Solution-Focused Mentoring with College Students Diagnosed with a Learning Disability

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Abstract

College students with learning disabilities face a number of challenges in postsecondary education and a lower graduation rate when compared with their peers who do not have a learning disability (Fernandez & Santi, 2016; Kreider, 2020). In response to this discrepancy, we designed a peer mentoring program utilizing mentors who are enrolled in a graduate counseling program that emphasizes a solution-focused (SF) approach. Two students, both women and diagnosed with dyslexia, engaged in six meetings with their respective mentors. These meetings involved solution-focused conversations about their strengths, goals, and successes, as well as academic coaching in the form of study skills psychoeducation for areas that they had identified. The LASSI was used both for goal exploration and assessment of executive functioning. Both participants showed increases on the Anxiety, Concentration, and Time Management scales on the LASSI, and they reported benefits to their study strategies, personal insights on their self-efficacy, and improvements to their mental health.

Keywords: solution-focused approach, peer mentoring, learning disability, college students, self-determination

An increasing number of students with disabilities pursue postsecondary education, with 19% of undergraduate students in the United States self-reporting a disability (de Brey et al., 2021). Historically, approximately one third of undergraduate students who report a disability identify themselves as having a learning disability (LD; Raue & Lewis, 2011). The National Institute of Neurological Disorders and Stroke (NINDS) defines learning disabilities as "disorders that affect the ability to understand or use spoken or written language, do mathematical calculations, coordinate movements, or direct attention" (NINDS, 2019). This category of disabilities involves "specific deficits in an individual's ability to perceive or process information efficiently and accurately" and is "characterized by persistent and impairing difficulties with learning foundational academic skills in reading, writing, and/or math" (American Psychiatric Association, 2013, p. 32). Students who are diagnosed with LDs enroll in postsecondary education at about the same rate as their peers without disabilities, but they graduate at significantly lower rates (Fernandez & Santi, 2016). This graduation discrepancy suggests a need for improved supports for postsecondary students with LDs. We utilized a solution-focused conceptual framework (de Shazer et al., 1986) to design and study peer mentoring inclusive of academic coaching as a support for undergraduate students with LDs.

College Students with Learning Disabilities

College students diagnosed with LDs report a variety of challenges on their paths to and through postsecondary education, and these challenges highlight opportunities for institutions to provide support.

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Young adults diagnosed with LDs may experience social and emotional challenges, struggles with independent living, greater risks for substance abuse, and more academic difficulties in college (Cortiella et al., 2014). Young adults with learning and attention issues are also more likely to report outcomes associated with thriving when they experienced a strong sense of self-confidence; at the same time, they are less likely than their peers without LDs to report self-confidence (National Center for Learning Disabilities [NCLD], 2015). Particularly relevant to a solution-focused framework, self-confidence in the aforementioned NCLD study was described as having a positive outlook, being able to take the first problem-solving step, and not giving up in the face of challenges. College students diagnosed with LDs may need targeted support to thrive. However, the transition to postsecondary education typically occurs with declining supports and barriers to seeking support for college students diagnosed with LDs (NCLD, 2021).

Targeting Self-Determination to Support College Students with an LD

Wehmeyer (1992) introduced self-determination to the field of special education, defining it as "the attitudes and abilities required to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference" (p. 305). Self-determination, according to Wehmeyer, involves autonomy, self-actualization, and self-regulation. College students who had access to accommodations in K-12 guaranteed through 504 or Individualized Educational Plans (IEPs) may find themselves without these supports once they reach adulthood and leave their guardian's care. They must learn to advocate for themselves and navigate the often-confusing process of obtaining accommodations when they start college (NCLD, 2021).

Students who seek services early on in their college career perform better than those who do not, but many students wait until they are in an academic crisis to seek help and others delay seeking support for their learning disability as a way of trying to develop an identity that does not include their disability (Lightner, Kipss-Vaughan, Schulte, & Trice, 2012). These planning, advocacy, and navigation skills align with the broader concept of self-determination, suggesting that self-determination skills would be a high yield target for support. However, although it is known that college students with LDs often struggle to connect with supports and that students with any disability benefit from self-determination skills, a review of self-determination research found that interventions targeting such skills are under-utilized (Wehmeyer, 2015).

Supporting Self-Determination for Students with an LD through Mentorship

Researchers have suggested a link between mentorship and self-determination (e.g., Gregg et al., 2016; Neufeld et al., 2021). Mentoring relationships have been characterized as developmental relationships that provide career support, skill development, and role modeling, as well as psychosocial support and sponsorship or networking (Dominguez & Kochan, 2020). Many postsecondary institutions employ mentoring programs to perform a wide variety of functions, including providing academic and psychosocial and emotional support, role modeling, and helping with goal setting and career paths (Gershenfield, 2014). In a study of the influence of specially-trained mentors on the outcomes of students with LDs, Kreider et al. (2020) noted the positive impacts of mentorship on mentee perseverance, academic achievement, and executive functioning skills. Kreider et al. further report that mentors trained in the conditions of LDs may be better able to support students through challenges in both the personal and college realms.

