pertaining to symptoms or medication side effects. This document data reflect an acknowledgement of and sensitivity to the possibility that symptoms and/or medication use could pose problems for SECs in their school experience, as well as a readiness of SED programs to help them overcome any related issues.

Additionally, interview data suggest the same understanding and sensitivity to MH symptoms and medication side-effects. For example, SED researcher Kerri personally attested to the challenges faced by those with MH symptoms, drawing from her own experiences with uneven work productivity while in college due to MH symptoms (Interview, 5/25/2023). SES supervisor Jackie asserted that conditions such as anxiety, PTSD, and schizophrenia can manifest sporadically during the academic year and affect students' cognitive abilities and task completion (Interview, 4/25/2023). Additionally, multiple participants, including Jackie, Ann, Renee, and Tom, drew a correlation between specific diagnoses—namely PTSD, schizophrenia, and

anxiety—and the likelihood of disruptive TCI episodes (Jackie Interview, 4/25/2023; Ann Interview, 4/25/2023; Renee Interview, 4/27/2023; Tom Interview, 4/19/2023). Furthermore, Chris placed a particular emphasis on reminding himself daily that his clients are "individuals in distress" and that challenges to participation and time-management are to be expected and met with a sense of compassion (Interview, 4/18/2023). In addition to identifying symptoms as a factor that can catalyze TCI episodes, SES supervisors Ann and Jackie also noted that the medications their SECs use could create episodes of diminished capacity. Ann highlighted grogginess and memory problems associated with medications (Interview, 4/25/2023) and Jackie reported a dynamic wherein medications impinged on SECs' ability to maintain schedules, concentrate in class, and stay organized (Jackie, 4/25/2023).

This broad recognition in document and interview data among SESs of symptoms and medications as potential challenges to SECs' success represents a mindset of acceptance and readiness among SESs and SED programs to proactively offset issues of TCI as they arise. In addition, this proactive mindset undergirds three support strategies revealed in the data which are presented in Sub-Findings 11.1-11.3: (a) assertive engagement and outreach due to an expectation that the MH symptoms of their clients will fluctuate, (b) the encouragement of SECs to reflect on the potential impact of symptoms and medication on their functioning as a first step in planning support, and (c) attention to and assistance with maintaining a medication regime.

Sub-Finding 11.1: Data Indicated an Emphasis on Assertive Outreach and Frequent Contact with SECs to Counter Occurrences of TCI and Non-participation. One support strategy delineated in document data is the practice of assertive outreach to clients. The *SED Toolkit* directs SESs to practice "assertive engagement and outreach" by phone, mail, email, and/or community visits and is defined as a minimum of five outreach attempts per month for

new referrals or non-participating clients until the individual acknowledges that they do not want to begin or continue receiving SED services (p. 11). The rationale given for assertive engagement is that “[m]any clients tend to drop out of treatment due to unmanageable situations in their lives caused by MH symptoms, poverty, or a sense of hopelessness” and “it has repeatedly been shown effective to provide assertive outreach to SMI clients” (p. 34). The *SED Toolkit* makes this assertion, though the document does not include a reference to any evidence of the claim of its effectiveness. However, the effectiveness of assertive outreach aligns with the evidenced-based practice of PC, a postsecondary student support strategy that involves proactive and frequent outreach to students and has been shown to increase engagement and retention (Ableman & Molina, 2001; Burge-Hall et al., 2019; Daniels et al., 2019; Glennen, 1975; Rothwell & Shields, 2021; Schwartz et al., 2005). Given this alignment, it appears that “assertive outreach” is the SED version of the proactive outreach of PC.

In addition to document data, though no participant specifically used the phrase “assertive outreach,” interview statements reflected intentionally frequent contact with clients. For example, current SES Abby emphasized that she requires weekly planning sessions with clients to offset potential problems which include planning for therapy and doctor visits in order to assist clients in keeping organized and following through on all aspects of their lives. She also stated that she will visit clients at home if they are unresponsive to outreach (Interview, 4/27/2023). In addition, current SES Julia stated that "best practice" for SECs entering their first semester of college should include a three month on-boarding period of consistent engagement to avoid them being overwhelmed with too many tasks when classes begin. Furthermore, when classes do begin, she explained that her SED program has a meeting protocol which requires one meeting with SECs within four days before each semester, a second meeting within three days

after the semester starts, weekly meetings for the first few weeks, and then either weekly, biweekly, or monthly meetings thereafter depending on the success of the student (Interview, 4/25/2023).

Sub-Finding 11.2: SESs Indicated that Encouraging SECs to Self-Reflect on the Potential Impacts of Symptoms and Medication Can be Beneficial. A second strategy found in the data to counteract TCI is encouraging SECs to reflect on how TCI might impact their academic performance. These personal reflections then provide SESs with insights on how they might best support their SECs. This strategy is evidenced by very clear examples found in documents, such as in the Barriers to Education Check Sheet mentioned above, which asks clients to identify whether they consider symptoms and/or medication side-effects as potential barriers and then has space to generate ideas for possible support (Appendix C). Another example that demonstrates a concern for TCI support are planned discussions with clients about the process of disclosure and applying for accommodations. For example, the *SED Manual* explicitly states that symptoms can impact cognition, informing SESs that their "[c]lients who are returning to school may experience problems with anxiety, concentration, memory, or other functional limitations caused by their illness" (Unger et al., 2016, p. 19). It then recommends that SESs provide information and assistance to help SECs reflect upon and evaluate the possible impact of their symptoms on performance to help them make informed decisions on disclosure. In another example, the Disclosure Form from the *SED Manual is* to be used in these client meetings provides the following guiding statements for SESs to use when helping their clients reflect on the possibility of TCI:

> Some people choose to only disclose elements of their psychiatric disability that interfere with educational goals. For example, some psychiatric symptoms interfere with

> concentration making it important to have additional time to take tests. If you were to disclose your disability, what aspects of your disability would you disclose? (Unger et al., p. 89)

Additionally, question six of the Assessing Educational Strengths and Interests section in the *SED Toolkit* asks SECs to consider what “challenges/barriers” they have faced in the past in school and lists “medication side effects” as one such potential challenge to consider for the future. Question 7 then asks, “What might help in overcoming these barriers to education?” (p. 83). These written statements suggest that encouraging self-reflection among SECs regarding the potential of TCI on their academic performance due to both symptoms and medications is considered a beneficial support strategy.

Interview data also suggested that encouraging SECs to reflect on the possible impacts of fluctuating symptoms and medication can be beneficial. For example, Ann explained that she helps clients who are experiencing debilitating symptoms reorient their thinking by focusing on organization and time-management, rather than dwelling on the symptoms. She explained her approach in the following words: “Rather than thinking, ‘How do I deal with this distressing voice while I’m trying to do my assignment?’ It should be more like, ‘I’ve put energy into dealing with this distressing voice and now I’m behind in class, [so how do I deal with that?]’.” She further stated that by asking clients to reflect on possible solutions rather than dwelling on the problems related to symptoms, they are able to regain control of the situation and maintain their progress in courses (Interview, 4/25/2023). Similarly, SES supervisor Jackie emphasized that helping clients reflect on how to use any cognitive techniques that they have learned from their therapists, instead of focusing on distressing emotional states related to symptoms, is a

beneficial support strategy that can lessen their distress and reorient their focus (Interview, 4/25/2023).

Sub-Finding 11.3: Participants Emphasized that Attention to and Assistance with Maintaining a Medication Regime is Beneficial in Addressing the Potential Occurrence of TCI Among SECs. Document data revealed that a third support strategy used to counter TCI among SECs is helping clients maintain their medication schedules and/or ensure that their medication treatment is aligned with their goals. For example, a main category of client information during client intake under Education Assessment of the *SED Manual* is "Disability related information such as diagnosis, medical problems, medications, and symptoms" (Unger, 2016, p. 61). In addition, for post-enrollment clients who are currently taking classes, the "Follow-Along Support Menu of Possibilities" lists *meals/snack/medication* as a daily support and *Ask for medication adjustment* as a support strategy to help manage symptoms (*Supported Education Toolkit 3.0*, p. 11). These references from documents suggested that the topic of medication and supporting medication schedules and adjustments are areas of concern pertaining to SECs' success in college. Such support is important because changes in medication or incorrect dosages can exacerbate MH symptoms and result in temporary cognitive deficits such as grogginess, difficulties with concentration, and memory problems which can impact academic performance (Hartley, 2010; Muckenhoupt, 2000; Hembree, 1988; Dobson & Kendall, 1993).

In addition to document data, three interviewees indicated the benefit of supporting proper medication regimes. For example, SES Abby emphasized that her required weekly sessions with clients include planning for doctors' visits to ensure that appointments regarding medication use are not missed (Interview, 4/27/2023). Similarly, SED researcher Diane and SED scholar Tom expressed that SECs can experience difficulty in attending off-campus

appointments related to medication and therapy while living on-campus (Diane interview, 4/17/2023; Tom interview, 4/19/2023). Overall, the strategies of assertive engagement and outreach, self-reflection, and medication support found in document and interview data reveal a widespread understanding that TCI can arise among SECs during the semester and that ongoing support to ensure proper medication and medication schedules is beneficial.

Implications

Based on the data presented in Findings 10 and 11 regarding support strategies for the cognitive domain for SECs in postsecondary education, it appears that SESs and SED programs in general take a preventative approach to countering potential EFCs and TCI that aims to empower individuals in their daily functioning to achieve their best possible academic performance. The participants' efforts to support cognitive functioning among their clients, which are actions guided by the support menus in the *SED Manual* (Table 7 and Table 8), are key takeaways that are supported by the literature. For example, prior studies found that similar preventative strategies that focused on supporting EFCs through assertive and frequent engagement through services such as proactive counseling (PC) and academic coaching (AC) helped increase course completion, GPAs, and retention rates (Bettinger and Baker, 2011; Vander Schee, 2007). Furthermore, the specific focus on time-management and organization strategies and EF skill-building in general which was found in the data aligns with prior studies on the benefit of EF skill-building for student success (Martin et al., 1983; Ryan and Glenn, 2002; Rothwell & Shields, 2020). This alignment between the SED support strategies presented above and the literature implies that SED programs and SESs are utilizing evidence-based best practices in their work with SECs, though whether their practices are grounded in the same literature or other research and experience is not known.

In terms of contrasts between findings from data collection and the literature, one difference is that SED programs appear to place a greater emphasis on the possible negative impacts of MH symptoms and medication side effects than does the literature on student support presented in Chapter 2. In particular, the support strategy presented here of encouraging self-reflection stands apart from the EF skill development support strategies presented in the literature review (Fleming & McMahon, 2012; Rothwell & Shields, 2020). This guided self-reflection of SECs, which are used to guide SESs' support plans for individual SECs, represents a more therapeutic approach than does the skill-development, provision of information, and task completion support of traditional on-campus student support services.

In another contrast to student supports discussed in the literature review, the interview and document data presented here indicates that SED more clearly recognizes the potential for TCI in college students and the importance of supporting their adherence to medication regimes. This difference implies that SED programs and SESs may be providing a service that more directly addresses MH challenges than do campus services such as PC and AC, for example. This observation of SED's heightened emphasis on MH challenges in comparison to traditional campus support services aligns with prior literature, which articulated that SED's unique and primary purpose is to specifically support college students who are experiencing MH challenges (Collins & Mowbray, 2005).

A final contrast is relevant to practices within the field of SED itself. While the literature review produced one SED-related study that found a positive correlation between cognitive rehabilitation (EF training) and college retention (Kidd et al., 2014), and another study which asserted that EF training could be useful for SECs (Ellison et al., 2014), no literature on the use of an EF curriculum to support SECs was found. Therefore, the interview data and EF

curriculum documents provided by Diane and Melissa represent a new and more robust form of SED that takes into account and proactively addresses the negative impacts of EFCs to academically empower SECs by teaching them crucial EF skills. This incorporation of EF skill training into the practice of SED by Diane and Melissa suggests an evolution in the field of SED.

Findings: Support Strategies for Individual Challenges: Behavioral Domain

Findings on individual challenges in the behavioral domain suggested that SECs can struggle with using the types of academic success skills that typically lead to student engagement and the attainment of educational goals which included: (a) the use of cognitive skills (e.g., setting goals, monitoring progress, memory skills), (b) the use of self-management skills (i.e., maintaining attention, motivation, and controlling anger), and (c) the use of social skills (i.e., listening, social problem solving, and teamwork) (Carey et al., 2014). Specifically, interview data presented here for Findings 12 and 13 suggested problems with time-management and organization, memory, attention, the self-management of emotion, and peer relations in the classroom. Data collected in this study revealed that these individual challenges were being addressed through a variety of support strategies with an emphasis on EF and communication skills support as presented in Findings 12-13 below.

Finding 12: SECs Discussed a Variety of Support Strategies Intended to Increase SECs' Use of Academic Success Skills Related to Cognition and Self-Management

There is considerable overlap between SESs' support strategies for cognitively related challenges (EFCs and TCI) and for behaviorally related challenges, since academic success skills in the behavioral domain include cognitive skills, such as setting goals, monitoring progress, and actively employing memory skills (Carey et al., 2014). Therefore, the evidence provided above in Finding 10 on how SESs support cognition is also applicable here as supports for productive

academic behavior. For example, SES Abby's "School Tasks Breakdown Template" (Figure 10) supports students' EF by helping them identify and sequence the sub-tasks involved with writing a paper (cognition), but also ensures that it is physically written and turned in on time (behavior). As well, the other cognitive support strategies presented earlier such as the use of schedulers and checklists, help with setting alarms, navigating and using transportation, and strategically timing support meetings aid in both cognitive functioning and in behavior that can produce academic success and the attainment of educational goals. Such behaviors include actions such as securing accommodations, completing assignments on time, getting to class on time, and administrative tasks like completing financial aid applications to ensure that funding is available to attend college.

One main support strategy to promote positive academic behavior, emphasized by SESs Julia and Abby, is the use of proactive and frequent meetings to ensure that SECs are engaging in the cognitively-related academic success skills necessary for success, such as setting goals, monitoring progress, and using memory skills (Carey et al., 2014). Julia explained that her SED program's meeting protocol, described in Sub-Finding 11.1, helps SECs actively keep track of tasks and complete goals, such as applying for accommodations before the beginning of the semester. She added that she also personally appreciates these meetings, which are required by her SED program, because they also help her stay on top of the needs of each client, such as making sure that her SECs have their financial aid in order, are registered in classes and know their locations, and are connected to ODS for accommodations if they choose to disclose. She stated that building "that framework" and then proactively maintaining contact during the early part of the semester ensures that students begin their coursework smoothly (Interview, 4/25/2023).

Abby also emphasized the importance of frequent meetings early in the semester to support the use of academic success skills, stating: “[In order] to prevent a second or third-week drop, we want to ensure that people are submitting everything. Because, once midterms hit, they tend to quit. That's when they give up” (Interview, 4/27/2023). She considers these meetings so crucial, in fact, that if clients are not responding to her outreach, she will visit their homes and knock on their doors to make sure that a meeting schedule can be established. Abby attested to the benefit of these meetings for SECs, noting that some long-term clients request them even during times of success. She explained that when they meet, she asks them, “Are you on track? How is your mental health? What skills are you using?" and finds that in general, these long-term clients are “doing amazing” (Interview, 4/27/2023).

Secondly, in terms of supporting the academic skill of self-management, SES Julia and SES Abby commented on strategies they use to support attention and to diffuse frustration and anger among their SECs. Regarding attention, Julia explained how she consistently reviews course material and information with clients, making sure to “read through the directions with them, and ensure they understand and review the syllabus, discuss office hours, and talk about any announcements they have” (Interview, 4/25/2023). She considers it “best practice” to help clients stay focused on course information and one that should continue throughout the semester. In fact, the “treatment plan” that she enters into county records as part of the overall MH rehabilitation plan for clients, often includes reviewing syllabi as part of the official treatment. In addition to this consistent and ongoing review of course material, Julia also frequently asks clients challenging questions that they cannot answer “off the cuff,” but instead require their attention and thoughtfulness. These questions cover assignments (“How's your homework? What was your first grade? How did that go?”), professor feedback (“What was the teacher's feedback?

Is there a delay in assignment feedback? Why hasn't there been feedback? Have you prompted your teacher? Is this a conversation we need to have?") and accommodations ("Have you requested those? Have you had a conversation with the teacher about it? Have you sent a follow-up email?") (Interview, 4/25/2023). By putting clients on the spot with these questions, Julia is guiding them to be attentive to developing situations regarding grades, teacher feedback, and accommodations.

While Julia discussed strategies to support SECs' self-management of attention outside the classroom, Abby emphasized strategies for the management of attention within the classroom, specifically regarding note-taking. She explained how she ensures that SECs who have trouble paying attention in class are provided "mechanical tools" by the community college, such as a pen that records lectures and links the recorded audio to students' written notes in a "special book." Abby explained that this tool helps clients overcome periods of inattention by capturing crucial information from the instruction. Additionally, Abby advocates for priority seating for her SECs so that they feel comfortable and can focus, stating that "some prefer the back so they can stand up, others prefer near the door if they feel the need step out, and some like the corner to see everything" (Interview, 4/27/2023). Abby's strategies to support attention, which involve innovative technology and priority seating considerations, appear to not only increase the probability of attention in current classes, but also serve to give SECs helpful strategies that they can use in future courses.

In terms of the self-management of emotions, SESs employ several strategies to help SECs manage disruptive feelings, such as the feelings of frustration and anger, overwhelm, and anxiety that are presented in Findings 4-6. These strategies will be discussed in detail in Findings 14-15 regarding the affective domain.

Sub-Finding 12.1: Support for the Use of Social Skills as an Academic Success Skill was not Emphasized in the Data. In contrast to reported support for the academic success skill areas of cognition and self-management, the third area of the use of social skills such as listening, social problem solving, and teamwork that is identified in the literature (Carey et al., 2014) is not present to a significant extent in the data collected for this study. Interviewees did not mention the need to support SECs social skills regarding peers, with only one instance in which an interviewee – current SES Renee – explained how she sometimes discusses the benefits of peer relationships with SECs who may see them as unnecessary distractions (Interview, 4/27/2023). In addition, while professor and SED researcher Matt and researcher Kerri discussed and provided documentation regarding a campus engagement study on students with MH challenges that they conducted, their findings described students' experiences and the value of increasing social engagement but did not assert recommended strategies to support social skills or teamwork (Matt Interview, 4/26/2023; Kerri Interview, 5/25/2023). Otherwise, while researchers Melissa and Diane emphasized teaching SECs the use of socially appropriate and friendly communications with professors as a means to advocate for their needs, they did not highlight peer communication as a strategy for success (Interview 4/17/2023). Finally, document analysis identified only one instance related to peer connections, with The Follow-Along Menu of Possibilities listing "Strategies for managing in-class dynamics and interactions" and "Plans for talking with instructors and peers" as recommended actions under the "Instructor and Student Relationship" category. However, interview data did not reflect these items as main areas of support in practice (Unger et al., 2016, p. 61).

Finding 13: SESs Emphasized Effective Student-Faculty Communication as a Beneficial Academic Behavior

Sub-finding 3.4, “Participants Indicated that Achieving Effective Communication with Faculty can be Difficult for Some SECs,” discussed earlier in the section on individual challenges, suggested that some SECs experience challenges in proactively and effectively communicating with faculty, particularly surrounding issues of disclosure and accommodations, which involve misunderstandings and misinterpretations of professors’ messages on the part of some SECs and were associated with negative emotional reactions such as anger and frustration. To address these challenges, four interviewees explained that they engage in support strategies which (a) encourage proactive communication by SECs with their professors about SECs’ accommodations and (b) address individual communication issues to offset misunderstandings and mitigate negative reactions in SECs.

Sub-Finding 13.1: SESs Explained that They Assist with SEC-Faculty Communications Regarding Student Needs and Accommodations. Regarding a general strategy of proactive communication, four participants emphasized that being able to express one’s needs is a critical skill for college students. Abby stressed her general belief that everyone, including SECs, “need to feel heard” and “deserve” the right to ask questions and, if needed, “deserve to be able to ask again” (Interview, 4/27/2023). Similarly, Melissa asserted that everyone needs to be able to “express their needs to others” and that it is “a real skill that every adult needs to develop, but it's especially helpful for people with mental health conditions to learn so that they have language to use when they need it” (Interview, 4/17/2023). She further explained that a primary benefit of effective student-faculty communication is an increase in understanding and flexibility from professors which can be especially useful for SECs due to

unforeseen individual challenges. Melissa further stressed that early communication with faculty regarding accommodations is paramount, explaining that “[a] faculty member is more likely to grant you your accommodations if a request comes a day in advance, than if you don't submit your paper and now you have a zero” (Interview, 4/17/2023). Likewise, Julia stated that professors “are going to be way more understanding if [students] come to them on the first day and say, ‘Hey, I'm hoping that I won't use these accommodations, but these are what I have in place. These are some circumstances in which I might need to use them’” (Interview, 4/25/2023). In addition, she highlighted that early and clear communication specifically regarding accommodations is important in terms of securing a clear understanding on how they will be implemented. She also reiterated Melissa’s point that faculty are generally more empathetic and flexible with students who communicate their needs ahead of time and before a problem arises (Interview, 4/25/2023).

