

A Qualitative Study: Examining Students' Involvement in A Career and Technical Student Organization and Practicing and Promoting Mental Wellness

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This study aims to explore career technical education (CTE) students' involvement in practicing and promoting mental wellness in schools and communities. Specifically, this study focused on students enrolled in a career and technical student organization (CTSO) leading youth-defined activities raising awareness of risk factors and protective factors associated with psychological distress and wellness. This study is grounded in resilience theory expounding on the resilience of HOSA students and their motivation to thrive and overcome adversities as they advance their career and college readiness and their civic engagement. Purposive sampling was used to select 94 students from seven high schools with a CTSO (i.e., HOSA) and participating in a prevention and early intervention project. Semi-structured interviews were done with these 94 students enrolled in a CTSO. Our findings revealed three key implications: (1) a CTSO can serve as a protective factor that mitigates the many risk factors to which young people are exposed; (2) a CTSO is able to promote and focus on student's early signs of mental health issues; and (3) exposing students to leadership and training opportunities may facilitate a career path into mental health fields.

Keywords: career technical education, HOSA, mental wellness, early identification and prevention

Introduction

Career Technical Student Organizations (CTSOs) have contributed greatly to the education and workforce development of adolescents and young adults (Ullrich et al.,



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2007). It has been well-documented that students who participate in a CTSO strengthen their career and college readiness, leadership development, and service to communities (Alfeld et al., 2006; Aragon et al., 2013; Brand et al., 2013). Students enrolled in a CTSO demonstrate growth in knowledge, experience, and self-confidence related to career readiness (Author et al., 2016). Simply put, students who participate in a CTSO demonstrate higher levels of: (1) school and community engagement, (2) motivation or self-efficacy when tackling challenging tasks, and (3) employability abilities when compared to non-CTSO students (Loera et al., 2013, 2016). It is important to mention that the earlier students begin participating in a CTSO during their secondary school years (e.g., starting in grades 7-9), and the longer they remain in a CTSO, the greater the impact on their academic success and career identity (Advance CTE, 2020).

Problem Statement. Participation in a CTSO can influence students in more than just leadership development and career and college readiness. With the current pressure on schools to respond to the social and emotional needs of students, especially those who have historically felt excluded or disengaged from school activities, a CTSO can represent a place of belonging and promoting a culture of inclusivity within schools. From a mental wellness perspective, a CTSO has the attributes or protective elements that mitigate risk factors associated with psychological distress. To-date, there are no empirical studies that have explored the effects of a CTSO on youth's mental wellness and its connection to early detection and early intervention of mental health disorders. Cal-HOSA:Future Health Professionals may be the first CTSO to investigate this connection and provide future research recommendations on how a CTSO can change a young person's life trajectory from potential illness to wellness, and toward a career pathway in mental health. In 2018, Cal-HOSA's Prevention and Early Intervention project was launched at 10 school sites with a HOSA Chapter to address the risk factors associated with mental health issues and suicide ideation among youth and young adults. For that reason, HOSA: Future Health Professionals was chosen as the CTSO of focus for this study.

HOSA is a student led CTSO dedicated to preparing the future healthcare professionals through education, partnerships, and community engagement. HOSA's leadership conferences are where students demonstrate their leadership abilities through competitive events that then translate those experiences into real-life community service to vulnerable populations. For example, HOSA's 2016 Mental Health National Service Project leading advocacy efforts to increase health literacy and mental health awareness. A nation-wide "Pop the Stigma" educational campaign was initiated across more than 4,500 HOSA chapters and led to school- and community-defined solutions to address mental health disparities.

Purpose and Research Questions. This study aims to explore Cal-HOSA students' involvement in practicing and promoting mental wellness in schools and communities. Specifically, this study focused on Cal-HOSA's students' participation in youth-led activities focusing on prevention and early identification of risk factors and protective factors associated with mental health and wellness. We interviewed students

who participated in Cal-HOSA during the 2019-20 school year to answer the following research questions: (1) what is it about Cal-HOSA that creates a sense of urgency to act and serve others? (2) what early identification and prevention activities are Cal-HOSA students participating in? and (3) how did experiences in Cal-HOSA strengthened students' efficacy, resilience, school engagement, and community engagement?