Academic Coaching

Academic coaching was one facet of the mentorship provided in the current study. Academic coaching is a type of academic support often provided through advisors and other liaisons to campus supports (Capstick et al., 2019) and has been described as focusing on "strengths, goals, study skills, engagement, academic planning, and performance" and the development of "an individualized action plan focused on, but not limited to, time management, goal setting, and study skills" (The University of Memphis, 2019). In a study of academic advising, Soria et al. (2017) found benefits for first year university students when advisors provided academic coaching that identified, integrated, and leveraged strengths and developed plans for meeting career goals. Academic coaching may be offered through a peer mentoring relationship like the one implemented in our study. Capstick et al. (2019) found that students who received academic coaching had increases in GPA and were more likely to be retained by the university. In providing academic coaching aligned with a solution focused approach, the mentors in our study adhered to the primary tenets of effective coaching promoted by the National Academic Advising Association (NACADA, 2021): the student is the "expert" in his or her own life and sets the agenda for meetings, while the [mentor] actively listens and provides guidance.

Supporting Students with an LD through Solution Focused Approaches

The previously mentioned aspects of effective coaching (i.e., acknowledging the student as the expert, allowing the student to guide the conversation) are also key components of the solution-focused (SF) approach. Solution-focused brief therapy (SFBT; de Shazer et al., 1986) is a strengths-based approach that helps clients notice and augment use of their own unique abilities and resources to impact their current situation. Whereas many approaches to therapy emerge from a theory of change, SFBT is the result of mental health practitioners observing their own work and taking note of what was most effective (Shennan, 2019). Students diagnosed with LDs have reported that solution-oriented brief counseling helped them make progress towards their goals, improved how they perceive their situations, and decreased the intensity of adverse feelings associated with their problems (Thompson & Littrell, 1998). A later intervention study of elementary students with reading disabilities found that those who received an SF intervention performed better on a number of measures compared to a group that received more neutral homework support (Daki & Savage, 2010).

Although originally developed as a form of therapy, the SF approach has expanded to other settings, including education, and may be used by anyone who engages in conversations to assist others in setting goals and working through problems (Shennan, 2019). Visser (2010) argued the SF approach provides strategies for supporting three basic human needs related to self-determination: autonomy, competence, and relatedness. Working with students using SF approaches allows for the student to be the expert, guide the meeting, and recognize and utilize his or her own strengths and resources, all of which respect the student's autonomy. This focus on strengths has been shown to enhance college students' engagement and self-efficacy (Seko & Lau, 2021). When using an SF approach to mentorship, academic coaching, or any other type of helping, the helper asks the student to describe their *preferred future* (i.e, their best hope for what they want to result from the relationship or a given encounter). Using details from this description, the helper will ask scaling questions to help the student self-assess their progress toward achieving this preferred future, as well as to determine small, next steps that may move them closer to their goals. By asking the student to describe instances of success (i.e., movement toward their preferred future), the helper recognizes and amplifies the student's competence to achieve goals. Finally, SF helpers attend both to their relationship with the student and other important relationships in the student's life. For instance, the helper may ask what someone might notice (e.g., what would your professor notice about your engagement in class?), in order to generate more possible solutions (Shennan, 2019). The graduate counseling students who served as mentors in these relationships were trained in the SF approach, both as a set of tools for this particular mentoring relationship and as the primary therapeutic approach of their graduate training in counseling.

Although the literature related to disability in postsecondary education continues to grow, a recent taxonomy of this literature highlighted the relatively low number of studies focused on student-support that investigated strategies such as learning and study skills and self-determination interventions–the very types of interventions that may be most supportive to students diagnosed with learning disabilities (Dukes et al., 2017). Solution-focused interventions foster pragmatic, strengths-based solutions and promote life authorship (i.e., self-determination; Bliss & Edmonds, 2008). As such, SF mentoring holds potential as a particularly adaptive support for college students with learning disabilities.

Method

The aim of the study described here was to understand how university students diagnosed with a learning disability experience an SF mentoring program. The researchers used a mixed-method design to answer the following research questions:

1. What are the experiences of students diagnosed with a learning disability when they engage in a supervised peer mentoring program?
2. Does the combination of SF mentoring and academic coaching influence executive functioning (organizational skills)?