To support early student-professor communication as an effective academic behavior, Melissa described how her program supports “effective communication techniques based on the audience,” with professors in this case being the audience (Interview, 4/17/2023). To that end, she pointed to a document on her program’s website entitled “Email Template & Guide for College Students Advocating for Assistance at School.” This document is a detailed guide for SECs to use when writing to their professors and includes written example emails. The guide is six pages and addresses four different scenarios: 1) Crafting an Email to Ask a Professor for a Change/Informal Accommodation, 2) Crafting an Email to a Professor if your Request is Denied, 3) Crafting an Email to the Administration to Advocate for a Change (e.g., Allowing for Pass/Fail), and 4) Crafting a Thank-You Email to People who have Supported You. Figure 13 is a portion of the first scenario of requesting a change in policy or an informal accommodation:

Figure 13

Email Template to Request Change/Informal Accommodation

What is the Email Template & Guide? *Use the Email Templates in this Guide when writing to professors or administrators at your college. This Guide can serve as a jump-start for an effective email when advocating for changes to policies or accommodations.*

1. Crafting an Email to Ask a Professor for a Change/Informal Accommodation.
Use the table below to help you think through what to say:

	Item to Include	Example Email Content
A.	Start with a nice statement, such as:	"I hope you and yours are safe and healthy."
B.	Express your gratitude for their effort, such as:	"I appreciate the email that you sent out to us about how to finish up the class. I understand that you are probably receiving many emails from students. I realize this is a hard time for professors too, and I'm sure it has been difficult to transition to online instruction given the circumstances."
C.	Describe your barriers in a functional way (how it affects you), such as:	"I have been struggling with finishing the assignment on time because of limitations I have at home that would not have been an issue when on campus."

Note. A portion of resource materials provided by participants and SED researchers Melissa and Diane during data collection.

In Figure 13 Items A-C identify elements to include in the email and provide examples that clients can use to customize their emails to professors. Items included in D-I of this template, not included here, further explicate how to: describe prior actions taken to overcome one's challenges, convey the personal value of the current class, make the request and state the reason for the request, and respectfully close the email with an offer to speak on the phone. Researcher Melissa explained that this template is intended to help SECs "tell their stories in a way that gets their needs met," especially considering how busy faculty can be with the large class sizes common in postsecondary education. While she did not provide specific anecdotes regarding the past use of these email templates, Melissa stated that students have reported them being helpful in their communications with professors. She explained that even though they were

originally produced and provided to assist students during the COVID pandemic, she and Diane decided to keep them available online due to positive feedback from students (Interview, 4/17/2023).

Melissa and Diane referred to this type of friendly, polite, and clear SEC-faculty communication as “love notes” in which the main points are: "Hey, I'm having a hard time. Do you think that I can get a couple of days? These are the things that I'm struggling with." As Diane explained, these types of personalized communications can “force some love” into the communication in order to hopefully “get students what they want, or at least in the ballpark” (Interview, 4/17/2023).

Sub-Finding 13.2: SESs Described Personalized Assistance with Student-Faculty Communication as a Beneficial Support Strategy. In addition to the formalized communication skill development for individual SEC-faculty communications presented in the guide of Figure 13, document and interview data reveal that SESs also provide direct assistance for SECs’ personal communications with professors. For example, in the “Follow-Along Support Menu of Possibilities” of the *SED Manual,* the following supports are listed under the “Instructor and Student Relationship” category: “Plans to get performance feedback from instructors, Plans for interpreting and dealing with lower grades or scores and feedback, Plans for talking with instructors and peers, How to ask for and receive help” (Unger et al., 2016, p. 61). These items seem to be designed to help SECs develop the skills that can be valuable when communicating with professors. In addition, three participants reported that they provide personalized support for clients in their email exchanges with professors. For example, SES Julia’s probing questions of SECs during the first weeks of school, presented above in Finding 12, put attention on SEC-professor communications for informational purposes. Julia explained that she asks questions

such as “Is there a delay in assignment feedback? Have you prompted your teacher? Have you requested accommodations? Have you sent a follow-up email?” to uncover any potential information needed. If information gaps are found, then she explained that she will help SECs craft effective emails to gain that information. She added that the level of email support that she provides depends on the given student’s typing abilities and self-confidence in their writing. For those with the necessary typing skills and confidence, she will encourage them to write an email and then she will review prior to sending. For those with less confidence, she will ask them to talk through what they want to say and then compose it for them and elicit their review and feedback (Member Check, 7/20/2023). Additionally, Julia explained how she stays aware of the administrative emails required in the accommodations process and assists SECs with those as well: “They get the email from disability services with their accepted accommodations, and they [need to] send a follow-up email to gauge whether or not an in-person or Zoom meeting with the teacher is needed “ (Interview, 4/25/2023). Likewise, SES Renee stated that she helps her SECs write emails to professors to ensure that they are providing the appropriate accommodations and are communicating with the SECs’ advisors. Finally, SES Abby stated that she has helped clients write email responses down “word for word” frequently at first, but that her clients “usually can work towards doing it independently rather quickly” (Interview, 4/27/2023).

In addition to assisting with emailing for informational reasons, SESs also indicated that they support SEC-faculty communication to offset emotional responses on the part of clients. For example, Renee described how she helps SECs re-interpret messages that they receive from professors if they initially experience anxiety or take offense to the email. She stated that “a lot of times certain clients will misinterpret an email, and then they'll get very anxious about it or they'll think their professor is mad at them or something.” Therefore, she works with them to

“take a step back and understand what the professor meant in their email” (Interview, 4/27/2023). Similarly, Abby stated that she often helps students receive and formulate responses to professors to mitigate negative emotional reactions. She explained that “people with high anxiety will sometimes not open the email from their professor until they send me a copy and we open it together while on the phone.” In these cases, she will read the email aloud for the client since she finds that "the voice in which they read the email is more negative” than if they hear the email in her voice (Member Check, 7/18/2023). In addition to reading emails aloud, she also helps clients interpret emails from their professors to mitigate frustration or feeling unheard, telling her students, “Let's really see what's written in the email. Let's really see what could have been meant by that assignment” (Interview, 4/27/2023). Likewise, Julia described how she will talk situations over with clients and encourage them to speak further with their professors if they are upset. She recounted a case in which a client was upset over a professor’s unwillingness to provide a particular accommodation. After discussing the situation with the client and encouraging them to go communicate about the issue, the client went in and simply said, “‘I'm really wondering why you weren't willing to do this accommodation,” to which the professor replied, “Oh, well, I'd rather do this instead." According to Julia, the professor’s preference in how the accommodation would be implemented was “a perfectly acceptable suggestion. So, instead of dropping the class and being angry, defiant, I always ask the client, ‘What can we do?’” (Interview, 4/17/2023).

Sub-Finding 13.3: SESs Described Direct Communication with Faculty and Staff to Advocate for SECs’ Needs on Their Behalf as a Beneficial Support Strategy. Three participants stated that they directly contact faculty and staff regarding an important issue if a student has not done so or if a message needs to be conveyed more clearly. For example, both

SES Abby and SES Renee discussed the importance of filling in gaps in communication that would normally be left to a student, such as between a student's advisor and professors to ensure proper accommodations. Or Abby and Renee will also communicate directly with professors on behalf of students to advocate for their needs. For example, Renee described one client with a tracheostomy tube, so for assignments that require public speaking, she ensures that "the professor offers an alternative for them to do an essay as opposed to being recorded" (Interview, 4/27/2023). To facilitate communication between SESs and school personnel, the *SED Manual* provides a "Supported Education Disclosure Form," which is a Release of Information agreement that allows SESs to communicate with "Accommodations/Disability Services Office, Student Support Services, Financial Aid, Teachers, Students, Academic Advisor, TRIO Advisor, etc." (Unger et al., 2016, p. 53). This form, if agreed to and signed by an SEC, gives Julia and other SESs the ability to "step in" and arrange a group conversation with the client and faculty or staff in order to advocate on the client's behalf. Julia described what she would say to campus personnel in such a collaborative meeting: "Hey, based on the disability services assessment, these are the accommodations that [the student has]. Is there any way that we can make some wiggle room and go from there?" (Interview, 4/25/2023). In addition, Julia provided a "Liaison Services Agreement Form" used at her local community college, which can be used to create an agreement between SECs and their professors for reasonable flexibility in the case of unexpected disability related symptoms. She stated that her advocacy is bolstered when this agreement is in place. In sum, SESs Renee, Abby, and Julia all indicated that this advocacy has been a beneficial support strategy to bolster SEC-faculty communication and help ensure that SECs' needs are voiced, understood, and addressed.

Implications

Overall, the data for Findings 10 and 11 present a notable overlap between cognitive functioning supports and behavioral functioning supports. For example, as presented in Findings 12 and 13, the strategies used to improve the cognitive skills of EF, such as teaching and assisting with time-management through the support of attention and working memory are also intended to improve positive behavior in students such as actively tracking classes, completing long-term assignments, and turning them in on time. One explanation for this overlap is that lenses used in this Capstone project to understand individual challenges in postsecondary education—the three domains of student of cognition, behavior, and emotion (Fredericks, 2004; Medalia & Revheim, 2002)—are not fully distinct categories of the human experience. Rather, the lines between cognition and behavior begin to blur when 'thinking in an organized way' becomes a kind of behavior—a kind of doing. In other words, is paying attention solely an automatic cognitive function or does it involve intentional and actionable behavior? The data suggest that perhaps paying attention involves both automatic cognitive responses in the brain that could be improved through training as well as intentional and motivated behavior that could be encouraged through modeling and guidance. This dual perspective implies that the strategies to support SECs need to encompass both isolated EF skill training (such as the training provided by Melissa’s and Diane’s curriculum) as well as SESs’ willingness to model and guide positive behavior by, for example, riding the bus with clients or knocking on their doors when they are unresponsive.

Another possible rationale for this overlap is that cognitive supports for academics positively influence academic behavioral outcomes so that the effects of the support appear simultaneously in both domains. For example, by utilizing Abby’s “School Tasks Breakdown

Template," a student's cognition can work more effectively, which can lead to improved academic behavior and improved grades and an increase in earned credits. While a connection between better cognition and better grades may seem logical, this flow from improved cognition to improved behavior raises an important implication, which is that perhaps support strategies should first address EF among clients which will then contribute to subsequent effective academic behavior and higher performance. SED researchers Melissa and Diane's contention that robust EF training "undergirds" and augments SECs' academic performance echoes current literature which links EF training to higher GPAs, higher rates of retention and fewer instances of academic probation (Vander, 2007; Ableman & Molina, 2001). Conversely, however, Matt and Chris assert that engagement and meaningful relationships predominate in determining student success, and EF training, while it might be useful, is not as significant (Matt Interview, 4/26/2023; Chris Interview, 4/18/2023). These varying perspectives suggest that support for SECs should entail a multiplicity of strategies that address different angles of a person's experience. This insight aligns with the strategy of encouraging self-reflection of the individual to uncover needs and plan support which could result in a variety of approaches, whether that would be EF training or developing social skills for example.

In addition, the support strategies presented in Finding 12 and 13 involve proactive and frequent communication that reflect the same preventative practices reported as beneficial in the literature (Varney, 2012; Higgins, 2003; Schwartz et al., 2005). Additionally, supports that focus on how clients are 'behaving' academically seek to bolster cognition and self-management, ensure adherence to a purposeful schedule, secure the necessary accommodations, and facilitate student-faculty communication in order to maximize students' functionality and to prevent the "mid-term drop," as Abby put it (Interview, 4/27/2023), and the "zeros" on papers referred to by

Melissa (Interview, 4/17/2023). This alignment between this project's data and the literature suggests the key takeaway that being proactive through frequent communication is an important element of support, helping SECs develop cognitive and behavioral habits that foster academic success.

Findings: Support Strategies for Individual Challenges: Affective Domain

Findings 4-6 on individual challenges of the affective domain suggest that SECs can struggle with 1) anxiety which can amplify academic challenges and is rooted in self-pressure and related to misunderstandings and miscommunications, 2) a negative sense of self that manifests in feelings of inadequacy and low self-efficacy, negatively impacts a person's belief in their entitlement to support, and can originate in fear, 3) a lack of positive coping skills which can lead to feelings of overwhelm and to struggles with anger and frustration, and 4) feelings of isolation due to social struggles. In general, participant statements revealed an awareness and concern with the affective challenges of SECs. For example, SES researcher Melissa emphasized the overall importance of recognizing emotional struggles among SECs, saying "It's important to address the emotional components and not let them overwhelm you because school can be challenging, especially when you're struggling" (Interview, 4/17/2023). Likewise, SES Renee stated that "there's a lot of emotional support involved in the [SES] role to ensure that clients don't get overly frustrated" and added that "It's kind of inevitable you have to talk about some emotions around school" (Interview, 4/27/2023). Finding 14 below reveals support strategies which work to reduce anxiety by supporting EF, communication skills, and emotional states in SECs, and Finding 15 reveals strategies which work to combat a negative sense of self by promoting self-esteem and confidence through 1) supporting SEC success in the first semester, 2) providing positive thinking to dispel fear and build confidence, 3) educating clients on their

right to accommodations and the process of securing them, and 4) helping SECs build positive coping skills.

Finding 14: Participants Conveyed that They Use EF, Communication, and Emotional Support Strategies to Help Reduce Anxiety Among SECs

Six participants discussed support strategies they use to mitigate anxiety among SECs, which, as identified in Findings 4 and 6, is associated with academic challenges and feeling overwhelmed, is rooted in self-pressure and fear of failure, and can be related to misunderstanding and miscommunication. Overall, SESs conveyed the sense that specifically addressing anxiety among SECs is both a crucial and constant task. For example, Abby asserted that managing SECs' anxiety levels is an essential part of her role, explaining that "[w]e work on keeping their anxiety levels manageable and it's still high, but not out of range" and added that most of the support she provides, in fact, involve helping her clients manage anxiety (Interview, 4/27/2023). As shown in the data, support strategies used to reduce anxiety include support for EF and SEC-faculty communications, and emotional support through promoting SECs' self-reflection and encouraging them to take breaks and rejuvenate.

Sub-Finding 14.1: EF Support was Understood as Preventative Measure for Anxiety. Six participants suggested that there is a strong connection between the support strategies used to address EFCs and those used to address anxiety. As described by participants, mitigating EFCs can help clients lessen the overwhelm which lies at the root of anxiety and can trigger stress in the first place. For example, as mentioned in Sub-Finding 10.1, Abby stated that a main goal of her support is "to reduce the factors that could trigger or worsen anxiety" and she therefore conducts weekly planning sessions with all of her clients specifically to help them avoid stressful situations that can occur from poor time-management. Likewise, she indicated

that she uses her “School Tasks Breakdown Template” (Figure 10) to prevent clients from becoming anxious due to feeling overwhelmed by life activities such as moving or stressful academic tasks such as writing papers (Interview 4/27/2023). Similarly, SED researcher Diane explained that a primary reason for providing EF support, such as “scheduling out the semester, breaking down projects, and starting them early” is precisely to avoid the stress associated with last-minute rushes (Interview, 4/17/2023). According to these interviewee statements, therefore, EF support is viewed as a beneficial strategy to reduce anxiety by preventing its initiation through proactive assistance with time-management and cognitive skill-building. Prior studies in the literature corroborate this connection (Bettis et al., 2017; Jarrett, 2016; Petersen et al., 2014; Rabinovici et al., 2015; Snyder et al., 2014).

Sub-Finding 14.2: Communication Support was Understood as a Preventative Measure for Anxiety. According to statements by three participants, the strategies they use to support SEC-faculty communication for clarity on accommodations and expectations, as described earlier in Finding 13, also have the dual purpose of reducing anxiety. As discussed in Finding 13, SESs Renee, Abby, and Julia provide personalized support for clients in which they help them understand, interpret, and respond to communications from professors. Regarding anxiety, Renee stated specifically that she helps reduce the anxiety of clients who can become “very anxious” due to misinterpretations of professors’ emails, by having them rethink and reconsider what a professor might have been trying to communicate (Interview, 4/27/2023). Similarly, Abby will read emails from professors aloud for clients who are too anxious to read them on their own, providing a ‘voice’ that is assuring and reasonable and avoids the anxiety produced by the negative ‘voice’ that the clients give the professors’ statements when they read them alone. Additionally, Julia’s efforts to get at the root of misunderstandings over

accommodations between her SECs and their professors are performed, in one regard, to reduce her SECs' anxiety by helping them gain clarity about their professors' expectations (Interview, 4/25/2023), which works to combat a type of stress that Abby described as "anxiety around not understanding, not knowing" (Interview, 4/27/2023). These interviewee statements suggest that assistance with interpreting and understanding communications from faculty is seen as an effective means to mitigate SECs' anxiety in general over communications with their professors as well as anxiety grounded in feeling uninformed.

Sub-Finding 14.3: Emotional Support was Understood as a Mitigating Measure for Anxiety that is Rooted in Self-Pressure and Fear of Failure. Four interviewees discussed types of emotional support that can be used to reduce anxiety among SECs. For example, SES supervisors Jackie and Ann explained that, even though SESs are not licensed therapists, they can and do assist clients in practicing the therapeutic methods that clients are learning from their therapists. Jackie stated that since "anxiety can definitely be a side effect" of SECs' MH symptoms, SESs can utilize "deep breathing as a form of coping with, or strategy in dealing with, their feelings of being overwhelmed or anxious." Or, even if an SES does not mirror the exact therapy, Jackie added that they can "remind the individual of that strategy to calm themselves first before they embark on an educational activity" (Interview, 4/25/2023). Ann added that the SESs she supervises are also encouraged to help clients learn to use evidenced-based tools such as "personal medicine," a set of strategies developed by Pat Deegan, the author and practitioner in the MH recovery movement mentioned in Finding 11.3 regarding TCI. In the context of anxiety, the principle of personal medicine states that people with anxiety should be empowered through self-awareness of anxiety triggers and access to meaningful, purposeful, and

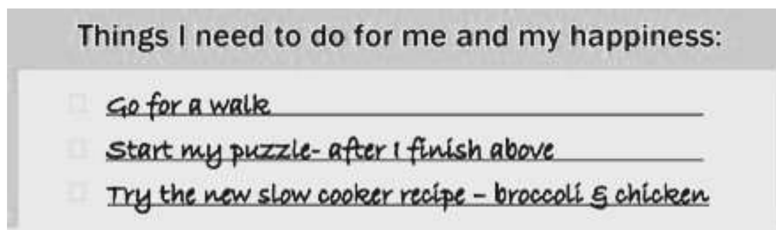
self-caring activities (for example volunteering, hobbies, yoga, mindful meditation) to reduce their anxiety (Deegan, 2019).

Likewise, statements by SESs Renee and Abby reflect the same person-centered strategies of rejuvenation and relaxation as means to reduce anxiety related to school. For example, to support her anxious clients who tend to overwork themselves out of a “fear of failure,” Renee explained that she sometimes finds it crucial to encourage them to take a break by doing something relaxing. She will tell them, “You need to take a break and do something else. What is something you can do that will relax you?” which might include, she said, listening to music or watching anime. Renee marveled at how her clients are “putting so much pressure on themselves to get it all done in one sitting” and “won’t even realize that they need the break,” and noted that her suggested respites can help her clients reduce the anxiety they experience related to self-pressure. She finds this strategy of learning to self-pace through taking breaks and relaxing to be beneficial and yet, “so simple” (Interview, 4/27/2023).

Abby also emphasized the need for students to take breaks in order to offset anxiety, specifically by finding joy through noticing the world around. She stated that she has clients who “always live on that anxiety” and frequently apologize for being anxious. To help them, she suggests “finding that joy” in life, explaining that "[w]e can be having the most horrendous time and still take a walk. Is there snow? Are there flowers? Is the sun peeking through?" (Interview, 4/27/2023). She helps her clients break feelings of chronic anxiety by having them open their experiences to being “able to see or do or comprehend other things,” because “when we're anxious, we're so stuck in that repeating voice” (Interview, 4/17/2023). Renee’s and Abby’s strategy of encouraging breaks to relieve anxiety is echoed by the slide from Melissa and Diane’s training presentation for new SESs as shown here in Figure 14.

Figure 14

Examples of Taking a Break to Reduce Anxiety



Note. From Powerpoint presentation for SED training provided by participants and SED researchers Melissa and Diane during data collection.

As well, under Managing Symptoms in the Follow Along Menu of Possibilities, “Plan for managing stress, anxiety- self-care” is listed as a support item, though what this plan might entail is not explicated (Unger et al., 2016, p. 61). According to statements from Abby and Renee, as well as some evidence from Melissa and Diane’s documents and the Follow-Along Menu, helping clients learn to self-pace through taking breaks for relaxation and rejuvenation is considered a beneficial strategy to reduce anxiety.

Finding 15: SESs Described how they Promote the Self-Esteem and Confidence of SECs to Combat the Negative Sense of Self

Finding 5, “SECs Can Experience a Negative Sense of Self,” suggests that a negative sense of self among SECs can manifest as inadequacy and low self-efficacy, can originate in fear, and can negatively impact SECs’ belief of their entitlement to support and accommodations. Four interviewees provided information on the support strategies that they use to counter the negative sense of self by promoting self-esteem and confidence through 1) supporting SEC success in the first semester, 2) providing positive thinking to dispel fear and build confidence, 3) educating clients on their right to accommodations and the process for securing them, and 4) building positive coping skills.