Literature Review

Career Technical Student Organization (CTSO). The National Coordinating Council estimates that more than two million students participate in one of the eight nationally recognized Career Technical Student Organizations (NCC-CTSO, 2019). The efficacy of a CTSO is one that is recognized by the NCC-CTSO as adhering to a set of criteria. These criteria are organized around three overarching areas: (1) organizations with a mission that include (a) career technical education (CTE) programs that are unique to an industry and (b) a focus on CTE students and teachers in one of the 16 career clusters; (2) organizations govern with a commitment to CTE including: (a) not-for-profit organizations, (b) geographically distributed at a state level, and (c) board of directors that is representative of CTE educators/ administrators; and (3) engagement by CTE students, educators, and state department of education that include: (a) 20,000 or more student members organized into chapters at the secondary and postsecondary levels of education, (b) 1,000 or more student middle and high school, and postsecondary chapters, (c) 15 or more recognized/approved state associations advancing CTE instruction/curriculum and advisor/ educator with CTE credential, (d) an active national executive director or its equivalent, and (e) at least 10 career and/or leadership development activities and competitive events. Additionally, the NCC-CTSO (2019) recognizes the following eight CTSOs: (1) Business Professionals of America (BPA) – Prepares student leaders for careers in business management, finance, accounting, information technology, and office administration; (2) DECA – Prepares emerging young leaders and entrepreneurs for careers in marketing, finance, hospitality, and management; (3) Future Business Leaders of America-Phi Beta Lambda (FBLA-PBL) – Prepares student to become community-minded business leaders in a global society through relevant career experiences; (4) National Future Farmers of America (FFA) Organization – Prepares youth leaders for careers in the science, business and technology of agriculture; (5) Family, Career and Community Leaders of America (FCCLA) – Prepares students for careers in making a difference in their families and communities by advancing family and consumer science education; (6) HOSA: Future Health Professionals – Prepares students to become leaders in the global health community and promotes career opportunities in the health and mental/behavioral industry; (7) SkillsUSA – Prepares students for careers in trade, technical and skilled service occupations by empowering them to become world-class leaders and build a quality and skilled workforce; and (8) Technology Student Association (TSA) – Enhances the personal and leadership development of youth and provides career opportunities in science, technology, engineering, and math (STEM).

The most conclusive evidence on the effectiveness of a CTSO is engaging and preparing students for real-world leadership practices through competitive events that mirror real-life situations and competencies comes from CTE/CTSO researchers (Ewing et al., 2014; Threeton et al., 2010). While a CTSO is more evident in high school, most start in middle school (Zirkle & Jeffery, 2019), making a CTSO ideal for promoting and advancing early prevention and intervention initiatives. A CTSO can also be seen as small learning communities, or clusters of students enrolled in multiple classes together receiving instruction from a group of academic and CTE teachers who work together to plan curriculum (Loera et al., 2016). In addition, the combination of academic and CTE curriculum around career themes (e.g., the health and mental healthcare industry) provide students with experiential learning opportunities through partnerships with employers inside their communities (Kemple & Willner, 2008; Stern et al., 2010).

Youth Mental Wellness. When stigma associated with mental health is high, the likelihood that student-educator conversations about mental health will occur is much lower. Easton and colleagues (2013) found that stigma combined with poor health literacy led to poor health outcomes. Stigma is a significant barrier to people seeking and receiving treatment (Henderson et al., 2013; Knaak et al., 2017; Gronholm et al., 2018) and learning strategies to manage their health and mental wellness (Nyblade et al., 2019; Smith & Applegate, 2018). It is important to note that the amount of stigma that people feel and the impact of this stigma on individuals' mental wellness depends on their backgrounds and lived experiences.

Overcoming the stigma barrier can lead to more conversations about stigma inside classrooms and increase mental health literacy among youths. Youths are already engaging in much of their own decision-making about their health and well-being (Cusack et al., 2017). Early intervention to increase student's awareness about mental health while they are in school can lead to students developing strategies to cope and overcome other risk factors (Manganello, 2008). Early intervention combined with coping skills can lead to youths adopting positive behaviors that are strength-based (e.g., resilience and protective factors) that will improve their wellness. Youth engaged in CTSOs and in leadership roles can help to destigmatize mental health inside their schools, households, and communities. Noddings (1995) contends that when adolescents believe that they are in environments where they are cared for (i.e., school) and learn to care for others (i.e., classroom, curriculum), they will be more successful in translating that knowledge of wellness strategies and coping skills into real-life practices. It is our premise that a CTSO is a mechanism where students are engaged in activities that focus on identifying and nurturing their personal strengths and human resources (peers and advisors) that enable them to overcome risks associated with mental health problems.

Theoretical Framework

Zimmerman's resilience framework has generated the most comprehensive research and practice on resilience and provides a theoretical strength-based model that encompasses the positive or protective factors in youth's lives that focus on change

strategies designed to enhance personal strengths and assets (Fergus & Zimmerman, 2005; Zimmerman & Brenner, 2010; Zimmerman, 2013). Participation in HOSA activities (e.g., leadership/competitive events, community service, organizing health career clinics, promoting health literacy) starting in their middle school grades tend to eventually activate their resilience and motivation to thrive in the face of challenges and act in service to others. And for many, set their path toward a program of study and career in mental/behavioral health. This may help to explain the resilience of HOSA students and their motivation to thrive and overcome adversities. Anecdotal data from students describing Cal-HOSA as a preventative strategy has led to it becoming an avenue to focus on students' mental wellness. Researchers have shown that protective factors (e.g., self-efficacy) provide protection against stressful conditions and their management of stress attributed to resilience (Dias & Cadime 2017; Kövesdi et al., 2020; Scolveno, 2018). That is, efficacious beliefs are associated with lower anxiety and stress levels, related to positive behaviors and attitudes, and increased self-efficacy among adolescents (Bandura, 1977; Lopez & Little, 1996).