Using two methods of analyses, pre- and post-test scores and qualitative content analysis, allowed for triangulation (Creswell, 2005) and provided rich information from participants to offset the weakness of a small sample. Following a sequential nested sampling design, the researchers collected quantitative data prior to qualitative data from the same participants. According to Onwuegbuzie and Leech (2007), a nested design facilitates "credible comparisons of two or more members of the same subgroup, wherein one or more members of the subgroup represent a sub-sample of the full sample" (p. 246). In this research study, the two members represented students with LDs at the same university.

Research Team

The research team consisted of two faculty, one staff member, and three graduate students at the same university. The two faculty are white females in a college of education; one faculty member teaches counseling, whereas the other faculty member teaches educational psychology and research methods. The staff member is also a white female and works with students with disabilities on campus; she assisted in the solicitation of participants. The three graduate students, two females and one male, are LatinX and are pursuing master's degrees in clinical mental health counseling. The two female graduate students provided the mentorship intervention and attended bi-weekly supervision with the counseling faculty member, who also conducted the informed consent meetings and follow-up interviews.

Setting and Participants

The setting for the study was a private, mid-sized university in the southern U.S., but due to the COVID-19 pandemic, all interactions with participants took place over video conferencing. After receiving ethical clearance from the university's Institutional Review Board, the research team used criterion sampling (i.e., participants met criteria of having a learning disability and being enrolled at the university; Patton, 2014). Information about the study was provided to all students registered with the university's Office of Access and Accommodations, and interested students contacted the lead researcher and participated in an informed consent meeting. Following Patton's (2002) Ethical Issues Checklist, the lead researcher provided participants with materials that explained the purpose of the study, potential risks and benefits, and confidentiality expectations.

Caroline and Tina (pseudonyms) are both white female students at the same university who participated in the study. Both women are of traditional college age, and both had been diagnosed with ADHD and dyslexia and/or dysgraphia. Caroline has dysgraphia; Tina has both dyslexia and dysgraphia. Caroline was taking general education courses, and her primary goal for participating in the study was to improve her time management. Tina was a first-year student majoring in engineering, and she also expressed a goal of improving her time management.

Procedure

During the Spring 2021 semester, two graduate students from the university's counseling program provided mentorship to two undergraduate students who had been diagnosed with a learning disability and referred by the university's office for disability accommodations. The mentors utilized strategies from the SF approach to focus on their mentees' strengths and facilitate goal-setting discussions based on their participant/mentees' preferred future. Each participant provided informed consent to the lead researcher and took a *Learning and Study Strategies Inventory* (LASSI; "LASSI Learning & Study Strategies Inventory, 3rd Edition," n.d.) pre-test prior to the first mentorship meeting. Due to the COVID-19 pandemic, all interactions (e.g., training, mentor meetings) for this study took place using a video-conferencing platform.

Training

As part of their counselor training, both mentors had previously completed an *Introduction to Helping Relationships* course, in which they learned basic attending/listening and SF interviewing skills. In addition, they participated in a three-hour workshop that provided them with an overview of the college student population with learning disabilities, boundaries of the mentor relationship (i.e., how it differs from personal relationships and therapeutic counseling relationships), suicide risk and intervention, and scoring and interpretation of the LASSI instrument. Throughout the intervention period, they participated in biweekly supervision with the lead researcher, who is a member of the university's counseling faculty.

Intervention

The mentors met with participants six times over the course of the semester via Zoom video conferencing. Each meeting lasted between 30-50 minutes. Tina began the program early in the spring semester (February) and met with her mentor every two weeks, whereas Caroline began the program after a midterm break (late March) and met with mentor weekly. The initial meeting consisted of an interpretation of LASSI pre-test results and exploration of the participants' hoped-for outcomes from the mentorship experience. Meetings two through five involved SF conversations centered around participant-generated goals, as well as brief psychoeducation related to study skills areas requested by the participant. For example, Caroline and her mentor made a study schedule together and set priorities for specific tasks (i.e., ABC method of time management). Tina similarly utilized the ABC method as well as an exam action planner for prioritizing her study tasks. Tina and her mentor also used virtual sandtray figures to visualize improvement (for more information related to use of sandtray, see Taylor, 2009) . In each mentorship meeting, both mentors used an SF scaling technique to help the participants chart progress and set new goals. Prior to the final

meeting, the participants completed the LASSI a second time. The final meeting included discussion of the LASSI post-test results and discussion of the overall experience.

Data Collection and Analysis

The final mentorship meeting was audio-recorded and transcribed. Both participants met with the lead researcher for a follow-up interview, which was audio-recorded and transcribed as well. The research team analyzed LASSI test results and transcriptions of the final mentorship meeting and follow-up interview to answer the research questions.