Sub-Finding 15.1: First Semester Success was Viewed was a Means to Build Confidence to Overcome Feelings of Inadequacy and Low Self-Efficacy and Increase Persistence. To combat feelings of inadequacy and low-self-efficacy among her clients, SES Abby said that she practices a strategy of helping her students succeed during their first-semester to build confidence and boost persistence. For the first term, her main goal is for first-semester retention: "My goal for them, the very first term, no matter where they're at, no matter what they're studying, or how often they've been to school, is to not give up." She de-emphasizes the importance of grades in this first semester and instead focuses on helping SECs simply pass their courses in order to experience success, humorously adding she will "drag [them] kicking and screaming to pass their class" (Interview, 4/27/2023). Overall, her statements indicated that retention during the first semester is crucial, and grades are secondary because, as she confirmed in a follow up Member Check, that "making sure that students pass their first semester courses can give them can help with feelings of self-worth needed for the long-term" (Member Check, 4/15/2023). As mentioned above in Finding 12, Abby emphasized frequent meetings to prevent her clients from "disappearing," which she asserts happens often with first-term students once they begin to fall behind in their courses (Interview, 4/27/2023).

During her meetings with clients, Abby explained that she assists with SECs with their time-management through engaging in meticulous planning, scheduling, and tracking of tasks with them as strategies to ensure that clients do not fall behind in their schoolwork, thus preventing them from quitting around mid-terms and ultimately earning their first semester credits. This strategy that focuses on time-management, she asserted, helps students persist in school for the second semester at which point they can then build on their success and shoot for B's and even A's if possible. Finally, she added that after successfully completing their first-

semester classes, she has clients who have called her and reported on their newfound confidence in handling problems at school on their own, which represents, she said, a new positive sense of self and of self-efficacy, which she described as “amazing” (Interview, 4/27/2023). Similarly, SED researchers Melissa and Diane also emphasized that the development of strong EF skills can give students the confidence needed to persist and perform well in the college environment, which, they said, increases their clients’ feelings of self-adequacy and empowerment and contributes to their success (4/17/2023). Also similar to Abby’s strategy, Julia stated that she will “help [clients] build their self-esteem by helping them think of small goals so that they can kind of take small steps and have small victories moving forward” (Interview, 4/25/2023). Her emphasis on helping SECs taste ‘victories,’ no matter how small they may be, suggests that a strategy of early success can create feelings of confidence among SECs which can lessen the negative sense of self that some SECs feel and thereby aid in their persistence.

Sub-Finding 15.2: SESs Described how They Employ Positive Thinking to Overcome Fear and Increase Confidence and Self-Esteem to Lessen the Negative Sense of Self. Several participants discussed the importance of helping clients overcome fear associated with beginning postsecondary education to boost their confidence and lessen occurrences of the negative sense of self. SES Abby stated that she first tries to dispel any fear that SECs may have regarding their academic abilities, fears that can create feelings of inadequacy and fuel a negative sense of self. She explained that she assuages doubtful clients by assuring them that if they allow her six months, she can teach them all the skills they will need to be successful in college, including how to communicate effectively with professors, use the computer with confidence, and utilize beneficial study skills. Then, she projects a positive outlook into the future: “In six months we're gonna sit down and I'm gonna go back and say, do you remember that first week?

Do you remember how scared you were? Or nervous [compared to how confident you feel now]?" (Interview, 4/27/2023). Julia also emphasizes positive thinking by helping clients sort through feelings of failure and fear to build their self-esteem, build more confidence, and lessen the negative sense of self. She focuses on helping clients learn to accept "natural consequences" and "process the emotions" that surround frustration stemming from poor academic performance. She stated that she can "usually build them back up pretty quickly" by using herself as an example of someone who "failed a couple classes in college" but is doing well now. Her approach embodies a fearlessness of failure that she attempts to instill in her clients: "I don't tell any of my students that they can't accomplish whatever they're interested in. If they say that they want to be a doctor, I go, 'Cool, let's start you on some math and science'" (Interview, 4/25/2023).

In addition to highlighting a positive outlook for the future for clients, Abby also emphasized the importance of teaching them self-kindness, a focus, she said, that originates in her experience as a foster parent, in which role her ratio of compliments to complaints towards the children is "sixteen to one." She explained that her abundance of positive thinking and encouragement for her children and for SECs is meant to "interject" the skill of "being kind to themselves" (Interview, 4/27/2023). Abby stated that she also combines this practice of promoting self-kindness by using Pat Deegan's "skilled supports," mentioned in Finding 11, which focus on using "personal medicine" to foster hope, empowerment, and self-determination for people with MH challenges (Deegan, 2019); Abby noted that this approach helps her SECs "feel in control, heard, and feel better" (Interview, 4/27/2023). Overall, Sub-Finding 15.2 underscores the importance of addressing students' initial fears in postsecondary education with strategies and personal anecdotes that emphasize resilience and the potential for positive self-

transformation through self-kindness. Taken together, these strategies seem to aim at boosting SECs' confidence and dispel their negative self-thinking. Therefore, confidence as a key ingredient in overcoming a negative sense of self.

Sub-Finding 15.3: Participants Conveyed that Educating Students on Their Entitlement to Support and Accommodations can Mitigate the Negative Sense of Self. As highlighted in Sub-Finding 5.3, "The Negative Sense of Self can Negatively Impact the Belief of Entitlement to Support and Accommodations," the data suggest a connection between students' negative self-conceptions and their self-doubts over their right to and worthiness for accommodations. Additionally, these feelings can influence students to not disclose and therefore not receive accommodations, which minimizes their access to available support on campus. To address this individual challenge, three SESs pointed specifically to the benefits of educating SECs on the process of disclosure and their right to accommodations as strategies to offset these feelings of unworthiness. The most vocal proponents of this client-education were Melissa and Diane, who listed "education" as one of the three main areas of focus of their program-the others being "skills" and "resources." Diane explained how education is needed since some SECs do not realize "that they actually may have a disability that could warrant accommodations in certain situations" and that students need to understand "what they have the right to, what they have access to, what's possible" (Interview, 4/17/2023). Melissa said that she emphasizes to her clients that these services can protect them, explaining how ODS can communicate and advocate on their behalf with faculty, telling them: "disability services or accessibility services can also play that role of communicating to faculty once you are a protected student in those services." According to Melissa, she communicates these messages to answer the following questions for SECs: "What do you have a right to get? How do you access

it? And, where your information goes?" which Melissa added is "real education for college students" (Interview, 4/17/2023). She explained that a primary objective behind this education, aside from providing information to and raising the awareness of students, is to normalize the disclosure and accommodation process so that they understand that it is nothing to be ashamed of or to distance themselves from (Interview, 4/27/2023).

SES Julia was the other participant who emphasized educating students to offset negative feelings surrounding the process of disclosing and applying for accommodations. She explained that she conveys the benefits of disclosure to clients, stressing that many of the ODS staff are "therapist level" and highlighting the stringent privacy protections that govern accommodations by informing her clients that "disability services doesn't disclose their diagnosis to anybody outside of their own office unless written consent is provided" (Interview, 4/25/2023). With such statements, Julia hopes to build SECs' trust in the system and understanding of the benefits offered. Based on her and Melissa's statements, it seems that the goal of this accommodation-education strategy is to instill positive thinking and self-acceptance among SECs and change their trajectory away from any negative self-perceptions and toward feelings of self-confidence that promote success.

Sub-Finding 15.4: Support Strategies for Anxiety and the Negative Sense of Self Constituted the Development of Positive Coping Skills. This brief section is to acknowledge that support strategies were found which address the lack of positive coping skills among some SECs discussed in Finding 6. Specifically, the emotional support strategies outlined in Finding 14 (EF skill support, communication support, encouraging rejuvenation through breaks, promoting persistence, self-confidence, self-esteem, and empowerment) also pertain to the development of positive coping skills. These strategies contribute to promoting persistence, self-

confidence, self-esteem, and empowerment among SECs and represent efforts to develop positive coping abilities.

Implications

Data presented on Findings 17 and 18 regarding support strategies for the affective domain for SECs in postsecondary education suggest that SESs recognize the significant emotional aspect of the college experience for their students. In response, they work to offset the heightened challenges that SECs can face related to feelings of overwhelm, anxiety, inadequacy, and low self-esteem, a lack of confidence; a negative sense of self, and a lack of positive coping skills as previously discussed as challenges in Findings 4-6. SES's emphasis on intentionally addressing the emotional elements of their students' college experience is a key contrast to the student support services that were presented in the literature review. Abby's, Julia's, and Renee's willingness to provide emotional support, unrestricted positive reinforcement, and the caring they give to their clients are powerful addendums to skill-building and task-completion services involved with tutoring, AC, and academic advising. Similar to SED's willingness to address MH issues such as symptoms and medication, the data suggest a similar focus on supporting the emotional aspect of their clients' challenges, a service which, according to literature covered here, is not in the realm of student academic support but instead is typically allocated to counseling offices as a first measure and then off-campus therapists and psychologists/psychiatrists for higher-level service. As found in the literature review, for example, AC does not explore or treat emotional or behavioral problems directly, but instead considers their impacts on academic achievement (Schwartz et al., 2005). In contrast, the SESs interviewed for this project actively confront and strive to ameliorate negative emotions in their clients. This practice, of incorporating the affective domain into academic support, implies that

SESs and SED programs view educational support as an all-encompassing and holistic service for student success. As demonstrated in these support strategy sections for the cognitive, behavioral, and affective domains, SESs tread into areas of support that traditional college student supports, such as academic advising and coaching, do not typically cover, according to the literature reviewed.

Findings: Support Strategies for Environmental Barriers

Support strategies for environmental barriers are actions taken and methods used by SESs to help SECs overcome challenges within the postsecondary landscape. To do so, SESs work to ameliorate barriers in the environment, as opposed to focusing on perceived deficits of the individual; these actions align with the social model of disability perspective (Haegele & Hodge, 2016). Of all the participants, Matt was the most vocal and consistent regarding his advocacy for taking this social model perspective of disability in postsecondary education and therefore his ideas are a fitting introduction to this section. His overarching view, he said, is that the construct of disability arises from a poor fit, a "mismatch," between the individual and the environment. He said that he feels that SED programs overemphasize efforts to "fix" the individual through strategies such as EF skills training and underemphasize addressing environmental barriers: "To me, [SED] continues to point to the person as the problem. It suggests that you need to fix your brain, instead of others adapting to your brain." Instead, he strongly advocated in general for advancing policy changes aimed at making postsecondary institutions inclusive for SECs, or as he put it, for "creating a welcoming and embracing environment for all students with differences." For example, Matt stated that oral classroom participation requirements for students should be eliminated since they discriminate against students with social anxiety and rules

against having drinks in classrooms should be eliminated because they discriminate against students who are experiencing dry-mouth due to certain medications (Interview, 4/26/2023).

Even though Matt was the most vocal in calling for policy changes to embrace SECs and support their success, other interviewees expressed similar notions of how colleges could enact changes in the environment to increase inclusion. For example, SES supervisor Ann suggested that colleges should have professors undergo “Mental Health First Aid Training,” which she described as a skills-based training course that teaches participants to identify, understand, and respond to signs of MH challenges (Interview, 4/25/23). SED researcher Kerri stated that she has observed funding increases for addressing suicide via MH “task forces” and that some of that should be shifted to more MH training for counseling centers and faculty to increase inclusion of students with MH conditions (Interview, 5/25/2023). Diane stated that colleges need a point person on campuses to coordinate support services, a need which prompted her and Melissa’s study on the coordination of campus services (Interview 4/17/2023).

However, these types of policy changes are outside of the participants’ immediate spheres of influence. Aside from professor Matt and Kerri, none of the participants is employed as deans or administrative or support staff by the colleges that their SECs attend, individuals who might have influence in changing on-campus policies. Rather, the majority of the participants are active SESs, SES supervisors, and SED researchers who are affiliated with third-party agencies and engage colleges and universities from the outside and are not involved in creating campus policies. Therefore, the support strategies presented in this section represent the actionable items that the participants take to help their clients overcome existing barriers in the environment (stigma, nondisclosure, and exclusion), as opposed to suggestions that they feel colleges could

broadly do better such as initiating campus-wide training programs for faculty or hiring employees to coordinated on-campus services.

The findings presented below are support strategies that are actionable by SESs which seek to 1) offset stigma by providing empathy, raising awareness, and advocating for SECs among individual faculty, 2) reduce nondisclosure by educating SECs on the process of disclosure and applying for accommodations, 3) support inclusion of SECs by forming collaborative relationships with faculty and staff to ensure proper accommodation implementation and flexibility when needed, 4) promote the engagement of SECs on campus to increase integration, and 5) offset the lack of coordination of resources by ensuring SECs are aware of and accessing the campus resources available to them.

Findings: Support Strategies for Environmental Barriers: Stigma

As suggested by Finding 7, “Stigma is a Barrier in the Postsecondary Environment,” SECs can experience public stigma from faculty, administration, and students as well as internalized self-stigma. Support strategies to offset public and internalized stigma include providing understanding, and flexibility to SECs to help them feel valued and conducting advocacy to counter instances of stigma.

Finding 16: Participants Emphasized Flexibility, Understanding, and Advocacy as Strategies to Counter the Negative Effects of Stigma

The *SED Manual* emphasizes SECs’ increased “risk for feeling stigma” during the process of disclosure (Unger et al., 2016, p. 49) and in general, participants in this study seemed to sense the presence of stigma towards SECs and the need for more flexibility and understanding from the environment. SES Chris and professor and SED scholar Matt, especially, pointed to a lack of flexibility and understanding on-campus for SECs which, they said, can

create an environment that frustrates SECs' success. For example, Chris lamented a lack of flexibility and understanding from a local community college, which refused to award a grade change for a client while simultaneously a local university granted one under the exact same circumstances. He explained that the university "made a large effort, had a review, acknowledged the appeal, and in the final decision granted the student a portion of what he had been asking for, which was the removal of poor grades," while the community college simply refused due to the student missing their deadline. Chris added that "there's something to be said about having a greater understanding of the difficulties that the students face and what certain administrations do and are willing to take as actions to support the individuals.(Interview, 4/18/2023). In this case, the university's understanding and willingness to be flexible enabled the success and supported the inclusion of Chris's client by allowing him leeway and the chance to preserve his GPA, while the college's lack of flexibility reduced his chances of success and reinforced exclusion and the negative stereotypes that Matt pointed to earlier in reference to SECs-the message to SECs that "you shouldn't be here" (Interview, 4/26/2023).

Since Chris, as a SES who is employed by an outside agency, does not have the power to force a college to be flexible or alter a college's final decision on a student's appeal for a grade change, he does what he can, which is to acknowledge that his clients are individuals in "distress" and act accordingly. He stated that this involves a daily commitment "to reintroduce a sense of belonging and importance and self-appreciation" in his interactions with clients, which he asserted has the "most positive impact" on their outlook and motivation in the face of a college environment that can lack understanding and be exclusionary at times (Interview, 4/18/2023). Similarly, Matt stated that he is always willing to be flexible with students who are experiencing academic difficulty based on his understanding that MH challenges can severely

impact a student's motivation, self-efficacy, and confidence. He recounted a semester in which two students who were struggling in a class of his did not reach out for support even though he "kept saying [to them], 'Hey, let me know if there's something going on" so that he could support them. Matt stated that he "had to actually beg [the students] to work with [him] to help them complete the course." While Matt used this anecdote to highlight how debilitating MH struggles can be on individuals' motivation, self-efficacy, and confidence, his account also demonstrates how the provision of flexibility and understanding by faculty can support student success (Interview, 4/26/2023). Matt further articulated that faculty support should depend entirely on students' needs, regardless of any knowledge concerning diagnoses: "Faculty simply need to be aware of a student's needs to be successful, (e.g., 'I get very anxious when I speak in public') and use that information to provide alternative classroom participation or other assignments. They do not need to know that the student has been diagnosed with social anxiety disorder" (Member Check, 5/26/2023). His flexible and understanding approach to student support contrasts to that of inflexible professors who, as he explained, might tell a struggling student, "You require additional things that I was not trained to deal with" (Interview 4/26/2023). Another example of how understanding and flexibility can offset stigma was described by SES Abby, who stated that she readily agrees to meet with clients off campus when they fear public stigma associated with meeting on campus (4/27/2023). These accounts demonstrate how providing flexibility and extending understanding to SECs can work to decrease the effects of public stigma and manifestation of self-stigma among SECs.

In addition, three SESs described taking an active approach of advocacy on behalf of clients to directly counter discrimination associated with stigma. For example, Julia described accompanying clients to meetings with professors to ensure their accountability for providing

accommodations by helping guide SEC-professor conversations. She lets clients decide whether "to be possibly discriminated against" alone or stated that she "will go to battle with them if I have to." Julia added that, if given permission by the client, she will contact their professors and advisors on her own to advocate on her clients' behalf (Interview, 4/25/2023). Similarly, both Abby and Renee described how they will advocate for SECs' needs by helping facilitate agreements on the implementation of accommodations between faculty and SECs and then follow up to ensure they are being implemented correctly (Abby Interview, 4/27/2023; Renee Interview, 4/27/2023).

This advocacy, as described by Julia, Abby, and Renee, is considered a beneficial means to prevent possible discrimination surrounding issues of accommodations and is mentioned as a "reason to disclose" under the "Educational Goal Plan" in the *SED Toolkit:*

> Some students choose to disclose so their supported education specialist might be able to advocate for them. For example, if your psychiatric disability made it difficult for you to complete some course requirements the specialist may be able to talk to your instructor and other school officials to help extend deadlines. The school may not agree with your educational specialist, but the educational specialist will be there to help regardless. (p. 88)

In addition to this advocacy by SESs to elicit compromise and flexibility from faculty or other school officials, researchers Melissa and Diane, in a joint interview, described how they promote self-advocacy in their clients by teaching effective communication skills and providing email templates to maximize clarity on accommodations and increase flexibility from professors (4/17/2023). Likewise, SED researcher Kerri echoed the importance of developing SECs' self-advocacy skills as a means to increase their inclusion in the environment (Interview, 5/25/2023).

In sum, these efforts to provide and increase empathy to counter stigma and to engage in advocacy to negate possible discrimination are actionable support strategies stemming from an acknowledgement that stigma against SECs exists in the postsecondary environment.

Implications

Data presented in Finding 16 outline support strategies to address the exclusionary presence of stigma in the postsecondary environment as evidenced in Finding 7, “Stigma is a Barrier in the Postsecondary Environment.” Finding 16 reveals strategies to overcome negative impacts of stigma include directly providing flexibility and understanding to SECs and advocating for more of these elements in the environment. This proactive extension of flexibility and understanding by SES to their SECs, and by Matt to his students, addresses the barrier identified in Sub-Finding 7.2, “Interaction with the Environment may Result in Self-Stigma.” When Chris and Matt recognize the distress and struggles of their students and commit to help them, Abby readily agrees to meet SECs off-campus to help them avoid potential stigma, and Julia advocates for SECs to ensure the implementation of accommodations, they are countering the effects of public and self-stigma and demonstrating to SECs their importance as individuals that deserve to be valued and supported. Their efforts with and for SECs work to establish a sense of belonging among SECs that can be missing in the environment. In addition, by promoting success and demonstrating a consistent willingness to help, SESs are actively combating the discouragement and self-doubt that can result from stigmatization. These supportive actions and relationships that SESs provide to SECs are important, since a lack of flexibility and understanding within the academic environment can demotivate and deter SECs from persevering in postsecondary education. This implication aligns with seminal literature on retention in higher education, such as Vincent Tinto's (1975) "Dropout from higher education: A

theoretical synthesis of recent research," which found that academic and social integration accompanied by a sense of belonging is crucial to student persistence and success. (Tinto, 1975).

Likewise, the data cited in Finding 16 suggest that advocacy can be a pivotal tool in supporting SECs and can address the barrier identified in Sub-Finding 7.3, “A Primary Source of Stigma Against SECs is Faculty.” By intervening in situations where accommodations are required and ensuring accountability and clarity of faculty, SECs can reduce the prevalence of stigma and occurrences of discrimination, thereby promoting inclusion and feelings of belonging among SECs. By also fostering self-advocacy skills in SECs themselves, SESs seemingly help create an additional buffer against discriminatory practices. Furthermore, teaching SECs to effectively communicate their needs encourages independence and can empower them to take charge of their academic journey.

Findings: Support Strategies for Environmental Barriers: Nondisclosure

Finding 17: Participants Indicated that Client Education on Disclosure and Accommodations is a Beneficial Support Strategy to Encourage Maximum On-Campus Support

Document analysis indicated that SED programs consider the education of SECs on the process of disclosure to be crucial in enabling them to make the best decisions for leveraging the support that the environment offers through accommodations. Analysis of document data revealed an intentional strategy to educate students on the disclosure process and to help students make informed decisions regarding disclosure of personal health information. This strategy occurs in three stages 1) client intake and assessment as an introduction to the topic, 2) the pre-enrollment period which involves a detailed discussion on the issue of disclosure and includes a

Release of Information for the client to sign if they choose and, 3) a meeting in which the client makes a final informed decision on the level of disclosure that they prefer.

This multi-stage process that leads SECs through their disclosure decisions was recognized when reviewing and analyzing the *SED Manual,* the "Supported Education Disclosure Form," and the *SED Fidelity Scale*. Although no individual document provides an explicit, standalone description of the disclosure decision process, a comprehensive understanding emerges when considering all the documents collectively. Overall, the three stages seem to aim for a balance between mitigating stigma and facilitating academic support and accommodations for SECs. In the first stage during intake, the *SED Manual* prompts SESs to introduce SECs to the topic of disclosure and explain that it may "increase the risk for feeling stigma but may also open opportunities for educational support and accommodations," and that "choosing not to disclose to the disabilities office may reduce the risk of feeling stigma but may limit the types of assistance the student could receive" (Unger et al., 2016, p. 43). The second stage involves a subsequent meeting and is guided by a "Supported Education Disclosure Form" in which the pros and cons of disclosure are further discussed and the client is given the opportunity to make an informed decision as to the type of information they are willing to share (diagnoses, housing, criminal background, enrollment in SED program, use of MH services) and with whom the information should be shared (Accommodations/Disability Services Office, Student Support Services, Financial Aid, teachers, academic advisors). In addition, the document acts as a Release of Information agreement to be signed by the SEC which determines the level of SES support (complete SES involvement, partial SES intervention, or self-guided disclosure by the student). Finally, the third stage is guided by the *SED Fidelity Scale* which mandates quarterly review of the disclosure decision and the effectiveness of the resulting

accommodations. This three-stage educational process regarding disclosure aims to ensure that students are empowered to make informed choices about managing their educational journey, determines the level of SES involvement, and permits a tailored approach to disclosure. This structured approach integrates a systematic consideration of benefits and drawbacks into SECs' decision-making process regarding disclosure. This approach seems to be designed to respect each student's autonomy and help the student make thoughtful judgments about which kinds of disclosure will promote a successful college career.

Similarly, interview data pointed to the importance of educating SECs on disclosure to ensure that they are informed and empowered to access available on-campus support if they so choose. For example, SED researchers Melissa’s and Diane’s strategy of client-education on accommodations to enlighten them on their rights and the disclosure process in general is one strategy to ensure that SECs are informed regarding why and how to access on-campus support (Interview, 2/17/2023). Like Melissa, SES Julia described how she highlights to her clients that disclosure is welcomed on her campus, noting that staff are sensitive to MH issues. She also communicates to her SECs that disclosure is treated very professionally by ODS staff who are therapist-level providers with “years and years of experience.” Furthermore, she explains to them the ins and outs of “HIPAA and FERPA [Family Rights and Education Privacy Act] and how they're similar and how FERPA protects their privacy” (Interview, 4/25/2023). In addition, SES Abby described how she will discuss both the pros and the cons of disclosure with clients; a positive is the securement of the support from ODS staff; a negative is possible stigma since, as she tells clients, “some people are going to know that you’re likely getting support.” Abby's approach helps SECs make informed decisions and be prepared for the possibility of navigating some stigma if they choose disclosure (Interview, 4/27/2023).

Naturally, these conversations about disclosure also include educating SECs on the benefits and types of accommodations that result from disclosing. For example, Melissa described how she provides “accommodation education” to students by conveying to them how disability services can be “super helpful” by communicating their accommodations to professors to elicit understanding and flexibility from them (Interview, 4/17/2023). She added that her education on accommodations includes discussions on which types of accommodations might be most helpful for students, citing for example how “extended deadlines" may be a typical accommodation but not necessarily the most helpful for some as it can be used as “buying time” and might lead to procrastination. Extended deadlines, she said, should be reserved for those with “processing speed” problems. She described the importance of helping clients discern whether extended deadlines actually would meet their needs and explained that many of her students benefited much more from the development of better time-management skills (Interview 4/17/2023).

SES Julia also described discussions with students about the benefits of disclosure, comparing the securing of accommodations to wearing a parachute in a plane which has an open hatch during turbulence. She tells students, “With the appropriate preparations, you're ready to land. If you fall out of that airplane, you've got the right supplies like resource connections and tools ahead of time. You're going to land and you're going to be fine” (Interview, 4/25/2023). She contrasted this situation to the alternative of being unprepared as a result of nondisclosure: “You're just standing there willy-nilly, hoping for nothing to happen, and if you hit trouble, you throw out a trampoline last minute, hoping it will suffice to help you land safely. Unless you're incredibly lucky, you're going to fall through the air like the Roadrunner and not pass your class” (Interview, 4/25/2023). Her reference to the cartoon character the Roadrunner, who often falls

from the sky once realizing he cannot fly, reflects the risks facing students who do not have fitting strategic support in place to use when needed, such as not having accommodations that are aligned to their personal challenges and needs and that anticipate the possibility of unforeseen times of difficulty.

Implications

Data presented in Finding 17 outline support strategies that address the issue of nondisclosure, a decision which limits support options and is therefore an exclusionary factor, as evidenced in Finding 8, “Nondisclosure is a Barrier in the Postsecondary Environment.” The data reveal a main strategy of client education to address problems associated with nondisclosure, primarily working to alleviate the barrier of Sub-Finding 8.1, “SECs May Distrust the Process of Disclosure.” This strategy implies the critical importance of providing detailed information and a well-rounded understanding to SECs on their right and entitlement to support, the process of disclosure, and types of accommodations, so that they can make the most informed decision possible on whether to disclose or not. As well, the emphasis on the disclosure decision found in documents and weaved throughout various stages of SESs’ support for new SECs aligns with interviewee statements and further suggests that educating students on disclosure is considered a primary and necessary support strategy. Through this learning, SECs can become emboldened and empowered to make decisions that benefit them most which can counteract the negative influence of stigma discussed in Sub-Finding 8.2, “Stigma can be an Influence on Nondisclosure.”

Findings: Support Strategies for Environmental Barriers: Exclusion

As discussed in Finding 9, “Exclusion of SECs is an Environmental Barrier,” and its Sub-Findings 9.1-9.6, exclusion of SECs may be connected to a lack of faculty awareness and

training, misunderstandings between SECs and their professors over the implementation of accommodations, a lack of SEC integration into the campus environment, and a lack of coordination of services on campus. To address these barriers of exclusion, Findings 18-20 below detail how SESs work to foster the inclusion of SECs into the campus environment by 1) building collaborative relationships with faculty and staff to ensure proper accommodations and elicit flexibility and understanding through compromise, 2) identifying and connecting SECs to resources as a strategy to overcome a lack of resource coordination on-campus, and 3) promoting SEC integration by identifying and connecting SECs to social aspects of campus life for increased inclusion.

Finding 18: SED Program Policies and Individual SESs Emphasized the Importance of Building Collaborative Relationships with Faculty and Staff to Ensure Proper Accommodations and Elicit Flexibility and Understanding through Compromise

Presented previously as environmental barriers related to exclusion, Sub-Findings 9.2-9.6 discussed how a lack of faculty training and awareness regarding the characteristics and needs of SECs can constitute an environmental barrier of exclusion. Identified problems include examples of faculty members' inability and refusal to support SECs and inconsistency in the implementation of accommodations. To offset these barriers, seven interviewees described how SESs work to establish collaborative relationships with faculty and staff to increase their understanding of SECs' conditions and flexibility with respect to academic problems that might arise during the semester. To initiate these relationships, SESs Julia and Renee described how they will attend professor and advisor meetings with SECs to serve as advocates and in some cases will directly contact professors and advisors on clients' behalf if they feel that accommodations are not being implemented (Julia Interview, 4/25/2023; Renee Interview,

4/27/23). For example, Renee explained how she will reach out to professors to ensure they are providing the appropriate time extensions and assessment alternatives to clients (Interview, 4/27/2023). SES supervisor Jackie confirmed this practice, stating that “[a]bsolutely, depending on whether the student chooses to disclose or not and what level of disclosure, education specialists will work with a professor or an instructor to advocate for the student” (4/25/2023). Melissa described developing these relationships as strategic alliance building, stating that SESs and their SECs should seek to answer the important question of, “How do you leverage your faculty members to be your allies?” (Interview, 4/17/2023).

Furthermore, as SES Abby explained, these efforts at collaboration between SESs and faculty seek to create compromise over accommodation implementation between professors and SECs: “I'm not there to tell [professors] what they have to do. I'm there to try to help advocate for the client to be able to have a compromise. How can they meet [the students] halfway?” (Interview, 4/27/2023). She added that her advocacy can help assure faculty who may not feel comfortable talking to students with special needs or might not have the proper training to decide on the correct support: “They see me coming and think ‘Oh good.’ They know the client has an advocate. ‘Oh good. She'll help explain’” (Interview, 4/27/2023). Furthermore, Abby explained that her assistance with communication not only benefits the professor and student but helps the institution as well since it alleviates potential student-professor conflict which the administration might otherwise need to handle, describing her assistance as, “Something I do for the school” (Interview, 4/27/2023). Additionally, to find compromise when advocating for SECs, Julia described how she works to elicit professors’ flexibility by trying to frame SECs’ struggles in ways that they might understand, asking them, for example, “If someone's pet died wouldn't you allow leniency?” and if they answered "yes," which they typically did, then she made the

following kind of argument: "So, there are circumstances where you would extend leniency. So, what happens if somebody is hospitalized? What happens if somebody can't get out of bed today or feels like they're gonna get hurt if they leave their house? Do those count?" Julia stated that this type of Socratic questioning usually elicited reflection and increased flexibility on the part of faculty (Interview, 4/25/2023). Finally, Diane articulated the importance of building collaborative relationships that are non-threatening to staff:

> You definitely want to collaborate with the campus staff to make sure that you're successful. You don't want to be seen by an accessibility or disability services office as competing or a threat. You want to be really seen as working collaboratively with that office to support the students to have access to education and use accommodations that give them that access (Interview, 4/17/2023).

Diane added that for this type of collaboration to work, SESs "really have to reach out to disability services and work with them and make sure they know what you're doing with students to see how you can work together" (Interview, 4/17/2023).

In addition to interviews, document analysis also revealed that collaborative relationship-building between SESs and school personnel is considered an important support strategy to overcome environmental barriers of exclusion. For example, one of the qualifications listed under the Supported Education Specialist Job Description is "the ability to work collaboratively and as an advocate within the postsecondary education and other education systems" (Unger et al., 2016, p. 28). Also, Item 19 of "Enrollment/Ongoing Support" of the *SED Fidelity Scale* is "Liaison Services," which states that if a client chooses to disclose, then the SES should "serve as a proactive liaison to educational programs in order to address participant and programmatic issues. Collaboration and communication with relevant campus personnel occurs on a consistent

and regular basis" (Manthey et al., 2012, p. 51). Likewise, the *Oregon Integrated SE-SED Fidelity Scale 2017* (a more recent and briefer version of the *SED Fidelity Scale*) includes Item 7, "Educational Resource Development," which measures the "[q]uality of collaboration with outside educational institutions, programs and organizations" by how well a program's "[e]ducation specialists build relationships with educational institutions and settings through multiple visits in person" (p. 11). In addition, in the *SED Manual*, under "Accommodations and Disclosure," SESs are directed to "work collaboratively with the Student Services Counselor to assess and determine consumer's needs" and consequently to ensure that accommodations are appropriate for clients (Unger et al., 2016, p. 22). This section also emphasizes that "it is important for the Supported Education Specialist to build a relationship with the Student Services staff, describe their collaborative role, and explain how they can assist the student to be successful" (Unger et al., 2016, p. 24). These examples are drawn from four separate sections across three different documents. Emphasis in these documents on collaborative relationship-building implies a perceived benefit and valuing of the practice as a support strategy.

In addition to the perceived benefit of collaboration between SESs and campus staff that is conveyed in documents, interviewees' statements also described the benefits of having these relationships in place. For example, Abby recounted a situation at the local community college's ODS that reflects such advantages: "A client and I were standing in a very long line and [a staff member] saw us and went and pulled us from the line and helped me because they knew me" (Interview, 4/27/2023). She described one contact person in particular in the main ODS office who took great care in understanding her and her clients' communications and would proactively make sure problems were solved. In some cases, the contact visited the financial aid or registrar's offices with the student and would consistently "explain what the student needed to do

step by step" (Interview, 4/27/2023). Prior SES and current SED scholar Tom also stated that in his experience, the relationship-building with school personnel has "been pretty great" and he has had "a lot of success with disability services," adding that they have been beneficial in helping the clients, as well as himself, navigate different policies and procedures at the school (Interview, 4/19/2023). He noted that developing these relationships can take time at first, mirroring a statement by Ann who said that building these relationships is a "big part of what [SESs] do" (Interview, 4/25/2023). Similarly, Ann confirmed that in her role as supervisor, she has spoken to SESs who have built "good relationships with accessibility services" and Julia, whom Ann supervises, reported that some campus staff "are very kind and will say 'You know what? Show me the documentation and we'll get you connected to disability services. I will work with you'" (Interview, 4/25/2023). Finally, SES Chris stated that he finds it helpful to "get to know the administrative staff" at the local community college in order to ease his role as an outside support provider at the school through relationship-building (Interview, 4/18/2023). Taken collectively, the document and interview data that support Finding 18 point to the importance of SESs proactively developing collaborative relationships with campus faculty and staff. This practice helps create solutions for SECs' challenges through dialogue and negotiation between important stakeholders, including SECs, faculty, and administration. In other words, SESs help to create synergistic communication between these stakeholders as a means of promoting SECs' success.

Finding 19: Data Indicated that the Identification and Coordination of Resources Promotes the Integration of SECs on Campus

Sub-Finding 9.6, "A Lack of Coordinated Services Contributes to an Environment of Exclusion," described how on-campus resources such as academic advising, disability services,

and tutoring can be disconnected from each other and not readily apparent or available to SECs. In fact, professor and SED scholar Matt identified “knowledge about resources” as a main environmental barrier for SECs (Interview, 4/26/2023). Likewise, Melissa and Diane stressed the importance of identifying on-campus resources and facilitating SECs’ connection to them. Melissa articulated that while EF skills are “super important, the resources are the thing that helps you survive. When we think about how to be successful in school, people need to have the right resources.” She emphasized that students should be asking themselves important questions such as, “What kind of resources do I need? What kind of tools do I need? What kind of hands, which is a resource, do I need to help me to do those things?” (Interview, 4/17/2023). To help SECs answer such questions, supervisor Ann explained that SESs in her program are required to make a certain number of contacts every month with different resource personnel on campus, “such as advisors, financial aid staff, and tutoring services, which are called educational resource contacts" (Interview, 4/25/2023). This practice of identifying resources and building relationships with ‘educational resource contacts’ to help SECs connect to on-campus support are support strategies which address the lack of coordination of resources revealed in Sub-Finding 9.6.

While the barrier indicated by Sub-Finding 9.6 identified a lack of resource coordination on-campus, document analysis revealed that strategies for resource coordination can begin before SECs even arrive on campus. For example, a passage in the section entitled “Education Resource Development” of the *SED Manual* states that during the “Choosing an Education Goal and Program” stage, SESs “will initiate and/or will have developed working relationships and have frequent contact with student services staff, financial aid staff, academic advisors, counselors, scholarship programs and other appropriate education personnel” at local institutions and

agencies to support fulfilling "the education goals of the client" (Unger et al., 2016, p. 13). In addition, according to the manual, SESs should be knowledgeable about "colleges and universities, certificate programs, training programs, apprenticeships and work study programs " to ensure "the widest possible choice for [clients in] meeting their goal" (p. 13). To attain this expertise, a section entitled "Education Resource Development-In Three Visits" outlines the process for building relationships with education resource contacts and provides a series of communication prompts, such as those shown in Figure 15.

Figure 15

Communication Prompts for Education Resource Development

"Hello. My name is Dorothy Parker and I work for School Opportunities here in town. I am an education specialist, and my job is to introduce students to programs. Would it be possible to schedule a 15-minute appointment with you to learn more about what you do here and the type of person who succeeds in your program?"

"Hi. My name is John Keats and I work for Montgomery County. I am an education specialist and I help people who have been out of school for a while to re-engage. Part of my job is to learn from departments (or scholarship programs) about what they do. Would it be possible to schedule a 15-minute appointment to come back and learn more about ____________________ (name of program)?"

Note. From Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual*, p. 65.

After using these types of prompts to build knowledge of available resources and to foster relationships with educational resource contacts, the manual directs SESs to then review the available resources with their SECs to help them determine which programs align with their interests, a practice that is considered beneficial to developing "the client's skills and confidence" (p. 13). Once possible programs are chosen, the SES is expected to accompany the students to visit programs, beyond providing a mere referral, since "students may be

overwhelmed with information and leave an office confused and frustrated about what to do next" (p. 13).

The next stage of resource support occurs once clients have chosen and are accepted into a program and SESs are to direct their attention to resource identification, relationship building, and connecting SECs to resources available on the relevant campus. For example, in the "Follow-Along Support-Menu of Possibilities," there are multiple recommended actions, which are presented in Table 9.

Table 9

Resource Support Actions Taken Verbatim from the Follow-Along Support Menu of Possibilities

Support Category	**Recommended SES Support Actions for SECs from Follow-Along Support Menu**
Enrollment	Registering with Student Services Navigating School Website and Technology [Connect to] Academic Advising
Barriers to Learning & Accommodations	Exploring strengths and resources that can be used to address barriers to learning Planning for anticipated needs - such as getting a tutor Finding a place to study
Managing Classes	Accessing tutor resources as needed Support connecting with academic advisors
In-Person Supports	Learning to navigate and use library resources Finding admissions/registrations/financial aid/student services offices In-person coaching, wellness support

Note. Adapted from the Follow-Along Support Menu of Possibilities in Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual*, p. 61.

The recommended actions in Table 9 involve action verbs such as *exploring, navigating, connecting,* and *finding* which all imply a proactive support strategy of introducing and engaging SECs with resources in the environment. These actions are also presented in written form in the

manual as support strategies to be used after enrollment. In addition, the manual recommends that SESs conduct campus tours with clients to identify "the Admissions/Registration Office, Financial Aid Office, and the Student Services Office … their classrooms, restrooms, instructor offices, student union/cafeteria, library, computer center, learning or career center, and student health center" (Unger et al., 2016, p. 25). Additionally, SESs are instructed to "be aware of and refer students to" academically related resources such as academic advisors and tutoring centers and also to consider the "personal resource needs" that SECs may have related to "transportation, childcare, a place to study, managing their symptoms, and managing their financial aid" (p. 25). These directives seem to be designed to assist in the identification and coordination of resources and suggest an intention by SED programs and their SESs to address the "Lack of Coordinated Services" that exists on-campus according to Sub-Finding 9.6.

Furthermore, in addition to document data, interview data also reveal that SED programs and SESs value this coordination of services as an important support strategy. For example, Diane explained how her program conducted a study in which they trained graduate students as SESs at a local university specifically to coordinate on-campus services in an effort to respond to a perceived lack of service coordination by the institution itself (Interview, 4/17/2023). As a slide presentation related to the study explains, the goal of the study was specifically to create a program that would assist "in the coordination of services to enhance outcomes" and facilitate "information sharing between offices, off campus resources, and students" (On Campus Research Partnership, Slide 9). The program acted "as a bridge between Disability Services, CAPS (counseling/psychological services), and Career Services" in order to assist "in the coordination of services to enhance outcomes" and "facilitate information sharing between offices, off campus resources, and students" (Slide 9). Diane emphasized that the study intended

to provide added benefit for SECs and not duplicate on-campus services: “We think it's really important for students to be connected to services on campus, services off-campus that are available and existing, and then we fill in other holes. We don't want to duplicate something that's already there” (Interview, 4/17/2023). According to Diane, the main objective was to consolidate and expose SECs to resources, thus ensuring that SECs are able to efficiently discern useful resources and know how to access them in the environment. As she explained, her trained SESs worked with students to identify resources that were commonly needed and also to introduce students to resources “they’ve never heard of before that may be useful to them, work to help the student access them, and help to coordinate the services.” She further stressed the importance of this work as filling a gap, making this point to her SES trainees in the following manner: “Is there anybody else doing this work? No. Is there anybody really pointing people to all the resources they need? Not really. So, this is where you come in and it is such an important piece” (Interview, 4/17/2023).

Diane reported that data from this study was still being analyzed at the time of this writing, but she attested that the coordination between services seemed to have increased and to have directly benefited students in the study. She provided examples of actions taken during the study, such as having the SESs work with ODS to “better understand the students we worked with and the accommodations that could help them have equal access. So, we often met with them to discuss/educate them” (Member check, 7/28/2023). In addition, SESs in the study alerted a “representative of the committee on campus” to keep an “eye on students who were really struggling, to help them respond to students who might be in crisis in a way that might prevent attrition.” They also communicated with Counseling Services to ensure that students could access emergency and weekly support both on and off-campus (Member check, 7/28/2023).

Overall, she asserted that this type of service coordination is an essential component of supporting students with MH conditions and that their study successfully helped SED providers to support students more effectively by helping to coordinate services. In sum, Diane's statements present a support strategy of service coordination which directly addresses the environmental barrier of "A Lack of Coordinated Services" identified in Sub-Finding 9.6.