LASSI

The research team examined differences in pre- and post-test scores on the LASSI instrument. Petersen et al. (2006) found correlations between the Executive Functioning Rating Scale (EFRS; Lott & Petersen, 1998) and four LASSI subscales: Anxiety, Concentration, Time Management, and Test Strategies. Although mentors discussed differences between pre- and post-test scores on all of the scales with their respective participants in the final mentorship meeting, the team calculated mean comparisons between test administrations for these four scales to determine whether the intervention influenced executive functioning.

Final Meetings and Follow-Up Interviews

To explore the participants' experiences of the mentoring program, the mentors followed a prescribed agenda (see Appendix A) for the final mentorship meetings, and the lead researcher conducted follow-up interviews using a semi-structured protocol (see Appendix B). A professional transcribing service was used to provide verbatim transcripts for both meetings and interviews, and participants were offered the opportunity to review transcripts prior to analysis. However, no corrections or additions were needed.

Data Analysis

Using open and axial coding (Charmaz, 2012), the lead researcher and two mentors identified themes from both final meeting discussion and interview. Specifically, they reviewed each transcript line-by-line and used colored font and highlighting to label participant responses with descriptive codes. After conducting independent analyses, they engaged in discussion to reach consensus before organizing the codes into themes. Further, they noted the frequencies of codes to determine the most important concepts for participants (i.e., classical content analysis; Leech & Onwuegbuzie, 2007).

Additionally, the remaining two members of the research team reviewed the four transcripts using *in vivo* coding ("In Vivo Coding," 2008) by taking a word or short phrase from sections of data to ensure interpretation captured the meaning of the participants' responses. The research team then compared findings from the two different coding methods to confirm the assignment of codes and establish trustworthiness through triangulation. Although there were some differences between the two methods of coding, the research team discussed and reached consensus in their interpretation of the data.

Trustworthiness

The data obtained were specific to the two participants of the study. As such, the findings are not intended to be generalized to other students in other settings. Rather, the research team focused on minimizing threats to internal validity or the trustworthiness of interpretations related to the two participants. To increase descriptive and interpretive validity, the accuracy of interview transcriptions was verified through a member checking process and triangulation with LASSI post-test results, and direct quotations from participants' responses were provided to allow readers to "experience the participants' actual language" (Johnson, 1997, p. 285). In addition, the research team engaged in peer debriefing to bracket assumptions in an effort to reduce any biases that might impact the findings (Hays & Wood, 2011); team members who had direct contact with participants through the mentorship intervention or interviews discussed and compared interpretations of data with team members who did not have direct contact.

Findings

A mixed method design was implemented to answer the research questions. The research team conducted qualitative analyses of both final mentorship session and follow-up interview transcripts to explore the experiences of two participants' engagement in a supervised, SF peer mentoring program that included academic coaching. To determine whether the SF mentorship impacted executive function for these participants, descriptive statistics were computed for LASSI pre- and post-test scores.

Experiences of Participants

Classical content analyses of the transcriptions yielded 14 codes which were organized into three overarching themes to investigate the experiences of peer mentorship for two students diagnosed with LDs. The first theme, *Study Strategies,* explains the

changes made by the participants, whereas the other two themes (*Personal Insight* and *Mental Health Outcomes*) describe the influence of the mentorship on the students' lives. Table 1 presents the themes, code frequency, and sample quotations.

Study Strategies

Six codes used to label Study Strategies included: *more productive/disciplined, planning/more organized, prioritizing, specific strategy, time management,* and *proactive/utilized resources*. These codes were assigned when the students' behaviors helped them to improve their academics. The codes of *planning/more organized* and *time management* were the most frequently used codes, with each code used in 34 instances. Both participants shared a goal of managing time better and indicated that organizing and planning out their study tasks, along with using specific strategies (29 instances) generated with their respective mentors, allowed them to reach this goal. Some of the specific strategies included using an ABC Method for prioritizing study tasks, block scheduling of study time, use of timer for 30-minute study intervals, and regularly attending the professor's office hours. Referencing a specific time management strategy of limiting breaks, Tina shared:

> I just have to limit my break so I can like meet my goals. I feel like I've gotten better at, okay, I just got out of a class, I'm gonna take like a 15 minute like study, study break, not do anything. Do something like watch YouTube videos. Then after that 15 minutes are up, I'm like okay, I need to get back to work.

Both students further indicated the strategies helped them to be more productive (16 references) and become better at prioritizing (10 references). Caroline recalled that she was "getting [her] work done early" and explained, "We also just wrote what to prioritize, how even though like some things might be due, other things were more important later down the road." Finally, Tina and Caroline noted that they became more proactive in utilizing resources (13 references) available to them. They specifically mentioned going to professor or department office hours, obtaining assistance from the university computer initiative, using the library to study, and joining study groups for additional help and support.