Similarly, both SED scholar Tom's and SES Julia's statements reflected efforts to connect their clients to on-campus resources for the purposes of overcoming the lack of coordination of resources revealed in Sub-Finding 9.6. Tom described how, during his time as an SES, he would walk with SECs to find and utilize resources such as the financial aid office and the tutoring center (Interview, 4/19/2023). Similarly, Julia stated that she conducts campus tours with clients, showing them the financial aid, ODS offices and library; in these tours, she shows them "the cafeteria and the bookstore and the different clubs that are available in the gym so that they know that there are social-related places that they can go" (Interview, 4/25/2023). Tom's and Julia's statements suggest that they are following the protocol for connecting SECs to on-campus resources as directed by the manual. In a similar fashion, Abby explained that she also connects clients to off-campus resources, particularly by sourcing hotspots and rebuilt computers for clients from local libraries and a nonprofit called Next Steps (Interview, 4/27/2023). In sum, according to the interview statements and document data, SESs are addressing the environmental barrier of poorly coordinated and disconnected services identified in Sub-Finding 9.6. They do so proactively by identifying on-campus resources that could be helpful for their students, building relationships with the relevant campus personnel, introducing clients to the resources and helping them discern which might be beneficial, and then connecting students to those resources.

Finding 20: SESs Indicated that They Promote Integration by Identifying and Connecting SECs to Social Aspects of Campus Life

Interview and document data together indicate the importance of strategies aimed at integrating SECs within campus life to offset the dynamics of exclusion identified in Sub-Finding 9.5, "A Lack of Integration Contributes to an Environment of Exclusion." As presented in Sub-Finding 9.5, multiple participants expressed the need for greater integration of SECs into campus life. For example, Matt expressed that "there needs to be a shift in attitudes and beliefs about, around inclusion in particular and being a welcoming, embracing environment" (4/26/2023); Tom stated the need to support SECs by nurturing "feelings of inclusion on a college campus and feelings of having a support system" (Interview, 4/19/2023); Chris emphasized the lack of social connection that many SECs experience (Interview, 4/18/2023); and SED researcher Kerri explained how students with MH challenges feel discomfort around peers and a sense of not belonging (5/25/2023). In terms of strategies to offset these feelings of exclusion, interview and document data suggest that SED seeks to help SECs integrate into campus life and the practice directs SES to take specific actions to accomplish this integration. For example, in addition to providing methodical detail on how to establish collaborative relationships with faculty and how to connect SECs to resources, the *SED Manual* also offers detailed directives geared to assist with SEC integration in the environment in both the Pre-Enrollment and Follow-Along Support menus, as shown in Table 10.

Table 10

Integration Support Actions Taken Verbatim from the Follow-Along Support Menu of Possibilities

Support Category	**Recommended SES Support Actions for SECs from Pre-Enrollment - Menu of Possibilities**
Educational Resource Development and Exploration	Accompany the client while exploring different institutions
Enrollment	Navigating school website and technology Familiarizing with college environment and resources Getting a student ID
Plan for Transportation	Planning for transportation to other educational events (orientations, social events, clubs etc.)
Support System/ Community Partners	Include peer community
Support Category	**Recommended SES Support Actions for SECs from Follow-Along Support Menu**
Instructor and Student Relationship	Strategies for managing in-class dynamics and interactions Plans for talking with instructors and peers.
Managing Classes	Accessing tutor resources as needed Support with connecting with academic advisors
In-Person Supports	Learning to navigate and use library resources Finding admissions/ registrations/financial aid/student services offices Finding restrooms, classrooms, study areas, computer center, learning/career centers, health center, quiet safe places
Support Network	Involve Peer Supports Connect with campus support groups Connect with social supports/clubs on campus

Note. Adapted from the Follow-Along Support Menu of Possibilities in Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual.*

To direct SESs' work supporting SECs' integration, the directives in Table 10 use numerous action verbs: accompany, familiarize, navigate, include, talk, access, find, and

connect. These verbs invite SESs to facilitate connections between SECs and the various aspects of campus life, including the school website, educational events, peer community events, tutor resources, campus support groups, social supports/clubs, as well as any important social activity locations where students can connect with the college environment. This document data clearly shows that SED practice seeks to promote SECs social integration on campus.

One participant, SES Julia, explained in detail how she enacts the directives provided in the manual's support menus. In addition to recognizing the importance of introducing SECs to academic resources, Julia also recognized that "school isn't just about school and learning, it's about a whole bunch of other things" and therefore she explained how she also connects clients to the gym, exercise classes, rock-climbing groups, a community garden where students can volunteer and receive vouchers to receive produce, and the "queer resource center" if they identify as part of the LGBT community (Interview, 4/25/2023). She stated that "whatever they want to do to connect to the school, I am there to help them with it" and that her integration support that is "tailored to the specific student is really helpful" for "students that kind of feel sometimes a little bit dissociated from aspects of the community" (Interview 4/25/2023). Julia asserted that students who are able to integrate and engage and have "that [social] buy-in tend to do better" than SECs who only log in or visit campus for classes. She summed up the benefits of this social-integration support by saying that "the students that are more integrated in the school don't leave school as easily because they've got more buy-in. They've got friends, they've got interests, they've got clubs that they need to be part of. They've got that other side of it" (Interview, 4/25/2023). According to Julia, social integration is an important dynamic that helps SECs have a more well-rounded life and strengthens their resilience amidst the stresses of college level academic work. Additionally, Jackie, who serves as a supervisor to Julia, confirmed

that "[o]ne of the things we hope is that students increasingly focus on joining clubs or organizations or groups that are part of the campus milieu" (4/25/2023). Correspondingly, the *SED Fidelity Scale* lists "Peer Support" as one of five critical areas of "Enrollment/Ongoing Supports" and explains that SESs "should offer to assist clients/encourage clients in finding peers that are positive influences and encourage clients in their educational paths" (Manthey et al., 2012, p. 39).

Another significant set of data on strategies to promote integration comes from a study conducted by Matt and Kerri on understanding and increasing campus engagement for students with MH challenges. As Matt explained, the study was grounded in Vincent Tinto's work on the importance of campus engagement as a critical factor in student resilience and retention (Tinto, 1975). Their study took the form of an intervention to promote campus engagement that used a peer approach "to supporting students being more engaged on campus as a way of helping them be successful" (Matt Interview, 4/26/2023).

Matt provided an unpublished draft of the manual, entitled "Enhancing Inclusion of College Students with Mental Illness," which resulted from his group's Campus Engagement Project (Baker-Short et al., 2023). The manual explains that this project explored how engagement interventions could enhance inclusion and positively influence degree completion. The project consisted of five key areas in which students: 1) reflected on their current state of engagement, 2) identified barriers to their engagement, 3) identified goals for engagement, 4) created a plan to achieve those goals, and 5) examined how the project may have increased their engagement or produced other benefits. The research methods for the study were inspired by Photovoice, a community-based participatory research method which aims to allow research participants to communicate their lived experiences in the community through taking

photographs and writing narratives. These photos and narratives are then used to communicate and raise awareness of the experiences of a particular population such that their experiences can be shared with each other and ultimately with policymakers. Kerri conducted the study by leading an online community of students for a semester in which each student first "established a campus engagement goal," such as "study in the lounge instead of in my dorm room," and then shared photos and narratives relating their experiences of working toward and, when successful, achieving their goal.

The final section of the draft manual, entitled "Student Stories," presents the participants' experiences during the semester by including approximately 70 direct quotes of student narratives with photos. A subsection entitled "Student Stories: Impacts," offers evidence of the project's benefits through additional student testimony. These benefits include 1) new self-reflection and personal growth among the students gained from confronting personal struggles, navigating new challenges, and implementing coping strategies, 2) an enhanced sense of confidence and independence in students as they learned to grapple with diverse environments and consistently participate in campus activities, 3) a shift in the students' sense of belonging as the program facilitated the building of strong relationships with instructors, classmates, and friends on campus, 4) an amplified connectedness to the campus community as students overcame initial apprehensions and engaged socially in group activities such as clubs, lunches, and study groups, 5) new student understandings of their personal needs, like the necessity for recharge time, which helped them balance their campus activities, and 6) deeper connections with professors through side projects and events (Baker-Short et al., 2023). In general, the program underscored the concept of individuality and provided students with the freedom to define campus engagement based on their preferences. These results suggest an overall positive

impact, including significant personal milestones and progress experienced widely among participants as well as an increasing overall connectivity that enabled participating students to feel more connected to others, their surroundings, and themselves. Therefore, as presented in their working manual, “Enhancing Inclusion of College Students with Mental Illness,” Matt and Kerri’s engagement project offers promising guidance regarding support strategies that aim to offset the commonplace exclusion of SECs by methodically helping SECs become more socially engaged and participate more fully in campus activities and campus life.

Implications

Findings 18-20 present a variety of strategies that SESs use to address the barrier of exclusion that is evidenced in Finding 9, “Exclusion of SECs is an Environmental Barrier,” which relate exclusion to patterns of discrimination, a lack of faculty awareness and training, an inconsistency in the implementation of accommodations, a lack of integration, and a lack of coordinated services on-campus. To address these various factors related to exclusion, the support strategies of Findings 18-20 promote the inclusion of SECs and involve collaborative relationship-building, the identification, coordination, and connection of SECs to on-campus resources, and the integration of SECs within campus social life. In general, these strategies suggest an overarching effort by SED programs and their SESs to increase SECs’ inclusion in postsecondary education. These practices align with Tinto’s (1975) argument that students need to develop and possess a sense of belonging in order to persist and succeed. They address the “mismatch” noted by Matt between SECs and the environment by finding and developing smoother connections between the two (Interview, 4/26/2023).

Additionally, these strategies could help offset the various forms of exclusion outlined in Sub-Findings 9.1-9.6. For example, by building collaborative relationships, SESs could decrease

instances of discrimination by raising faculty awareness and enabling them to more fully understand SECs' needs and the possible negative impacts of their own instructional practices. Such collaboration could also help establish clearer expectations between SECs and their professors for more consistent implementation of accommodations. In addition, document data and interviewee statements on the coordination of services appears to address the barrier of a lack of coordinated services on campus. In fact, Julia's and Tom's practice of conducting personalized pre-semester campus tours to introduce SECs to campus resources seems to go beyond the group tours and freshmen orientations that colleges commonly offer. Finally, the concern over the exclusion of SECs and the concerted efforts to help them integrate socially address the lack of integration noted in the findings on exclusion and represent a thoughtful and consistent support campaign by SESs for greater inclusion. Overall, the amount of data gathered that addresses the environmental barrier of exclusion exceeds that for the other barriers of stigma and non-disclosure and rivals the attention paid to support strategies for the individual challenge of EF, which is extensively covered at the beginning of this chapter. This considerable attention to addressing factors of exclusion in SED support strategies, therefore, implies that working to increase the inclusion of SECs in class and on campus is an important goal.

Discussion: The Theme of Prevention

Interview and document data showed that participants often employ preventative strategies which support students' individual cognitive, behavioral and affective challenges and seek to mitigate the environmental barriers of stigma, exclusion, and lack of coordination of services. For example, to prevent negative effects of students' EFCs, SED researcher Diane stated that in her and Melissa's SED OnCampus program and associated EF curriculum, "there is a significant emphasis on time and task-management as a preventive intervention" in contrast to

a "crisis-driven" intervention (Interview, 4/17/2023). Melissa also hinted at the theme of prevention when stating the importance of helping SECs address “emotional components [to] not let them overwhelm [SECs] because school can be challenging, especially when [they’re] struggling” (Interview, 4/17/2023). Former SES and current SED scholar Tom, who stated that he is aware of Melissa’s and Diane’s program, concurred that helping students develop EF skills is a “preventative” support measure (4/19/2023). Additionally, SES Abby emphasized the importance of conducting frequent meetings with SECs before and during the first several weeks of the semester in order to “prevent a second or third-week drop,” adding that overall, she and her fellow SESs “aim to reduce the factors that could trigger or worsen anxiety” (Interview, 4/27/2023). Her preventative efforts align with Julia’s beginning-of-the-semester frequent meeting framework, which seeks to ensure that financial aid, course registration, and accommodations are all in order before class begins. In addition, Julia’s proactive attention to students’ schedules, course syllabi, and probing questions regarding professor communication and feedback appear to be preventative measures for ensuring student success and retention (Interview, 4/25/2023). Finally, Abby’s expressed mission of retention for her SECs during their first-semester is explicitly intended to prevent attrition (Interview, 4/27/2023).

Regarding prevention related to environmental barriers, such as a lack of integration, Melissa stated that ensuring SECs’ connection to structures and supports such as campus resources is the “key” to preventing “feelings of failure in the environment” (Interview, 4/17/2023). Similarly, Julia discussed her efforts to integrate SECs into the college environment by conducting campus tours with them prior to the semester to prevent exclusion (Interview, 4/25/2023) and Matt and Kerri’s Campus Engagement Project aimed to prevent attrition by increasing personal campus engagement among their student participants (Interview, 4/26/2023;

Interview, 5/25/2023). For example, Week 2 Prompt for student reflection and discussion asks participants to consider what might be “preventing [them] from attending an event [they]'re interested in or studying at the library instead of at home” (Baker-Short, 2023, p. 18). In sum, the collective insights from the participants emphasized the importance of preventative measures in fostering SEC success, ranging from individualized interventions to broad environmental strategies that are aimed at negating potential challenges to their success.

This focus on prevention of SED support strategies connects to student support strategies discussed in the literature review, most specifically to PC. PC is defined by its *proactive* outreach to students to provide early academic intervention and referrals to additional services such as academic coaching, mentoring, and tutoring, before problems arise (Varney, 2012). PC is a preventative support service which, similar to SED practice, provides students with information on institutional supports, policies, and documents, early in the semester (Jansen et al., 2017). In addition, like the SED support strategies revealed in this study’s findings, PC involves weekly/bi-weekly contact initiated by counselors to provide frequent time-management support, such as checking a student’s progress on particular assignments (Bettinger & Baker, 2011). PC’s time-management and task organizational support aligns with Finding 10, “EFCs were Viewed as Important Targets for Intervention,” and specifically Sub-Finding 10.2, “Time-Management and Task Organization were Identified as Key Areas for Intervention.” In fact, SES Abby’s “School Tasks Breakdown Template” (Figure 10) is an example of how PC uses strategies such as backwards planning to support the completion of long-term assignments (Fleming & McMahon, 2012). Furthermore, SES Julia’s focus on helping SECs complete crucial tasks, such as reviewing syllabi, securing textbooks, and communicating with their professors regarding accommodations (Interview, 4/25/2023) directly connects to Rothwell and Shields (2020)

explanation of the 2-4-8 proactive counseling model used by Catholic University. In the 2-4-8 model, the first counseling session of each semester specifically involves having students review syllabi, order textbooks, and email their letters of accommodation to their professors. Since studies have shown that PC correlates to greater success among students, such as higher GPAs, less instances of academic probation, and significant decreases in attrition (Glennen, 1975; Molina, 2001; Vander Schee, 2007), it can be concluded that SED's similar practices of prevention should produce similar benefits.

Conclusion

Chapter 4 revealed a variety of crucial findings. It emphasized that SECs faced cognitive challenges, particularly EFCs and TCI, which negatively impacted their academic performance and called for specific interventions to enhance their time-management and task organization skills. The findings also revealed affective struggles among SECs, including anxiety and negative self-perceptions. These issues necessitated strategies that extended beyond traditional academic support to encompass the emotional facets of their college experience. Additionally, stigma, nondisclosure, and exclusion were identified as significant environmental barriers. Support strategies for these included raising faculty awareness, fostering collaborative between SESs and campus staff, and educating SECs on disclosure and supporting their decision to disclose. The findings also aligned with the literature, corroborating the critical nature of these challenges and barriers and suggesting the effectiveness of these support strategies across similar contexts. This alignment strengthened the case for a comprehensive and multifaceted support system for SECs that could address the wide array of challenges and barriers they faced to promote their success in postsecondary education.

Chapter 5

The purpose of this study was to understand the individual challenges and environmental barriers experienced by postsecondary students who are receiving SED services in order to identify the most effective strategies to support them. The end goal of this study is to use the information learned from the literature review, data collection, and findings to provide recommendations to the local SED program for the improvement of support services for SECs. To begin the exploration, I conducted the literature review of Chapter 2 to identify the individual challenges and environmental barriers that SECs, as members of the broader category of students with neuropsychiatric conditions (SWNPs), can experience in postsecondary education. This review produced three main categories of individual challenges (cognitive, behavioral, and affective) and three main categories of environmental barriers (stigma, nondisclosure, and exclusion) which provide the basis for the Conceptual Framework. In addition, the critical disability perspective of the literature review revealed that the outcomes of SECs in postsecondary education are acutely shaped by the interaction between their individual manifestations of disability the environmental construction of disability as a concept (Shakespeare & Watson, 2000; Trammel, 2009a). Specifically, SECs' outcomes are influenced by the interaction between the functional impairments associated with their individual neuropsychiatric conditions and ableist dynamics in the postsecondary secondary environment which abnormalize, marginalize, and obstruct the progress of students with disabilities (Dolmage, 2017; Forham, 2009; Haegele, 2016).

Given that scholarly research emphasized functional challenges as well as environmental barriers, I decided upon a two-pronged approach in this study. I have sought to understand how the traits of SECs might relate to their academic challenges, a line of questioning that relies on

the functionalist/medical model of disability. And I sought to understand how environmental factors might relate to SECs' struggles, a parallel line of questioning that represents the constructivist/social model of disability (Haegele, 2016). To accommodate both lines of questioning, I constructed a Conceptual Framework that encompasses both perspectives in order to provide a holistic conceptual approach to understanding SECs' postsecondary experience, an intersectional postmodernist perspective known as the *multidimensional model of disability* (Gabel & Peters, 2004). Leveraging postmodernist thinking, which allows for the simultaneous acceptance of opposing perspectives, the Conceptual Framework took into account both the medical and the social models of disability to frame the research questions. This approach sought to gain insight into challenges stemming from the individual and barriers stemming from the environment. In addition, the research questions sought to understand support strategies that can empower individuals to overcome their personal challenges as well as address barriers to render the environment more inclusive.

Upon completion of the literature review and construction of the Conceptual Framework, I understood that in order to achieve its goal of ensuring success for its student clients, the local SED program would need to address both the individual challenges and the environmental barriers that SECs are experiencing in college. As a first step in understanding how the local program might accomplish this dual approach, I assessed the program's current state of student support by examining and analyzing the federally provided SAMHSA *Supported Education Toolkit*, which informs the entirety of the policies and practices of the local SED program and have remained unchanged since the program's founding circa 2013. Relying on the Conceptual Framework's set of categories aimed at comprehensively understanding SECs' struggles, I

explored where gaps in service might exist in the SAMHSA toolkit. For example, among other concerns, a lack of EF training in the SAMHSA toolkit became apparent.

In addition to gleaning evidence from the SAMHSA toolkit to develop a portrait of the local SED program, I relied on my five years of experience working as an SES within that program. In fact, this study was motivated in large part by my experience in the program, where I witnessed chronic academic struggles among SECs: low GPAs, academic probation, withdrawal from classes, and dropping-out. The desire to help the program evolve resulted in my decision to develop a rigorous academic understanding of SED approaches in relation to SECs' struggles. An examination of SED-relevant literature led me to construct this study's two-pronged Conceptual Framework. The medical model of disability led me to focus on the cognitive, behavioral, and affective dimensions of SECs' struggles. Meanwhile, the social model of disability led me to focus on the environmental barriers of stigma, nondisclosure, and exclusion. The literature also revealed support strategies that could be used to respond to SECs' struggles, both individual and environmental.

To test the Conceptual Framework, I enlisted eleven SED specialists. Aggregately, their experiences include direct work with SECs, supervision of those working directly with SECs, SED program development, and scholarly research in the area of SED programing. In addition to participant interviews, a variety of formal and informal documents upon which participants relied in their work were collected. The data were subsequently analyzed to produce the Findings of Chapter 4, which align with the Conceptual Framework's categories of individual challenges in the cognitive, behavioral, and affective domains, and the environmental barriers of stigma, nondisclosure, and exclusion. In addition, corresponding support strategies were found and presented in the Findings, summarily represented here in Table 11:

Table 11

Individual Challenges and Corresponding Support Strategies

INDIVIDUAL CHALLENGES AND CORRESPONDING SUPPORT STRATEGIES	
INDIVIDUAL CHALLENGES	**SUPPORT STRATEGIES FOR CHALLENGES**
COGNITIVE	
EFCs	- Utilize an EF Training Curriculum

EFC: Time-Management and Organization	- Develop Individual Time-Management and Organization Support Plans
	  - Assessment
	  - Strategy selection
	  - Monitor progress

TCI: Symptoms and Medication Side Effects	- Develop Individual TCI Support Plan - Identify symptoms during intake - Meet frequently to monitor for problems - Support adherence to medication regimes - Encourage self-reflection and medication empowerment - Secure relevant accommodations - Raise faculty awareness through communication
BEHAVIORAL	
Lack of Positive Academic Success Skills Participation and Attendance Problems Falling Behind	- Utilize strategically timed framework of frequent meetings - Consistently review course information (syllabi, announcements, instructions) - Consistently update schedules and calendars - Breakdown long-term projects - Encourage self-reflection using open, recall and response, and funneling questions[2] - Support attention in the classroom by securing accommodations and/or tools

[2] Open, recall and response, and funneling questions are the type of questions described by Julia in Chapter 4 found to increase student engagement with course content (Ertmer et al., 2011).