Personal Insight

The theme of Personal Insight included four codes: *self-efficacy/self-confidence, self-talk/self-reflection, learning from previous experience,* and *new perspective/more realistic expectations.* The codes in this grouping represented realizations made by the participants that were related to their personal experiences and a deeper understanding of how the changes they were making benefitted cognitive functioning and academic performance. The most frequently-used code was *self-talk/self-reflection,* which was mentioned in 44 instances. This code was used to indicate when a participant reached a new understanding regarding study strategies and academic performance and often reflected an aspect of the participants' inner dialogue. An example from Caroline is, "When there's something disruptive to the schedule, like finals week, that can mess with it. So right now I'm trying not to focus on that too much and just trying to focus on what I can control…" In this case, she realized that her usual strategies did not apply in every circumstance, and she would tell herself to let go of aspects that were beyond her control.

Both participants had instances (28 in total) that were categorized with *self-efficacy/self-confidence,* because they either mentioned they believed they had the capacity to accomplish something or that they felt more trust in their abilities than they had previously. Tina shared, "Now I feel like I'm actually getting better," and Caroline noted, "I'm feeling more like confident in what I do after studying for it."

The code *new perspective/more realistic expectations* was used in 16 instances and was noted by both participants when they were able to see a situation differently. In many cases, situations or goals were now viewed as more practical and achievable. An example from Tina was:

> Because that's like for a while there I was like, you know, like everything was super important. It had to be done right then. Now I've kind of realized like I don't have to do this right this moment. I can wait on this.

Caroline had a similar response:

> I think before I was always just struggling to have time for everything in the day. Like I had a lot going on and so I felt like I was running from place to place. But now I feel like I have the opportunity to breathe and, I don't know. I feel like now I know how to even start making a schedule and it doesn't seem so scary anymore because it's actually fairly easy.

Additionally, both Tina and Caroline had responses that were coded as *learning from previous experience*. This code was noted for 12 instances and in-

Table 1

Themes, Coding Frequency, and Example Quotations

Theme and Frequency of Codes	Example Quotation
Personal Insight	
Self-efficacy/self-confidence (28 Instances)	"I think it shows I'm more confident in my own planning skills, and the fact I'm able to reach out and help other people. Because before I probably would not do that, since that wasn't really my strong suit."
Self-talk/self-reflection (44 Instances)	"I realize like grades are important but they're not the only thing that matters, or like I'm not getting an A, but I just look at where everyone else in the class is, I'm actually doing okay."
Learning from previous experience (12 Instances)	"I learned what his expectations were on the exams, and like what I need differently to do well on the exams and write it down and stuff."
New perspective/more realistic expectations (16 Instances)	"I feel like when it's just you it's really easy to be like hard on yourself... I can still kind of take a break. Not be perfect and all these things. It's just nice to like remind yourself that oh, no one's perfect. So like don't hold yourself to that standard."
Mental Health Outcomes	
Reduced stress or anxiety (13 Instances)	"I could just kind of decompress and it wasn't like going, going, going. And also, just anxiety within my performance. I felt more prepared. So therefore, I was less anxious."
Improvement beyond academics (15 Instances)	"It just improved all aspects of my life, not just my academics. Even my boyfriend could tell that I was more organized... So, he was just impressed that all my stuff was getting done. And I think my parents can definitely tell a difference."
Motivation (10 Instances)	"Getting all that energy out has made it so I can focus better, which has made me more motivated."
Improved concentration (3 Instances)	"I was able to concentrate more fully because it wasn't like I was cramming everything..."
Study Strategies	
More productive/more disciplined (16 Instances)	"I started being more productive, or I can be more productive during that like two-hour window that I have in the morning, so that was kind of nice. I feel like I'm able to start my work a little sooner now because I'm not wasting so much time."
Planning/more organized (34 Instances)	"Preparation is everything. And that kind of went along with daily life stuff because I knew what I had going forward, whether it'll be meeting someone for lunch, I just would work that into my schedule..."
Prioritizing (10 Instances)	"I feel like I'm getting better prioritizing what I do. Because that's like for a while there I was like, you know, like everything was super important. It had to be done right then. Now I've kind of realized like I don't have to do this right this moment. I can wait on this. This is like, this isn't waited as much as the other assignments. So like I shouldn't be spending this much time on it."
Specific strategies (29 Instances)	"I just do like we talked about setting alarms reminding me . . . I'm reminded, oh yeah, 30 minutes is that fast. Then in the evening I give myself like a 10 minute break afterwards."

(Table 1, continued)

Time management (34 Instances)	"My time management is definitely better, so I don't feel like I'm stressed all the time about having to get stuff done... I can have hours in my day that I can devote to this, to get what I need to get the good grade that I want."
Proactive/utilized resources (13 Instances)	"I went to one of the TA (Teaching Assistants) office hours this week. Normally I haven't, I've been busy at those times. But this time I was like, now I'm making an appointment. I was kind of confused. I went and I feel like they were able to answer my questions, which was nice."

cluded examples of past experiences that taught them how to get through a current obstacle or challenge, such as strategies for taking online exams.