	- Monitor attendance and provide wake-up calls or transportation support if required
Communication Problems with Faculty	- Develop communication skills - Provide individualized communication support
AFFECTIVE	
Anxiety Lack of Coping Skills	- Support EF to decrease overwhelm - Encourage rejuvenation - Support the use of therapeutic techniques - Emphasize first-semester success
Negative Self	- Consistently provide empathy - Reframe negative thinking - Educate clients on accommodations and rightful entitlement
ENVIRONMENTAL BARRIERS	**SUPPORT STRATEGIES FOR BARRIERS**
STIGMA	
Public Stigma Self-Stigma	- Consistently provide empathy - Respect boundaries by meeting off-campus
Originating from Faculty or Staff	- Build collaborative relationships - Advocate on clients' behalf
NONDISCLOSURE	
K12/College Disparity Distrust the Process Influenced by Stigma Invisible Disability Increases Risk	- Follow the three-stage meeting strategy regarding the disclosure decision - Provide accommodation education - Obtain ROI for communication with faculty/staff - Advocate
EXCLUSION	
Manifests as Discrimination Lack of Faculty Awareness and Training	- Build collaborative relationships with faculty and staff - Advocate

Lack of Integration
Lack of Coordinated Services
	- Build collaborative relationships resource and services contacts
	- Identify and coordinate resources and services
	  - Identify Resources
	  - Build educational contacts
	  - Share resources and contacts with SECs
	- Connect SECs to social aspects of college life
	- Conduct pre-enrollment campus tours

Table 11 informs the six recommendations below that are aligned with the Conceptual Framework, literature review, data collection and analysis, and findings of this project. These recommendations advance support strategies for the three areas of individual challenges (cognitive, behavioral, and affective) and three areas of environmental barriers (stigma, nondisclosure, and exclusion). Grounded in the extensive information that was gathered and analyzed during this study, the following recommendations suggest actions that the local SED program should consider to maximize its support of SECs in postsecondary education.

Recommendations

Recommendation 1: Provide Proactive EF Support to Offset the Impact of EFCs Among SECs

The Findings 1 and 2 indicate that, regarding individual challenges in the cognitive domain, SECs can experience EFCs associated with their neuropsychological conditions and episodes of TCI due to fluctuating symptoms and medication side effects. These factors can compromise SECs' attention, memory, concentration, and particularly their time-management and organization skills. The main strategies to address these cognitive challenges, according to the findings, include the implementation of an EF training curriculum, frequent meetings to provide individualized assistance with time-management and organization using lists and

templates, and supporting SECs' adherence to their medication regimes. These support strategies, which attend directly to SECs' cognitive struggles, are organized and presented as Sub-Recommendations 1.1-1.3 below.

Sub-Recommendation 1.1: Adopt an EF Training Curriculum

A review of the local SED program's practices, which are derived from the SED model toolkit, *Supported Education: Building Your Program* (SAMHSA, 2011a), revealed the absence of intensive EF training for SECs. The SED toolkit contains various checklists of important tasks to be completed during the college application process and several suggestions that SECs may need support with time-management. However, it does not offer detailed strategies that respond to the intensity and ubiquity of EFCs among students. Nor does the local program detail any supplemental strategies outside the toolkit that would address EFCs squarely. Therefore, when made available for use, it is suggested that the local program consider adopting the 12-week EF Curriculum created by Melissa and Diane which includes 12 Cognitive Skill Training Sessions aimed at improving students' executive functioning across four domains: 1) prospective memory, 2) attention and concentration, 3) learning and memory, and 4) problem-solving and cognitive flexibility (see Figure 16).

Figure 16

EF Curriculum Table of Contents and List of Modules

Cognitive Skill Training Sessions

Session 1: Introduction to [Curriculum] and Time Management
- Goal Setting, Time Management, Introduction to Calendaring

Session 2: Prospective Memory (Remembering to Remember)
- Calendaring, Lists, Linking Tasks and Prioritizing

Session 3: Short-Term Prospective Memory
- Weekly Calendar Planning, Short-Term Memory Strategies

Session 4: Task and Conversational Attention
- Strategies for Improving Focus and Attention

Session 5: Attention Skill Practice

- Attention Strategies and Skill Practice, Sequence Ordering

Session 6: Verbal Learning and Memory/Name Learning
- Memory Process and Encoding Strategies, Name Learning

Session 7: Verbal Learning and Memory/Retrieval
- List Learning, Study Skills, Retrieval Strategies

Session 8: Verbal Learning and Memory/Note-taking
- Note Taking

Session 9: Cognitive Flexibility and Problem-Solving/Method
- Brainstorming, Problem-Solving Method

Session 10: Cognitive Flexibility and Problem-Solving/Practice
- Categorizing, Hypothesis Testing, Strategy Verbalization

Session 11: Cognitive Flexibility, Problem-Solving, and Planning/Strategies
- Self-Monitoring, Set-Shifting, Managing Distractions

Session 12: Skills Integration, Review, and Next Steps
- Review of all Skills and Strategies, Connecting to Goals

Module 1

Sessions 1 – 3: Prospective Memory
• Remembering to remember: The ability to remember to do and plan things in the future
• Includes organization strategies, calendaring, time and task management, weekly planning, and short-term memory strategies

Module 2

Sessions 4 – 5: Attention and Concentration
• Maintaining your ability to focus and take in important information
• Includes conversational and task attention strategies

Module 3

Sessions 6 – 8: Learning and Memory
• Your ability to encode (take in) and retrieve information
• Includes encoding and retrieval strategies, skills for learning new information, and note taking strategies

Module 4

Sessions 9 – 11: Problem-Solving and Cognitive Flexibility
• The ability to be flexible in your thinking and solve problems
• Includes brainstorming, strategies for solving problems, self-monitoring, and set-shifting

Session 12

Skills Integration, Review, and Next Steps
• Putting it all together!

Note. Adapted from Table of Contents and list of modules of the EF Curriculum provided by participants and SED researchers Melissa and Diane during data collection.

A study by Mullen et al. (2017) reported that this curriculum showed promise in regard to improving academic performance among SECs: Implementing this curriculum “may lead to an increase in self-efficacy and cognitive strategy use, as well as a reduction in academic difficulties among students with psychiatric conditions” (p. 103).

However, if this curriculum does not become available for use, then it is suggested that the local program consider adopting a previous EF curriculum, *Motivationally Enhanced Compensatory Cognitive Training for Mild Cognitive Impairment (ME-CCT-MCI)*, which formed the basis for Melissa and Diane’s curriculum (Personal Communication, Diane, December 15, 2021), and which is available to download online with “permission to copy, modify and distribute any part of the manual and curriculum for educational, research and non-profit purposes, without fee” (Twamley et al., 2018, p. 1). As shown below in Figure 17, its Table of Contents shows 8 training sessions covering similar EF domains as those covered in Melissa and Diane’s EF Curriculum.

Figure 17

Table of Contents from the ME-CCT-MCI Training Manual

Table of Contents

Session 1: Course Introduction, Education and Lifestyle Strategies

Session 2: Organization, Prioritization and Prospective Memory

Session 3: More Organization, Prioritization and Prospective Memory

Session 4: Attention, Concentration and Working Memory

Session 5: Learning and Memory

Session 6: Executive Functions: Decision-Making and Problem-Solving

Session 7: Executive Functions: Decision-Making, Problem-Solving and Planning

Session 8: Skills Integration, Review, and Next Steps

Notes. Huckans, M., Twamley, E., Tun, S., Hutson, L. Noonan, S., Savla, G., Jak, A., Schiehser, D., & Storzbach, D. (2018). *Motivationally Enhanced Compensatory Cognitive Training for Mild Cognitive Impairment (ME-CCT-MCI)*. Unpublished treatment manual. VA Portland Health Care System and Oregon Health & Science University, Portland, Oregon & VA San Diego Health Care System and University of California, San Diego, California, p. 3.

Melissa and Diane’s 12-week curriculum and the ME-CCT-MCI 8-week curriculum both provide training in EF skills directly linked to college success (Ellison et al., 2014; Kidd et al., 2014; Dijkhuis et al., 2020; Fleming & McMahon, 2012; Shmulsky et al., 2017). Melissa and Diane’s curriculum is slightly more expansive (having 12 rather than 8 sessions). However, their 12-week curriculum is still being tested and it requires explicit permission from the authors for full access. In contrast, the ME-CCT-MCI curriculum and manual is complete and readily

available online. Both curricula provide training for SECs to develop a wide range of EF skills, including in the critical areas of time-management and organization.

Sub-Recommendation 1.2: Develop Individualized Time-Management and Organization Support Plans to Address EFCs Among SECs

Considering the emphasis on time-management and task organization skills highlighted in Sub-Finding 10.2 and the literature review's evidence supporting their positive impact on student success (Bettinger & Baker, 2011; Pintrich & Zusho 2007; Richardson et al. 2012; Robbins et al. 2004; Rothwell & Shields, 2020; Wolters & Hussain, 2015), it is recommended that the local program develop a standard protocol for creating personalized Time-Management and Task Organization Plans (TMPs) for SECs. This intervention aims to assist SECs in effectively accomplishing their academic tasks and goals. According to Wedl (2005), such academic interventions should take a systematic approach which involves identifying the problem through assessment, matching and selecting an evidenced-based strategy for intervention, and then evaluating the success of the intervention. This approach was promulgated in the 2004 reauthorization of IDEA which articulated the “response to intervention process” (RTI) whose aim was ensure that all students receive the support they need to succeed through proactive measures (Applebaum, 2009). The RTI service delivery model contains four key intervention components (universal screening, targeted interventions, progress monitoring, and evaluation for decision-making) and replaced the “wait to fail” model of special education, in which students experiencing academic failure were reactively recommended for services. Instead, the RTI uses universal screening to proactively identify students who need support and then matches support according to student need (Applebaum, 2009). This type of service delivery model arose from prevention programs in schools that emphasize problem-solving to

prevent academic and behavior problems (Fletcher & Vaughn, 2009). Since RTI delivery models have been found to increase overall academic achievement scores and decrease special education referrals (Al-Onizat, 2021; Hite & McGahey, 2015; VanDerHeyden et al., 2007; Vaughn et al., 2013), it is advised that RTI's components of 1) assessment, 2) strategy selection, 3) monitoring, and 4) evaluation serve as a foundation for developing a TMOP for the local program.

1) Assessment: For assessment of SECs' time-management and task organizations skills and needs, the local program could utilize the Assessment of Time Management Skills (ATMS), a self-reported 30-item questionnaire that measures the degree to which respondents use cognitive strategies and adaptations such as calendars and lists for planning tasks in daily life and that assesses students' awareness of time-management strategies. Roshanay et al. (2022) found that the ATMS provided "valid measures of self-assessed time management skills" by identifying students' strengths and challenges in the organization of their daily life and helped service providers develop personalized and appropriate interventions for time-management and task organization (n.p.). The questions of the ATMS are shown below in Figure 18, reordered for clarity by Roshanay et al. (2022) and grouped according to the categories of time-management, organization and planning, and regulation of emotion.

Figure 18

Assessment of Time Management Skills Questions According to Subscale

Time management subscale	
19	I can correctly estimate the time I need to complete my tasks
1	I feel I manage my time well.
18	I put off things I do not like to do until the very last minute.
24	I feel confident that I can complete my daily routine.

20	I learn from my mistakes.
7	I rush to complete my work.
11	Even if I do not like to do something, I still complete it on time.
9	I find that I am overwhelmed by my daily routine.
30	I feel that I do not manage my time well.
26	I run out of time before I finish important things
10	I find that even though I want to be on time, I am often late.
Organization and Planning Subscale	
16	I wait until I feel better before taking on important tasks.
5	I stop and plan out the steps before I start something new.
6	I plan my daily activities.
2	I use a calendar or an appointment book as a way of remembering my daily tasks.
13	I clean my workspace before beginning a task.
15	I make to-do lists.
21	I make sure I have a good night's sleep.
8	I do my most difficult work at the time of day when I have the most energy.
29	I put my things back where they belong or where I got them from.
12	I am not organized in my tasks.
28	I wear a watch or carry a mobile phone to keep track of the time.
Regulation of emotion subscale	
14	I complete the task on my schedule or appointment book to my satisfaction.
25	I put in more effort to follow my schedule when I see others keeping up with their schedule.
17	I reward myself for doing a good job.

23	My mood affects my ability to manage my time.
22	I feel competent about managing my time when I write down my appointments.

Note. Reprinted from The psychometric properties of the original version of Assessment of Time Management Skills (ATMS) (n.p.), by Roshanay et al. (2009), *Occupational Therapy International.* Copyright © 2022 Afsaneh Roshanay et al.

This tool could help SESs develop profiles of SECs' abilities and needs and choose appropriate interventions in the areas of time-management, organization, and planning as well as in the regulation of emotions related to EF skills (n.p.).

However, the ATMS does not focus on challenges specifically related to college life. Therefore, it could be supplemented with two additional short time-management assessments, both of which are geared more specifically to college students with topics such as prioritizing assignments and creating distraction-free study environments (See Appendix D: So Where Shall I Begin and Appendix E: It's about Time). These supplements may be useful in targeting specific college-related time-management and organizational needs. Together, these assessments can offer important guidance for the development of the assessment portion of a protocol for TMPs for SECs. These tools serve to address their potential challenges with time-management and task organization as found in Sub-Finding 10.2 and the literature.

2) Strategy Selection: Once the assessment results have provided insights into an individual SEC's strengths and challenges regarding time-management and organization (for example, the lack of a quiet study space or constant tardiness), it is recommended that SESs select and provide interventions that address any specific areas of weakness. To facilitate the selection process, it is recommended that SESs incorporate the support strategies discussed in Sub-Finding 10.2, "Time-Management and Task Organization were Identified as Key Areas for

Intervention." According to that finding, SESs should consider the following six general support strategies when developing a personalized strategic plan that addresses critical EF areas affecting an SEC.

- Assist SECs with calendaring skills and ensure they adopt a personal calendaring system that suits their preferences and needs.
- Establish weekly or biweekly planning sessions to help the student capture information from syllabi and craft a calendar that details class times, assignment and test dates, blocks of time for studying, and other life/work activities.
- In these meetings, assist SECs with developing the daily habit of checking their online learning portal for announcements and assignment information.
- Assist SECs with breaking down long-term projects/papers into steps and entering those steps into their calendar
- Maintain awareness of SECs' class schedule to strategically time planning meetings.
- Ensure SECs have dependable alarm or notification practices to support their punctuality.

3) Monitoring: To monitor task-completion and support successful time-management and organization among SECs, it is recommended that the local SED program utilize a master checklist modeled on the Pre-Enrollment and Follow-Along support menus provided in the findings (Appendix D and Appendix E). These menus have been provided within the SED Toolkit and SED Manual specifically for use by SED programs, so it seems worthwhile for the local SED program to review them as potentially helpful tools for monitoring various aspects of time-management and task-organization. The master checklist format, with these menus as examples, ensures that every item specified in the various menus is considered. Table 12 provides a brief and incomplete version of such a checklist:

Table 12

Possible Format for Master Task Checklist Adapted from the Menus of Possibilities from the SED Manual

From the Pre-Enrollment Menu of Possibilities (Unger et al., 2016)	
Check	**Task**
	Turn in all relevant applications/resumes and associated materials
	Complete FAFSA if appropriate.
	Register with student services
	Obtain student ID
	Learn to navigate school website and learning portal
	Etc.
From the Follow-Along Menu of Possibilities (Unger et al., 2016)	
	Keeping track of class schedule/calendar
	Planning for anticipated needs - such as getting a tutor.
	Tracking homework assignments and deadlines
	Setting alarm clock/phone call
	Setting up study times
	Etc.

Note. Adapted from the Menus of Possibilities in Unger, K., Manthey, T. Krolick, J., and McMahon, C. (2016). *Supported Education Training Manual*.

To summarize, Sub-Recommendation 1.2 proposes that the local SED program enhance its support of time-management and organization skills among SECs. This enhancement could include assessing individual needs, then selecting a combination of interventions to comprehensively address those needs, and thereafter monitoring the students' progress to track

and foster their development of said skills and to verify that the student is in fact succeeding academically with the tools at hand.

Sub-Recommendation 1.3: Develop Individualized TCI Support Plans to Prepare and Compensate for the Possible Occurrence of TCI Among SECs

Sub-Findings 2.1 and 2.2 evidence the need for SED support strategies related to TCI. Given the significant impact of TCI among SECs, it is recommended that the local program develop *individualized TCI support plans* for SECs. These plans should first consider what symptoms are associated with a student's specific MH conditions. For example, a lack of motivation and procrastination are often associated with a diagnosis of depression. Furthermore, attention ought to be given to issues associated with medications (such as the necessity of maintaining a consistent medication regime). In addition, these plans should incorporate, but not be limited to, the following supports during intake, pre-enrollment, and during the semester:

1. *Gauge Potential Problems During Intake:* Gauge the potential of fluctuations in SECs' symptoms during intake. Information, such as the frequency and intensity of their symptoms or medication side effects, can be gathered from their insights based on their past school experiences. Consider using the Barriers to Education Check Sheet (Appendix C) or a similar tool during intake that can help proactively plan support for TCI that could occur during the semester.
2. *Determine an Appropriate Frequency of Meetings:* Determine an appropriate frequency of meetings for each individual client and create an agreed upon schedule. When doing so, consider a higher frequency of meetings leading up to the beginning of a new semester. According to the Pre-Enrollment menu (Appendix D), there are multiple tasks that need to be completed for a successful start to the semester including securing

financial aid, registering for classes, connecting with ODS, determining transportation, navigating the school website, and becoming familiar with campus. To achieve the completion of these items, consider adopting the meeting schedule protocol required by Julia's SED program which she confirmed is crucial in giving her enough time with SECs to adequately support them (Interview, 4/25/2023). This protocol requires least one meeting with SECs within four days before each semester, a second meeting within three days after the semester starts, weekly for the first few weeks, and then either weekly, biweekly, or monthly thereafter depending on the success of the student (Interview, 4/25/2023). Overall, a pre-enrollment and post-enrollment schedule of meetings would ensure the high-frequency contact that is considered best practice student support services such as PC and AC (Bettinger & Baker, 2011; Brown & Coomes, 2016; Higgins, 2003; Schwartz et al., 2005). Consistent and frequent meetings can help SECs continue to engage with their supports and avoid "falling off the radar" as described by Julia (Interview, 4/25/2023) of the non-participation that can lead to the "mid-semester drop" described by Abby described (Interview 4/27/2023).

3. *Support Adherence to Medication Regimes:* Help SECs adhere to the medication schedules prescribed by their physicians. Participants expressed concerns with SECs having difficulty refilling medications when living on campus, traveling to off-campus appointments for prescriptions, and taking their medications at the correct time to avoid grogginess (Diane Interview, 4/17/2023, Tom Interview, 4/19/2023, Abby Interview, 4/25/2023). In addition, according to three references to medication support in the Pre-Enrollment and Follow-Along support menus (Appendix D and Appendix E), helping SECs manage their medication is standard SED practice. To provide this support, local

SESs could help SECs incorporate medication schedules and appointments for medication into their weekly and monthly schedules as part of time-management skill-building and monitoring and ensure they have the means to travel to appointments for prescriptions.

4. *Secure Relevant Accommodations:* Assist with securing accommodations that account for the possibility of TCI, such as providing alternatives to oral presentations for students with social anxiety disorder as described by professor Matt (Interview, 4/26/2023) or priority seating for students with ADHD described by SES Abby (4/25/2023). Appropriate and relevant accommodations are crucial for SECs in receiving the correct type of support (Melissa Interview, 4/17/2023; Tom Interview, 4/19/2023). Information for determining the appropriate type of accommodations can be gathered from clients during the three-stage disclosure decision process described in Finding 17 and in collaboration with ODS staff as described in Finding 18.

5. *Raise Faculty Awareness:* If SECs voluntarily give permission through the informed signing of a Release of Information agreement, SESs should consider proactively establishing contact with those SECs' professors to discuss their students' conditions. As participants explained, it is important to connect early with professors and to proactively discuss ways to allay the difficulties caused by TCI as a preventative measure (Julia Interview, 4/25/2023; Abby Interview, 4/27/2023). Even if no exact plans are formulated, connecting with professors early on this issue should lead to greater empathy and flexibility on the part of professors (Melissa Interview 4/17/2023; Renee Interview, 4/27/23).

Among SECs, mental health conditions (e.g., ASD, ADHD, anxiety, depression, bipolar disorder, and schizophrenia) oftentimes involve episodes of TCI. To mitigate TCI episodes among SECs, the local program should expect and prepare for TCI. In regard to each student, it is important to discern and secure the accommodations that will mitigate the negative impact of TCI episodes.