Mental Health Outcomes

There were four codes determined for the theme of Mental Health Outcomes that included: *reduced stress or anxiety, improvement beyond academics, motivation,* and *improved concentration*. These four codes were grouped because of their relatedness to mental wellbeing and how that linked to their academic and life experiences. *Improvement beyond academics* had 15 coded instances with both participants noting an overall improvement in their lives. Tina shared, "I cleaned my room, and put a bunch of stuff away. I got rid of trash I didn't need. So I'm more organized now, like I see parts of my room that I couldn't see before." Caroline had a similar response:

> Not just for school, but for like being able to do things socially, like I've been able to go with my friends more because I've been getting my work done early…I've had time to like clean my room and get my laundry done, like daily life tasks.

Another code captured 13 responses indicating *reduced stress or anxiety* from both participants. Tina noted, "I don't feel like I'm stressed all the time about having to get stuff done," and Caroline shared, "I feel like I had just so much stress about trying too, like it makes me less anxious about assignments because I'm doing better."

The participants also gave responses that were coded as *motivation* (10 instances) and *improved concentration* (3 instances) that reflected experiences of their willingness or reason to want to achieve particular tasks and focusing their attention on certain tasks. Examples of *motivation* from Tina included, "on Saturday I was like, go ahead and finish it. I finished it," and "I think a lot of motivation comes from the fact that like I really do want to, now that I'm close to the end. I really want to push my way through." Caroline explained *improved concentration* as follow:

> Concentration wise, I think it was because we chunked it up into a certain two hours every day was dedicated for a certain subject or a certain hour… I was chunking it before the exam, way before it and that helped me concentrate because I didn't feel overwhelmed.

In sum, qualitative analyses indicated that participants used strategies they had co-constructed with their mentors. Both participants experienced personal insights (e.g., more realistic expectations, improved self-efficacy) and positive mental health outcomes (e.g., reduced stress, increased concentration and motivation).

Influence on Executive Functioning

The research team compared pre- and post-test results of the LASSI, which has been associated with executive function (Petersen et al., 2006). In the final mentorship meeting, research team members reviewed and discussed differences in LASSI scores with each of the participants. Despite a focus on time management in mentorship meetings, Tina's LASSI scores increased on every scale. The greatest increases were on the scales of Test Strategies and Using Academic Resources, where she moved from the 5th to 55th percentile and 30th to 85th percentile respectively. Conversely, Caroline's scores increased on only five of the scales (i.e., Anxiety, Concentration, Motivation, Time Management and Using Academic Resources). She remained in the 90th percentile on the Attitude scale, and her scores decreased slightly on the Information Processing, Selecting Main Ideas, Self-Testing, and Test Strategies scales. In discussion of the decreases, Caroline attributed some variance

in scores to how she felt taking the LASSI soon after coming out of an exam. However, she noted that she used certain test preparation and testing strategies less often because they did not work for her. She viewed the decrease in these scores positively, because she was using what works best for her.

To determine whether or not the combination of SF mentoring and academic coaching influence executive functioning, the research team specifically examined four scales, which Petersen et al. (2006) found to be highly correlated with scores on the *EFRS* (Lott & Petersen, 1998). Table 2 presents the pre-test and post-test scores for these four scales. Both participants showed increases on the Anxiety, Concentration, and Time Management scales, but Caroline decreased from the 99th percentile to the 90th percentile on Test Strategies due to becoming more selective in which techniques she uses.

Discussion

The study discussed here was a mixed methods investigation of SF mentorship that included academic coaching as a support for college students diagnosed with LDs. Quantitative analysis of LASSI scores related to executive functioning increased in several categories for the participant who received mentorship early in the semester and in one category for the participant who began after the midterm break. Qualitative analysis highlighted participants' experiences of the mentoring sessions as beneficial in the areas of study strategies, personal insights, and mental health outcomes. Over 20 years ago, Thompson and Littrell (1998) noted that students identified as having a learning disability benefit from goal setting and planning, and that they are motivated by compliments, encouragement, and organization. Based on our findings, this assertion remains true. Our findings also support previous research suggesting that individuals who have an LD are responsive to the SF approach and see improvements beyond the initial focus of the LD (Smith, 2005) and that using an SF approach facilitates individuals' insights about their experiences and themselves (Daki & Savage, 2010). Specific characteristics of SF peer mentorship inclusive of academic coaching align with what is more generally known about how to support college students diagnosed with LDs. These connections are discussed below in an effort to explain why an SF peer mentoring approach functioned in the way it did for the participants in this study.

The Solution Focused Approach and Self-Determination

Solution-focused practitioners trust individual desires and abilities to change and improve life outcomes. Similarly, students with LDs often deeply want to achieve better outcomes in their lives, and as discussed earlier, self-determination skills can help students with disabilities identify and achieve these desired outcomes (Wehmeyer, 2015). Students' agency and active participation in achieving their outcomes are largely emphasized in the SF approach. This was seen in the way participants implemented and followed through with strategies discussed in mentoring sessions. With their mentors, students described their best hopes and preferred futures in order to articulate well-formed goals. Once participants clearly defined these goals, they discussed with their mentors various strategies that had been helpful in the past, as well as possibilities for future strategies. Then, participants held themselves accountable as they implemented and debriefed various strategies to achieve their goals. Importantly, it was the students'

Table 2

Pre- and Post-Test scores on Scales Correlated with Executive Function

Student	Anxiety	Concentration	Time Management	Test Strategies
Tina				
Pre-test	15	30	55	55
Post-test	65	75	90	90
Caroline				
Pre-test	25	30	70	99
Post-test	50	85	85	90

implementation of strategies that initiated change and preferred outcomes. College students with learning disabilities are often transitioning away from environments that include more proximal and hands-on support and into contexts where they will increasingly be required to self-identify, find supports, and develop practices to achieve their goals (NCLD, 2021). In other words, college students with disabilities are particularly in need of self-determination skills like self-advocacy, goal setting, and developing strategies to achieve goals. Mentors trained in the SF approach may be able to provide a particularly concrete dialogic experience for students with learning disabilities that helps to develop and support these particular aspects of self-determination.

Strengths-Based Approach

Using a strengths-based approach that is founded on the idea that individuals have greater achievements when they discover and use their own talents rather than focusing on their flaws, helps individuals shift the focus of the problem to search for possibilities of hope (Soria et al, 2017). Because the SF approach is inherently strengths-based and is used to build from existing resources to solve problems and achieve goals, it is a good fit for college students who are often at a point in their developmental trajectory where they are both capable of and interested in reflective activities about the self (Seko & Lau, 2021). Using this approach, the mentors asked questions prompting the participants to reflect on what had been better since the last meeting, and the participants' responses determined how the mentors would move forward with a conversation about what was important to amplify, what was going well, and strengths and solutions that they noticed. By finding things that were going well and highlighting instances that were glimmers of hope in their lives, the participants learned to trust in their own abilities and reduce their stress and anxiety. An example of this is when Tina mentioned in her interview that she has "a better perspective on college…grades are important but they're not the only thing that matters…I'm actually doing okay." Further evidence was the remarkable improvement in the anxiety category on the LASSI where pre to post scores for Tina went from 15 to 65 and Caroline went from 25 to 50.

In addition to a focus on the individual's internal strengths, the SF approach often involves discussing who or what can be used as a resource. This aspect proved particularly helpful for the students in this study. Despite earlier research findings that students with disabilities delay seeking support (Lightner et al., 2012), the participants both indicated that they were able to utilize resources on campus that were offered, including attending course office hours, using computer labs with specialized assistance, and attending tutoring sessions offered by the college. Tina mentioned in her interview that she especially liked the additional resources that she began using and she "started going to more office hours to get help or use that time to sit and work" in case she had a question or that she can call on friends to do homework together and "help each other figure it out."

Pragmatism

Solution-focused approaches are short term and focus on what can be accomplished and influenced; de Shazer and his colleagues (1986) encouraged clients to do what works. College students diagnosed with LDs often find their time is stretched and consumed by coursework. Therefore, it is important that supports for these students be time-efficient. Mentors must quickly help students find strategies that work for them, rather than wasting time and energy on techniques that are not useful. Despite a decrease in her LASSI test preparation and test strategies scores, Caroline was pleased to notice that she was using the strategies that worked for her.

Another tenet of the SF approach is that only the minimum intervention is required and should not be one session more or less than what is needed with all populations, including individuals that have been identified as having an LD (Smith, 2005). For each meeting, the mentors included in the conversation with participants questions to explore what would be most useful with that designated time. The participants met with their respective mentors a total of six times. Whereas the first and final meeting involved discussion of LASSI pre- and post-tests, four meetings included SF conversations centered on the goals created by the participant, brief psychoeducation related to study skills, and other areas as discussed by the mentee. The participants in this study found it most useful in their meetings to establish goals, such as time management, and focus on academic priorities like planning times to study for exams and completing their homework. Caroline reflected in her interview that she was able to improve concentration by "chunking up her day" and dedicating time for a certain subject and that it was useful because she did not feel overwhelmed after using this strategy. The LASSI scores in concentration also reflected this expressed change with Caroline improving from 30 to 85 and Tina similarly improved her score of 30 to 75 (see Table 2).