Recommendation 2: Develop Individualized Academic Success Plans that Include Support for Positive Academic Success Skills, Student-Faculty Communication, Time-Management, and Task-Completion

Finding 3 indicates that SECs may struggle with a variety of skills (cognitive skills, self-management skills, and social skills) in postsecondary education, which can compromise their time-management, emotional control, and engagement and in turn lead to SECs feeling overwhelmed, falling behind in their coursework, earning "zeros" and/or dropping-out. Participants described how they help SECs improve academic behaviors that can prevent failure such as proper time-management and task-completion to stay on top of coursework, especially during the first semester (Julia Interview, 4/25/2023; Abby 4/27/2023; Melissa Interview, 4/17/2023; Diane Interview 4/17/2023) Additionally, as shown in Finding 13, participants stated and documents revealed that effective student-faculty communication to elicit flexibility and understanding, especially regarding accommodations, promotes SECs' success. These supports are accounted for in Sub-Recommendations 2.1 - 2.2 below.

Sub-Recommendation 2.1: Provide Support for Positive Academic Behavior to Ensure the Use of Positive Academic Skills by SECs

It is recommended that SESs provide support for positive academic behavior during the frequent and strategically timed meeting framework outlined above. This support is intended to

ensure SECs' use of positive academic skills which include the use of cognitive skills that allow SECs to manage their time well and stay organized and self-management skills that help SECs stay focused in class and aware of course information and changes outside of class (Carey et al., 2014). During meetings, to support positive academic behavior, the findings cited in Finding 12 suggest that SESs should:

1. Review course information such as syllabi, class announcements, and assignment instructions and deadlines with SECs and help them update their schedules and calendars.
2. Help SECs break down long-term assignments into manageable steps and add these steps to SECs' schedules and calendars. Consider using Abby's "School Tasks Breakdown Template" (Figure 10) or a comparable tool.
3. Ask SECs a series of questions about each course that provoke effortful reflection about assignments ("How's your homework? What was your first grade? How did that go?"), professor feedback ("What was the teacher's feedback? Is there a delay in assignment feedback? Why hasn't there been feedback? Have you prompted your teacher? Is this a conversation we need to have?"), and accommodations ("Have you requested those? Have you had a conversation with the teacher about it? Have you sent a follow-up email?") (Interview, 4/25/2023). The findings suggest that questions such as these will support SECs' awareness of the aspects of each course and their ability to identify problems that need addressing. In addition, they represent the types of open, recall and response, and funneling questions which have been found to increase student engagement with course content (Ertmer et al., 2011).
4. During meetings, review SECs' experiences in each course to address their level of attention and focus in the classroom, success with notetaking and the provision of

necessary tools (e.g., recording pen), class participation, and the proper implementation of accommodations. Consider developing a checklist of these items to cover during meetings to ensure that these topics are addressed. If certain problems appear critical, such as a gap in SECs' notes from course lectures or problems with participation, reach out to faculty or ODS staff to collaboratively make any necessary adjustments to support SECs' success in the classroom. Ensure that an ROI is signed by the SEC before contacting faculty or staff.

5. Review attendance policies of all classes and monitor SECs' class attendance. If attendance is problematic, consider providing wake-up support (use of alarms and/or wake-up calls) and/or transportation support if necessary.

By completing these actions related to time-management and task-completion, provoking reflection and awareness on the part of the student and seeking to identify functional problems in the classroom, SESs can provide well-rounded support that promotes positive academic behaviors for success.

Sub-Recommendation 2.2: Provide Support for Effective Student-Faculty Communication

It is recommended that SESs provide support for effective student-faculty communication to avoid misunderstandings and achieve clarity on accommodation implementation according to findings cited in Finding 13. Therefore, to support effective communication, SESs should consider the following actions:

1. Ensure that clients who are receiving accommodations send their accommodations letters to each of their professors at the beginning of each semester.
2. Assist clients with plans to meet or email their professors with specifics as to how they prefer their accommodations to be implemented and any other concerns or needs.

3. Assist SECs in developing the skills needed to communicate with their professors. Consider utilizing the full “Email Template & Guide for College Students Advocating for Assistance at School” referred to in Figure 13 or a similar tool. Figure 13 refers to a resource which provides email templates for SECs who may need to ask their professors for a change in accommodations, address an issue in which their requests are denied, email administration to advocate for a change (e.g., allowing for pass/fail), and/or compose a thank-you email to people who have supported them.
4. During meetings, inquire whether SECs have any communication concerns or needs with other students, faculty, staff, or the administration. If SECs do report problems and request help with their communications, then offer to review incoming emails and offer to help edit or compose outgoing emails. This practice can help SECs understand messages from senders and send clear responses in return according to Finding 13.
5. If requested and authorized by a SEC, contact faculty, staff, and/or administration directly to advocate on behalf of the client in a collaborative manner or to provide clarity regarding a SEC’s communications.

The recommendations represent thorough support for student-faculty communications that can provide clarity for SECs as a benefit to their success.

Recommendation 3: Support SECs’ Emotional Well-Being by Promoting Calmness and Confidence

The Findings 4-6 indicate that, in the affective domain, SECs may struggle with anxiety, a lack of coping skills, and a negative sense of self. Support strategies used to address these challenges, according to Findings 14 and 15, include the following. First, EF training and communication training can help to reduce anxiety among SECs. Second, helping SECs succeed

academically in their first weeks and in their first semester promotes SECs' self-confidence. Third, emotional support helps SECs cope with the problems they experience. Fourth, suggesting to students positive ways of interpreting their struggles promotes a more affirming and positive attitude toward themselves. While Finding 13 shows that EF and communication skill development can reduce anxiety, support for those skills have already been recommended in Recommendations 1 and 2. Therefore, Recommendation 3 focuses on taking steps to restore calmness and build confidence among SECs to counter anxiety and feelings of inadequacy so that they can function to the best of their abilities. Though SESs are generally not licensed therapists, there are no rules against addressing negative emotions in their discussions with SECs that they might be experiencing. However, if SECs are experiencing anxiety or negative feelings that appear significant and are beyond SESs' expertise, SESs should contact SECs' therapists and psychiatrists within the assigned team at their SED program.

Sub-Recommendation 3.1: Identify and Counter EFCs that may be Contributing to Anxiety and Overwhelm

If SESs sense an increase of anxiety in a student related to coursework, according to the connections between anxiety and EFCs cited in Finding 1.3, it is recommended that SESs identify EFCs that might be connected (e.g., issues with time-management, organization, processing information, attention to details). If such EFCs are identified, SESs should select strategies that promote the use of positive academic skills, such as reviewing assignment instructions, due dates, and breaking down tasks. As indicated by participants, strategies that support EFCs can help reduce anxiety and students' feelings of being overwhelmed as evidenced in Finding 14 (Melissa Interview, 4/17/2023; Ann Interview, 4/25/2023; Abby Interview, 4/27/2023)

Sub-Recommendation 3.2: Encourage Rejuvenation and Use of Therapeutic Methods to Promote Positivity and Calmness Among SECs

According to the findings cited in Finding 15, SESs should encourage SECs to take breaks and engage in self-care activities that can be emotionally supportive if anxiety or negative thinking seems to be impacting SECs' academic performance. In addition, according to findings cited in Finding 14, SESs should remind SECs of any therapeutic techniques they have learned and encourage them to use these skills and also ask SECs' therapists for suggestions on how to assist them with the self-management of emotions to increase their emotional well-being. If anxiety or negative thinking appears to be especially pronounced, alert SECs' therapists as soon as possible so that they can provide the highest level of MH counseling for the client.

Sub-Recommendation 3.3: Support SECs' Self-Esteem and Counter the Negative Sense of Self with Empathy and Reframing

During meetings, it is recommended that SESs provide consistent empathy regarding SECs' challenges and actively reframe their struggles. To reframe, offer perspectives that acknowledge the students' difficulty but also provide information to help the student understand their situation in a wider context. For example, suggesting to a frustrated student that college is "supposed to be hard" and that most students also feel that college is quite difficult (Melissa Interview, 4/17/2023) can help them put their struggles in perspective. This reframing helps the student normalize the feelings of difficulty and not blame themselves or see themselves as deficient because they are struggling.

Sub-Recommendation 3.4: Bolster SECs' Confidence with Positive Thinking and an Emphasis on First-Semester Retention

It is recommended that SESs model a positive mindset and provide positive, uplifting, and motivating statements continually to SECs to build hope and confidence as a means to combat negative thinking, low self-esteem, and feelings of inadequacy. In addition, for SECs' first semester, SESs should emphasize the development of positive academic habits and the passing of classes over high grades. The confidence and self-satisfaction from small successes such as completing assignments on-time and passing quizzes and tests, as well as the larger success of earning college credits, not only move SECs along the path of achieving their educational goals, but can also work to increase their confidence, motivation, and engagement in the future, thus enhancing their emotional well-being.

Recommendation 4: To Counter Dynamics of Stigma, Provide Flexibility and Understanding, Advocate on Students' Behalf, and Help Students Develop Capacity for Self-Advocacy.

Finding 7 indicates two important points regarding stigma. First, SECs may experience stigma from multiple sources in the environment, including administrators, faculty, staff, and peers. Second, students may internalize stigma and have difficulty accepting their MH conditions. The following recommendations address both of these concerns, public stigma and internalized stigma. Main strategies used to address stigma, according to Finding 16 include providing flexibility and understanding to SECs, advocating for them in meetings with faculty, and promoting the development of their self-advocacy skills. In order to combat the negative effects of stigma, therefore, it is recommended that SESs engage in the following sub-recommendations.

Sub-Recommendation 4.1: Provide Flexibility and Understanding to SECs to Compensate for a Lack of Flexibility and Understanding in the Environment

It is recommended that SESs make a daily commitment to understand, as Chris stated, that SECs can often be "people in distress," and act accordingly by providing consistent empathy (Interview, 4/18/2023). This should include being sensitive to when and where meetings are held as some SECs prefer to not make their association with SED programs publicly known. If SESs feel they need suggestions and training on how to counsel with empathy, they should reach out to SECs' therapists for ideas. According to interviewee statements, a general practice of providing consistent empathy can positively impact SECs' outlook and motivation regarding school. According to interviewee statements cited in Finding 16, a general practice of providing consistent flexibility and understanding can positively impact SECs' outlook and motivation regarding school.

Sub-Recommendation 4.2: Advocate on SECs' Behalf with Faculty and ODS Staff.

It is recommended that SESs advocate for SECs by attending meetings that SECs have with faculty and ODS staff regarding accommodations. According to participant statements in Finding 16 and corroborated in a study by Pfeifer et al. (2021), SECs may have difficulty articulating their needs clearly during these meetings with faculty and staff, especially in their first year. By being present at these meetings, SESs can advocate on students' behalf if they are having difficulty expressing themselves. According to participants, this practice helps ensure that faculty and ODS staff are clearly aware of SECs' needs and that appropriate accommodations are being reasonably considered and settled (Julia Interview, 4/25/2023; Abby Interview, 4/27/23; Renee Interview, 4/27/23).

Sub-Recommendation 4.3: Help SECs Develop Self-Advocacy Skills to Counter Dynamics of Stigma.

According to the findings cited in Finding 16, It is recommended that SESs actively advocate for SECs by attending meetings with faculty and ODSs to ensure that their needs are being understood and met. In accordance with maintaining the ethical principles of individual autonomy as explained in the *SED Manual*, and HIPPA requirement of confidentiality (HIPAA, 1996), SESs should suggest different levels of advocacy, such as accompanying SECs to meetings or, if a client signs an ROI, then contacting and meeting with faculty and ODSs on their own. By advocating with SECs or on their behalf, SESs can ensure that faculty and ODSs are clearly aware of SECs needs and that appropriate accommodations are being provided.

Sub-Recommendation 4.3: Help SECs Develop Self-Advocacy Skills as an Additional Means to Empower SECs against Stigma in the Environment

It is recommended that SESs help SECs develop the self-advocacy skills that three participants mentioned as beneficial (Melissa Interview, 4/17/2023; Diane Interview 4/17/2023; Kerri Interview, 5/25/2023) and the literature corroborates are an effective strategy to counter stigma (Brownlow et al., 2021; Lee et al., 2021). However, self-advocacy should be considered as an additional layer of protection against stigma and not as a sole solution, since SEC's self-advocacy skills may not be effective enough to adequately assert their needs to acquire proper support (Pfeifer et al., 2021).

Recommendation 5: Provide Education on Disclosure and Accommodations to Help SECs Make Informed Decisions Regarding On-Campus Support

Finding 8 indicates that, regarding the barrier of nondisclosure, SECs may be affected by the disparity in support provided for disclosure between K12 and postsecondary education, may distrust the disclosure process, and may be influenced by stigma in their decision over whether to disclose. The primary support strategy to address these barriers, found in Finding 17, is to

support SECs in making their decision whether to disclose by educating them on issues surrounding disclosure to allow them to make an informed decision (Melissa Interview, 4/17/2023; Diane Interview 4/17/2023; Tom Interview, 4/19/2023; Julia Interview, 4/25/2023). Therefore, it is recommended that SESs take the following actions to support SECs in making their decision whether to disclose.

1. Consider following the strategy outlined in the *SED Manual* that occurs in three stages, This is the protocol followed by five participants currently practicing SED (Abby, Julia, Renee, Ann, Jackie) (Ann Interview, 4/25/2023): 1) introduce the topic of disclosure during intake into the SED program 2) during the pre-enrollment period, conduct the discussion on disclosure outlined in the SED Manual which includes a Release of Information for the client to sign if they choose to disclose and, 3) conduct a meeting in which the client makes a final informed decision on whether to disclose or not, and if they do, then what level of support they prefer. This three-stage process appears to provide SECs with information on the main pros and cons involved in the choice to disclose so that they can make an informed choice. In addition, the three meetings inform SESs on the level of actions they will need to take to help SECs receive appropriate accommodations. These actions can range from only guiding SECs through the disclosure process to taking the more hands-on approach of filling out the accommodations application with SECs and accompanying them to meetings with ODS.
2. Provide "accommodation education" to SECs by reviewing the specific accommodations that are provided by their college (e.g., extended time on tests, extended time for assignments, priority seating) and help SECs understand and consider which

> accommodations would be useful for them should they choose to disclose (Melissa Interview, 4/17/2023).

By providing extensive and specific information regarding their right to accommodations, the process of acquiring accommodations, the types of accommodations available, and the associated benefits, SESs can help empower SECs with knowledge for decision-making while also respecting their autonomy.

Recommendation 6: Promote Inclusion by Building Collaborative Relationships with Faculty and Staff, Identifying and Coordinating On-Campus Resources and Services, and Connecting SECs to the Social Aspects of College Life

Finding 9 indicates that, regarding the barrier of exclusion, SECs may experience discrimination due to: a lack of awareness of and training on their conditions among faculty and staff; a lack of coordination of campus services; a lack of integration among peers on campus; and a lack of awareness in themselves regarding available support resources on campus. According to Findings 18-20, support strategies that address these factors of exclusion include the following: 1) SESs should build collaborative relationships with faculty and staff; 2) SESs should identify, coordinate, and connect individual SECs to campus resources; and 3) SESs should identify and connect individual SECs to social activities that foster a sense of belonging on the college campus.

Sub-Recommendation 6.1: Build Collaborative Relationships with Faculty and Campus Staff

It is recommended that SESs, with the permission of SECs and a signed ROI, introduce themselves to SECs' faculty and to campus staff who interface with SECs (e.g., disability counselors, financial aid staff, tutoring coordinators) to establish collaborative relationships aimed at supporting SECs. Interviews with SESs suggested that reaching out to faculty and staff

in a proactive and collaborative manner can help increase awareness of SECs' needs in the environment, increase the chance of flexibility and understanding from faculty if needed during the semester, and help ensure that SECs are receiving their accommodations (Abby Interview, 4/27/2023; Julia Interview, 4/25/2023, Renee Interview, 4/27/2023).

Sub-Recommendation 6.2: Identify, Coordinate, and Connect SECs to Resources and Services on Campus

It is recommended that SESs identify, coordinate, and connect SECs to resources on campus by taking the following actions:

1. Identify, collect, and organize important information on resources at SECs' respective colleges which include, but are not limited to, support services such as financial aid, grant and scholarship offices, academic advising, ODSs, tutoring and academic coaching services, the library, and the registrar's office. Once collected, SESs should review this information with SESs and provide them with an organized list of services and contact information. SESs can then discuss with SECs which services would be of help.
2. Identify and build relationships with educational contacts at SECs' respective schools. For example, approach staff at offices for financial aid, grants and scholarship, disability counseling, academic advising, tutoring, academic coaching, library services, student services, and course registration. If relationships are formed, then SESs can reach out to these contacts for support if and when their SECs are experiencing challenges during the semester.
3. Prior to their first semester, conduct campus tours with SECs to familiarize them with the various resources available on campus, such as the aforementioned resources and study areas, food courts, social club offices, and gymnasium.

Sub-Recommendation 6.3: Identify and Connect SECs to the Social Aspects of Campus Life

It is recommended that in addition to identifying and connecting SECs to the academic support resources above, SESs should also identify and connect SECs to socially-related resources on campus to promote their integration into the social environment by taking the following actions:

1. Identify, collect, and organize important information related to social resources at SECs' respective colleges which include, but are not limited to, student clubs, opportunities for team sports, the gymnasium, and other volunteer opportunities. Once collected, SESs should review this information with SECs and provide them with a coordinated list including contact information and location of the resources.
2. During their meetings, SESs should explore and review the online location of the identified social resources with SECs so that they understand where and how to access them for support.
3. Include visits to these socially related resources during in person campus tours.

Summary of Recommendations

Taken as a whole, Recommendations 1-6 provide a multidimensional approach that addresses not only SECs' individual cognitive, behavioral, and emotional challenges but also the environmental barriers of stigma, nondisclosure, and exclusion. Recommendations 1-3 seek to empower SECs as they engage with postsecondary education by addressing individual challenges. Recommendation 1 advises the provision of proactive EF support, which can be realized through the adoption of specialized training and the formulation of individualized plans to help SECs with effective time-management and task organization. In addition, Recommendation 2 calls for crafting personalized time-management plans that reinforce positive

academic behaviors and for enhancing student-faculty communication. Furthermore, Recommendation 3 focuses on bolstering emotional well-being by aiming to cultivate an atmosphere of calmness, confidence, and resilience against potentially overwhelming academic situations. Recommendations 4-6 address the environmental barriers of stigma, nondisclosure, and exclusion. Recommendation 4 seeks to counter dynamics of stigma by providing flexibility and understanding, advocating on students' behalf, and helping them develop skills of self-advocacy. In addition, Recommendation 5 seeks to mitigate nondisclosure by proposing education on disclosure and the accommodations process so that SECs are equipped with the knowledge to make an informed decision. Lastly, Recommendation 6 suggests that SESs foster collaborative relationships with faculty and staff to effectively leverage available campus resources and help SECs integrate into the academic and social fabric of college life.

Conclusion

Supported Education Clients (SECs) receiving Supported Education (SED) services grapple with a myriad of adversities. These can stem from internal individual challenges in cognitive, behavioral, and affective domains such as EFCs and TCI, an underutilization of academic skills, student-faculty communication difficulties, anxiety, a negative sense of self, and a lack of coping skills. Concurrently, SECs face external environmental barriers which can include public and self-stigma, nondisclosure, exclusion, and uncoordinated campus services. Through a comprehensive synthesis of insights from SED professionals and an extensive literature review, this study not only sheds light on these challenges and barriers but also offers recommendations for a local SED program. By embracing the dual perspectives of the medical and social models of disability, this study has developed a roadmap for empowering SECs through individual skill development while also providing education and advocating for their

integration into the postsecondary landscape. The recommendations seek to strengthen SECs as students and simultaneously promote the broader causes of inclusion, advocacy, and systemic change aimed at integrating SECs in postsecondary education. Therefore, the original vision of this study to reconcile and promote both the medical and social models of disability, as opposed to entrenching itself in one side or the other, has produced a multidimensional set of success strategies to counter both the individual challenges and environmental barriers that SECs may face in their efforts to attain their educational goals.

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Appendix A

Interview Protocol for Supported Education Specialists

Interview Protocol Form for Supported Education Specialists
Interviewee (Participant ID): ____
Interviewer: ____
Documents Obtained: ____
Pre-Interview Comments:
____

Introduction Script

You have been selected to participate in this interview because you have been identified as a professional who works in the Supported Education (SED) field as defined by Substance Abuse and Mental Health Services Administration (SAMHSA) via their Supported Education Evidence-Based Practices (EBP) KIT published in 2012.

My research project focuses on the services currently being provided to SED clients that support their executive functioning skills, such as goal-directed behavior, organization, planning, and prioritization. As a SED staff member, you are in the unique position of being able to comment on client behaviors and SED support services that address these behaviors. Therefore, I am hoping that you might be able to shed light on the current state of SED services at your agency and any barriers there might be to serving these students.

To aid in my note taking, I would like to audio record our conversation today. Only I will have privilege to the recordings, and they will remain confidential. In addition, the recordings will be destroyed once they have been transcribed. Here is the release form which states …. I am happy to answer any questions you might have regarding privacy and confidentiality.
I plan this interview to last 30 - 60 minutes, depending on your schedule. In addition, there may be additional contact in the future if I need to clarify my interpretation of your comments. If you need to contact me after the interview, here is my card with phone and email information. Do you have any questions that I could answer before we begin?