Limitations

Given the small sample ($N = 2$), findings from this study must be interpreted with caution. Additionally, there was no control group or other methods used to determine if extraneous factors influenced the progress of each participant. Participants were recruited from the university's disability services office, so we may assume some level of proactiveness in finding and utilizing supports as they had to self-identify to receive services from this office. Also, both students were white females; their membership in the majority culture may influence their level of proactiveness. Future research should seek out a larger and more diverse sample. In addition, this study did not explore existing accommodations received by the participants or what supports they may have received in the past, so it is unclear which gains may be attributed directly to the mentorship received. In addition to increasing the number of participants, future researchers should gather and consider such data. Further, although use of the LASSI was helpful in guiding mentoring conversations, future researchers may also want to utilize instruments with more empirical research connected to executive function, such as *EFRS* (Lott & Petersen, 1998). Finally, this study took place during a global pandemic, which required the mentoring to be conducted via webcam. Future researchers may discover different outcomes if mentoring takes place in an in-person setting.

Implications for Those Supporting Students with Disabilities

Previous researchers have referenced a growing need to provide a better functional system of supports and to better communicate the availability of resources to students, especially those who struggle with LDs (Dukes et al., 2017; Wehmeyer, 2015). A peer mentoring system such as the one in our study would aid in extending campus supports to students with LDs and could potentially improve the retention and completion rates for this population of students. Another benefit from this peer mentorship structure is the experience it could provide for students looking towards futures in helping professions. Mentor positions such as the one in this study could allow students to gain relevant experience with students, including those with LDs. Student mentors could also benefit from practicing online or in-person individual interactions and add these interpersonal skills to their repertoire.

The findings from our research lend support to the use of SF and other strength-based approaches in college mentorship programs. Even short-term training in the SF approach can be effective, especially when helpers (mentors) additionally receive supervision (Cunanan & McCollum, 2006; Stark et al., 2018). Adopting a non-expert stance relieves the mentor of any pressure to correctly advise the mentee. Rather, SF strategies are used to assist mentees in coming up with their own solutions. The ease of use with goal formulation in this approach can aid mentors and mentees with identifying what they would like to work on together in the mentoring relationship. Additionally, the use of scaling questions can offer quantitative data to those looking to report on the progress of mentee progress and validating the need for mentor programs.

Conclusion

The purpose of this study was to identify ways college students with LDs might benefit from participation in a SF peer mentoring program. Our participants included two female undergraduate college students, both diagnosed with ADHD, and other LDs such as dyslexia and dysgraphia. Both participants reported an increase in their personal study strategies, new personal insights, and benefits to their mental health. Further, improved LASSI scores indicate a positive impact on executive functioning. Despite its small sample size, the findings from this study provide some evidence that an SF approach to peer mentorship, particularly when combined with academic coaching, may be a useful support for college students who have a learning disability.

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Appendix A

Agenda for Final Mentor Meeting

Note: This meeting should be scheduled for longer period of time to allow for administration of post-tests.

1. Greeting. Make sure it's okay to audio-record meeting.

2. Review results of post-test (LASSI)

3. What's better since we last met? (Amplify response—how were you able to do that?)

4. What would make this final meeting a good use of your time? (be sure to attend to this response)

5. We've been talking about your goal of X. On a scale of 1-10, where would you rate your goal attainment? Tell me more about that.

6. How has this experience been helpful to you?

7. What do you know now that you didn't know before we started meeting? What are you better able to do than you could before we started meeting?

8. If the goals we've discussed together are still important to you, what do you plan to do moving forward, now that we won't be meeting anymore?

9. What might make this mentorship program even more helpful?

10. Provide resources – https://studentaffairs.tcu.edu/virtual-support-services/
    Also, ask participant about what other resources they may use to help them.

Appendix B

Semi-Structured Interview Protocol

Begin with review of informed consent. Make sure it is still okay to audio-record the interview.

1. I really appreciate you taking the time to talk with me. The interview will take about 30 - 45 minutes. Before we begin, do you have any questions for me?

2. When you first agreed to participate in the study, what did you hope to gain from mentoring?

3. Were your hopes realized?

4. Tell me about your experience with your mentor. (What was meeting with your mentor like for you?)

5. What types of skills did you learn from your mentor? What was most beneficial?

Subquestions could refer to participants' specific pre- and post-test LASSI scores.
Examples: Tell me more about this change. To what do you attribute this change?

6. How are you different than you were before the mentorship program (e.g., what can you do that you didn't before?)

7. What challenges are you still experiencing?

8. What could be improved in the mentorship you experienced?

9. What else is important for me to know about your experience?