Background Information:
What is your job title and role related to Supported Education?
How long have you been involved in this work
How many years of experience do you have in the Supported Education (SED) field?
How many SED clients do you, or have you, worked with who are applying to or attending college?
Tell me about the services you offer to SED clients during their postsecondary education.
Interview questions regarding individual challenges and support strategies:

Question 1: Tell me about the kinds of individual challenges your SED clients experience in postsecondary education.

Follow-Up Question 1: What types of cognitive challenges might they experience?

Follow-Up Question 2: What types of academic behavior or skill challenges might they experience?

Follow-Up Question 2: What types of emotional challenges might they experience?

Question 2: On which individual challenges related to postsecondary education do you spend most of your time focusing? Why are these challenges so time consuming?

Follow-Up Question 1: What would have helped them be more academically prepared for college?

Follow-Up Question 2: In general, how would you rate the college readiness of your clients?

Question 3: With which individual challenges related to postsecondary education are you most able to help?

Follow-Up Question 1: What would help you be more prepared to help clients succeed in postsecondary education?

Question 4: What kinds of strategies do you employ to help your clients overcome the personal challenges they face in postsecondary education?

Follow-Up Question 1: Are there any strategies that you find most effective or beneficial for your clients?

Question 5: Do you see your students acquiring specific skills that make certain challenges in postsecondary education less problematic over time?

Follow-Up Question 1: If so, what was types of support or strategies help them acquire these skills?

Interview questions regarding environmental barriers:

Question 1: Tell me about any environmental barriers that your SED clients encounter during their postsecondary education. By environmental barriers, I mean, any common practices or aspects of a college's culture that may obstruct the path of your clients.

Follow-Up Question 1: [If stigma or exclusion is indicated] What types of stigma or exclusion have your clients experienced?

Question 2: Tell me about your client’s willingness to disclose their condition to receive accommodations.

Follow-Up Question 1: Are clients successful in applying for and receiving accommodations?

Follow-up Question 2: What are some of the reasons a client might not disclose to receive accommodations?

Question 3: Tell me about how your clients are experiencing their professors.

Follow-Up Question 1: What behaviors or practices conducted by professors seem helpful for your clients’ success in courses?

Follow-Up Question 2: What behaviors or practices conducted by professors seem to cause problems for your clients in their classes?

Question 4: Tell me about your clients' relationships with campus staff.

Question 5: Are your clients experiencing a culture of inclusivity among their college peers?

Follow-Up Question 1: What aspects of the culture seem to support inclusivity?

Follow-Up Question 2: Are there patterns of exclusion?

Question 6: Tell me about how your clients' experience with mental health or other support services on campus.

Follow-Up Question 1: Do you coordinate with campus support services or personnel to support clients?

Question 7: Do you see your clients growing socially as well as academically? In what ways?

Follow-Up Question 1: Are there any strategies that you find most effective or beneficial in helping them grow socially and academically?

Question 8: What common practices on campus (from faculty, staff, and from the administration) would help SED student inclusion, retention, and success?

Follow-Up Question 1: Are there any practices that you find most effective or beneficial in increasing inclusion, retention, and success?

Question 9: What types of collaborative relationships have you formed with college faculty, staff, and administrators?

Follow-Up Question 1: What types of collaborative actions do you find most effective or beneficial in helping SED clients succeed in college?

Question 10: Are you involved in any initiatives focused on inclusion with faculty, administration and/or students? Could you tell me about those initiatives and your role within them?

Follow-Up Question 1: What types of inclusion initiatives do you find most effective or beneficial in helping SED clients succeed in college?

Post-Interview Script:

This concludes our interview. I will follow up with any questions I may have, called a "Member Check," on the meaning of your statements if I have any. Feel free to contact me anytime. To reiterate, the recordings will remain in a secure location and your identity confidential. Thank you.

Appendix B

Document Analysis Protocol

Consent Process

Since this study will not collect identifiers, the information sheet will be used with verbal consent. This process by the Principal Investigator is as follows:

1. Provide the consent information via email to participants before the interview. The consent document lists both interview and documents as data sources.

2. Review the information sheet with the participant before the interview to ensure that they understand the study and what will be expected of them and will answer any questions they may have and address any concerns they express.

3. Obtain verbal consent: Once the participant has reviewed the information sheet and had the opportunity to ask questions, verbally and clearly ask them if they consent to participate in the study. If given, consent will be recorded in researchers notes using the Participant ID (i.e., SES01).

4. Provide a copy of the information sheet after the interview for their records.

Research Questions

1. According to Supported Education specialists and experts, what individual challenges do SED clients experience related to postsecondary education?
   1a. What support strategies do Supported Education specialists find helpful in mitigating these challenges?

2. According to Supported Education specialists and experts, what external barriers do SED clients experience in the postsecondary education environment?
   2a. What strategies do Supported Education specialists find helpful in overcoming these barriers?

Overview

- To gain insights into the policies, procedures, and/or strategies used by Supported Education specialists to record and monitor the individual challenges and environmental barriers experienced by clients. Types of documents can include, but not be limited to, forms, checklists, and/or rubrics for planning and/or evaluation of client challenges and needs. Documents will be selected based on their relevance to clients' individual challenges and environmental barriers in relation to their postsecondary educational experience and alignment with the research questions

Selection Criteria

Inclusionary Criteria	Exclusionary Criteria
• Documents used by SESs that are relevant to clients' possible challenges with EFs, academic performance, and/or emotional well-being, support strategies of academic skill-building, counseling, and coaching that align with the Conceptual Framework. • Documents related to the environmental barriers of stigma, nondisclosure, and exclusion, support strategies of faculty training, instructional initiatives, and the coordination of services that align with the Conceptual Framework.	• Exclusionary criteria are documents which are unrelated to the Conceptual Framework, those which contain any identifiers of participants or clients, and/or confidential documents.

Selection Process

- Obtain permission to access documents and ensure confidentiality and privacy.
- Request electronic or physical copies of documents from participants or access them through websites or other appropriate sources.
- Store all documents securely and maintain confidentiality and privacy.
- Use an organized system for cataloging and managing collected documents as explained below.

Document Access, Storage, and Archiving

- Save original submissions in the Rivanna Research Project Storage file system provided by the University of Virginia's ITS MyGroups system.
- Remove all identifiers (participant's or agency's name) from the original documents.
- Rename documents with a unique participant ID assigned sequentially by order of interviewee. For example, a document from the first interviewee will be given the name "SES01." Multiple documents from the same source will be given an additional decimal number, such as "SES01.1, SES01.2."
- Place data within separate Participant ID folders on Rivanna Research Project Storage file system.
- A secure list will include real names with assigned Participant ID numbers and will be stored with recordings via the Rivanna Research Project Storage file system provided by the University of Virginia's ITS MyGroups system.
- Researcher will control, protect, and keep confidential audio data and Participant IDs on a secure .txt file and stored in the Rivanna Research Project Storage file system provided by the University of Virginia's (UVA) ITS MyGroups system. Following standard UVA protocol, data will be preserved and archived for 5 years.

Analysis Protocol

- Read the document to identify elements which pertain to the a priori codes in the Codebook (Appendix B)
- Determine document type (i.e., form, checklist, rubric, handout, etc.)
- Paste relevant text into separate rows in a Microsoft Excel Project.
- Add codes to a priori code column and in vivo column if applicable
- Write notes in memo column that expound on connections and observations made.

Document ID	Document Type	Document Text	Code 1 (a priori)	Code 2 (in vivo)	Notes

Appendix C

Codebook

Code (Parent)	Code Level 1	Code Level 2	Definition
IC			Individual Challenge
EB			Environmental Barrier
SIC			Support for Individual Challenge
SEB			Support for Individual Barrier
IC	C		Individual Challenge - Cognitive
IC	B		Individual Challenge - Behavioral
IC	A		Individual Challenge - Affective
IC	C	EFC	Individual Challenge - Cognitive - Executive Functioning Challenge
IC	C	TCI	Individual Challenge - Cognitive - Temporary Cognitive Impairment
IC	B	PA	Individual Challenge – Behavioral – Poor Academic Performance
IC	B	GPA	Individual Challenge – Behavioral – Low GPA
IC	B	AP	Individual Challenge – Behavioral – Academic Probation
IC	A	AX	Individual Challenge – Affective - Anxiety
IC	A	CS	Individual Challenge – Affective – Lack of Coping Skills
IC	A	NS	Individual Challenge – Affective – Negative Sense of Self
EB	ST		Environmental Barrier - Stigma
EB	ND		Environmental Barrier - Nondisclosure
EB	EX		Environmental Barrier - Exclusion
EB	ST	PS	Environmental Barrier - Stigma - Public Stigma

EB	ST	SS	Environmental Barrier - Stigma - Self Stigma
EB	ST	PI	Environmental Barrier - Stigma - Peer Issue
EB	ST	FI	Environmental Barrier - Stigma - Faculty Issue
EB	ND	IS	Environmental Barrier - Nondisclosure - Influenced by Stigma
EB	ND	ID	Environmental Barrier - Nondisclosure - Invisible Disability
EB	EX	DI	Environmental Barrier - Exclusion - Discrimination
EB	EX	LF	Environmental Barrier - Exclusion - Lack of Faculty Training and Awareness
EB	EX	LC	Environmental Barrier - Exclusion - Lack of Coordinated Services
EB	EX	LI	Lack of Integration
SIC	C		Support for Individual Challenge - Cognitive
SIC	B		Support for Individual Challenge - Behavioral
SIC	A		Support for Individual Challenge - Affective
SIC	C	EFC	Support for Individual Challenge Cognitive - Executive Functioning Challenge
SIC	C	TCI	Support for Individual Challenge - Cognitive - Temporary Cognitive Impairment
SIC	B	PA	Support for Individual Challenge – Behavioral – Poor Academic Performance
SIC	B	GPA	Support for Individual Challenge – Behavioral – Low GPA
SIC	B	AP	Support for Individual Challenge – Behavioral – Academic Probation
SIC	A	AX	Support for Individual Challenge – Affective - Anxiety
SIC	A	CS	Support for Individual Challenge – Affective – Lack of Coping Skills
SIC	A	NS	Support for Individual Challenge – Affective – Negative Sense of Self
SEB	ST		Support for Environmental Barrier - Stigma

SEB	ND		Support for Environmental Barrier - Nondisclosure
SEB	EX		Support for Environmental Barrier - Exclusion
SEB	ST	PS	Support for Environmental Barrier - Stigma - Public Stigma
SEB	ST	SS	Support for Environmental Barrier - Stigma - Self Stigma
SEB	ST	PI	Support for Environmental Barrier - Stigma - Peer Issue
SEB	ST	FI	Support for Environmental Barrier - Stigma - Faculty Issue
SEB	ND	IS	Support for Environmental Barrier - Nondisclosure - Influenced by Stigma
SEB	ND	ID	Support for Environmental Barrier - Nondisclosure - Invisible Disability
SEB	EX	LF	Support for Environmental Barrier - Exclusion – Lack of Faculty Awareness
SEB	EX	LI	Support for Environmental Barrier - Exclusion - Lack of Integration
SEB	EX	LC	Support for Environmental Barrier - Exclusion - Lack of Coordinated Services

Appendix D

Pre-Enrollment/Enrollment – Menu of Possibilities

Getting Established	Educational Resource Development and Exploration	Application
Determine educational goal(s) Fill out the career profile and discuss in depth each section. Explore concerns/ ambivalence about education. Discuss past experiences with education. Establish rapport and trust	Explore potential educational institutions and programs that may meet the educational goal (colleges, universities, online programs, certificate programs, apprenticeships, work study programs etc.) Accompany the client while exploring different institutions. Determine the programs that best meet the educational goal(s) Discover and gather what materials and information is needed to apply to the program. Find references and contact info. Have identification needed.	Turn in all relevant applications/resumes and associated materials (transcripts, letters of recommendation, personal essays, etc.) Turn in FAFSA if appropriate. Discuss and plan for disclosure or non-disclosure. Reading appropriate policies and procedures
Enrollment	**Plan for Transportation**	**Support System/ Community Partners**
Financial planning Registering with student services Taking placement tests Navigating school website and technology Choosing classes Familiarizing with college environment and resources Purchasing books and supplies Academic advising Getting a student ID	Planning for transportation to classes. Planning for transportation to other educational events (orientations, social events, clubs etc.) Consider temporary transportation solutions to begin courses and for emergencies. Consider long term stable solutions that will last the length of course enrollment.	Refer to Vocational Rehabilitation Include peer community. Meet and include family and friends. Discuss plan with treatment team. Partner with Parole/Probation, Therapist/Counselor, and/or Mental Health Court etc. as appropriate
Financial Aid/ Benefit Counseling	**Barriers to Learning & Accommodations**	**Other Logistics**
Discuss options for paying for education (scholarships, grants, loans, work study, etc.) Discuss pros and cons of going into debt. Discuss past loan defaults and deferment. Discuss how benefits could be affected. Meet with family or rep payee.	Determine an initial plan for addressing barriers to learning such as: Addressing psychiatric symptoms Coping with and accommodating learning/physical disabilities Exploring strengths and resources that can be used to address barriers to learning. Planning for anticipated needs - such as getting a tutor. Finding a place to study	Obtaining child/elder care if needed Lunch meals Housing Managing meds at school Navigating class schedule

Appendix E

Follow Along Support – Menu of Possibilities

Daily Supports	Transportation	Financial Aid
Keeping track of class schedule/calendar Tracking homework assignments and deadlines Waking up on time alarm clock/phone call Meals/snacks /medications Health/Grooming Personal Support and Coaching	Rides to and from school Auto repairs Purchasing vehicle. Plan to approach other students for rides. Bus pass/ travel training Help with Bicycle or Gas Voucher Obtaining Driver's license	Searching for new financial aid opportunities Review student loans, scholarships, eligibility programs, work study, grants, Pell grants, while covering benefits and responsibilities of options. Resubmitting FAFSA as needed.
Instructor and Student Relationship	**Staying Sober**	**Managing symptoms**
Strategy to disclose/not disclose. Strategies for managing in-class dynamics and interactions. Managing anxiety – negative self-talk. Plans to get performance feedback from instructors. Plans for interpreting and dealing with lower grades or scores and feedback. Plans for talking with instructors and peers. How to ask for and receive help	Plan to include sponsor/mentor in education issues. Address potential substance use at school. Address students offer to use. Plan for support on paydays Meet with A&D team to plan supports	Plan for managing stress, anxiety- self-care. How to recognize symptoms Plan for what to do if symptoms arise at school. How to call in sick if necessary Ask for medication adjustment
Disclosure Support	**Managing Classes**	**In-Person Supports**
Discussing pros and cons for disclosing to the university student services and others. Choosing: Whether to tell What to tell Who to tell When to tell How to tell How I will benefit Identify potential problems	Setting alarms Helping with time management Setting up study times Accessing tutor resources as needed Support with connecting with academic advisors. Revisiting accommodation needs and access – (Changing seating, using headphones, recorders, books on tape, testing timeframes, changing formats, using cubicles/individual rooms, note taker, proctoring etc.)	Learning to navigate and use library resources. Finding admissions/ registrations/financial aid/student services offices Help with purchasing books and supplies. Finding restrooms, classrooms, study areas, computer center, learning/career centers, health center, quite safe places. In-person coaching, wellness support Ask for accommodations.
Next steps- Career	**Support Network**	
Linking current course work to concurrent/future job search. Learning from and reframing current setbacks to inform future success in education and work.	Involve family and friends. Facilitate meetings with VR counselor. Talk to treatment team about supports. Involve Peer Supports Connect with campus support groups.	

Appendix F

Barriers to Education Checklist

Using research from students and the literature, there appear to be several common themes that serve as barriers for individuals to return or sustain their educational involvement. This checklist provides a starting point to assess and strategize options for overcoming educational barriers.

____**Transportation** (e.g., don't have a car or don't know how to use public transit)

Strategy: ____

____**Past failures and negative experiences** (e.g., didn't do well in school previously)

Strategy: ____

____**Side effects from medication** (e.g., Medication makes it hard to concentrate)

Strategy: ____

____**Symptoms** (e.g., Depression gets in the way, voices make it hard to listen in class)

Strategy: ____

____**Academic learning skills** (e.g., Lack of computer skills or poor study skills)

Strategy: ____

____**Fears of the unknown** (e.g., Fear of failure)

Strategy: ____

____**Lack of support** (e.g., Not sure what to enroll in or how to get around campus)

Strategy: ____

____**Funding** (e.g., Need money to go to school, need to work while attending school)

Strategy: ____

____**Need accommodations** (e.g., Note taker, longer test time, tutors)

Strategy: ____

____**Physical Disability** (e.g., Difficult to get around campus or to sit through a class)

Strategy: ____

____**Other commitments** (e.g., Work, family)

Strategy: ____

____**Other:** (List any other barriers that may get in the way of reaching your educational goal)

Strategy: ____

Appendix G

Time-Management Self-Assessment 1: Where Shall I Begin?

There are two important early steps necessary to the development of effective time management. The first step is to take a close look at the way you currently manage time. The second step is to set some initial goals for change.

1. Self-assessment: Self-assessment of your study time patterns allows you to explore and evaluate the range of decisions you make each day with regard to time management. Managing time is a very complex process and self-assessment provides some measures of your strengths and weaknesses.
2. Initial Goals: After you have completed the assessment of your study time patterns, you will be asked to *select five items* from the inventory that you feel are weaknesses for you and are high on your priority list for change.

Do these items reflect you as a student?	No	Somewhat			Yes
1. I keep a careful record of the dates of upcoming major events such as tests and assignments.					
2. I often feel really panicky about being behind with my work.	1	2	3	4	5
3. During study sessions, I set small goals and work to achieve them (e.g., read 5 pages of text and do three math problems).					
4. I tend to miss classes.	1	2	3	4	5
5. If I need to solve a problem quickly, I get help from another student, the teacher, or other help resources.					
6. I often miscalculate how much time homework tasks will take.	1	2	3	4	5
7. I have set up a regular plan for my study activities.					
8. I find my current course load too heavy.	1	2	3	4	5
9. I begin assignments early so that I will have time to do a good job.					
10. I have difficulty concentrating while doing homework.	1	2	3	4	5
11. I plan ahead so I can be flexible about putting in extra hours if I have a lot of school work to do.					
12. I always seem to be behind with my work.	1	2	3	4	5
13. I regularly use a day planner to plan my activities.					
14. My marks tend to suffer because of last minute cramming for tests.	1	2	3	4	5
15. Each day I have clear goals for what I wish to accomplish.					
16. I am easily distracted from schoolwork by my friends, tv, etc.	1	2	3	4	5
17. I really enjoy working on the courses I am taking.					
18. I can only work if I feel like working.	1	2	3	4	5
19. I prioritize tasks effectively.					
20. I have a hard time deciding just what schoolwork I should be doing outside of class.	1	2	3	4	5

Initial Goals

Look back to your completed self-assessment. Numbers 1-10 may be behaviors that are currently detracting from your personal satisfaction and potential as a student, and 11-20 may be behaviors to try to develop to get the most out of your education. What would you like to change for the better?

Select 3 behaviors you want to change:

Select 3 habits you want to develop:

What strategies will you use to make these changes?

Appendix H

Time-Management Self-Assessment 2

Check the items that apply to you at least 75% of the time.

1. ____Use a calendar.
2. ____Create a "To Do" list.
3. ____Have a clean and organized work space.
4. ____Prioritize tasks.
5. ____Perform and complete tasks according to their level of priority.
6. ____Say "no" when I need to.
7. ____Focus on one task at a time.
8. ____Schedule down time and social activities.
9. ____Check my e-mail only two-three times per day.
10. ____Break large projects into smaller parts.
11. ____Study in a distraction and interruption-free zone.
12. ____Turn off my cell phone and close e-mail, Instagram, fb, Twitter, etc. when studying.
13. ____Link daily activities to short and long term goals.
14. ____Delete e-mail and voice mails regularly.
15. ____Handle pieces of paper only once (i.e. addressing correspondence, junk mail, bills, etc. **immediately** rather than having it pile up).
16. ____Throw away things that are no longer useful or relevant.
17. ____Store belongings in a consistent and handy place.
18. ____Create and use agendas for meetings and appointments.
19. ____Overcome procrastination.
20. ____Get enough sleep to be alert, efficient, and productive.
21. ____Schedule complex tasks during peak performance times.
22. ____Get things done on a comfortable timeline (i.e. without stress or anxiety)
23. ____Get clarification on papers and projects before getting started.
24. ____Eat a good breakfast and healthy lunch.
25. ____Have a visible representation of your personal mission statement and long term goals.
26. ____Consider delegating when possible and appropriate.
27. ____Minimize web surfing without a purpose.
28. ____Am able to find things when I need them.
29. ____Let people know not to interrupt you when working on critical projects.
30. ____Budget one hour a day for unanticipated tasks and interruptions.

Scoring: ***Add the total number of items checked.***

21-30 **Excellent**- You are an outstanding time manager!
15-20 **Fair-** You are engaged in some good TM techniques but there is some room for improvement.
10-14 **Poor-** You are exhibiting the "just-enough-to-get-by" approach to TM.
9 or fewer **Uh-Oh!-** You need some help to develop better time management skills.

List three actions that you intend to work on in the next two weeks.

1.

2.

3.