Method

Participants. Purposive sampling was used to select 94 students from seven high schools who were participating in Cal-HOSA's prevention and early intervention project. These seven high schools volunteered to become pilot projects for Cal-HOSA and for that reason they were selected for this study. These 94 student interviews were done between January and February 2019. Once Cal-HOSA advisors agreed to the interviews, each advisor recruited a cohort of 6 to 12 students, and all interested students were provided with a consent form and information about the study for parental completion. Of the individual interviews, the majority of the participants were female (79.8% female and 20.2% male) and in grade 12 (61.7%), followed by grades 11 and 10 (27.7% and 8.5% respectively) with fewer in grade 9 (2.1%). It is important to mention that all students selected had at least two years of involvement in HOSA, with many joining HOSA during their middle school years. The race/ethnicity characteristics of the participants were as follows: Latino or Hispanic (56.4%), Asian (20.2%), white (11.7%), Filipino (9.6%), and African American (2.1%).

Procedures. All individual interviews were done in person at each school. Each Cal-HOSA advisor organized a meeting room at the school site and scheduled the student participants. All signed consent forms were collected prior to the interview. Each interview started with the purpose and process, and the opportunity for students to ask questions. The approximate length for each interview was 30-35 minutes. All interviews were audio-recorded and transcribed word for word. The semi-structured interview questions were designed to investigate Cal-HOSA students' participation in designing activities for their schools' prevention and early intervention projects, and their behaviors in practicing and performing specific tasks in promoting student mental wellness. For the interviews, we used both prepared open-ended questions and planned and unplanned probes to elicit deeper participant insights. Table 1 shows the key questions and examples

of probing questions. These questions were developed based on conversations with HOSA advisors on key concepts that they considered important. We then tested the interview guide with a small cohort of individuals with knowledge of Cal-HOSA. Because this small convenience sample (Cusack et al., 2017) were part of the pilot to help refine the questions, they were not part of the study.

Table 1

HOSA Interview Guide

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1. How would you describe your overall experience as a member of HOSA?
 - a. What makes HOSA activities meaningful to you?
 2. HOSA gives students a sense of purpose. What does this mean to you?
 - a. What makes HOSA relevant to community mental health?
 3. Some HOSA students have described themselves as “community servant leaders”. Why would these students describe themselves this way? Would you also describe yourself as a “community servant leader? Why or why not?
 - a. What is it about HOSA that gives you hope?
 - b. What is it about HOSA that creates a sense of urgency to act and serve others?
 4. What does “being HOSA resilient” mean to you?
 - a. How has your HOSA experiences strengthened your resiliency?
 - b. What cultural or personal strength has HOSA brought out in you that you rely on to overcome your fears/worries?
 5. What is it about HOSA that helps you feel a sense of community?
 - a. In what ways does HOSA create a school culture that feels safe, supportive, and nonjudgmental?
 6. What role did you play in the mental health project?
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Data Analysis

The RADaR (Rigorous and Accelerated Data Reduction) technique was used to analyze the data. RADaR consists of four steps: (1) ensure that all data files are formatted similarly. This process was achieved when interviews were transcribed by the same person; (2) produce the first set of data reduction tables. Two analysts independently read two transcripts and generated initial codes or open coding; (3) create the second set of data reduction tables (step three was repeated as necessary). In this phase, more finalized codes or focused coding based on analysts’ consensus were created, leading to a codebook. Remaining transcripts were coded using the final codebook; and (4) finalize themes for the paper using the final data table. Finally, we identified blocks of text from transcripts and reduced them to shorter sentences or sections based on the codebook. After coding all the data for interviews, one author examined all coded texts, quotes, and themes and refined the themes and subthemes for coherence.

To ensure trustworthiness of the findings, three methods were used: (1) the main author acted as an auditor (Flynn et al., 2013) by verifying that the procedures and

strategies to achieve triangulation including gathering and examining information from multiple perspectives from students in seven different school settings (Patton, 1990) and ensure that the coding was dependable. This author/auditor has extensive experience conducting qualitative research; (2) accounted for the researcher's frame of reference (Moustakas, 1994); and (3) open-ended questions were asked to capture detailed narratives and ensure concrete descriptions of participant experiences (Creswell, 2006). The authors recognized the importance of practicing reflexivity (Patton, 2002) by continuously checking in as a team throughout the study. It is important to mention that with all methodologies, there are limitations in phenomenological approaches. Practical considerations including the difficulty of researchers to be bias free, the interviewer's ability to draw out full descriptions of the participants' experiences, the participants comfort and willingness to share their experiences, and the reality that data analysis and understanding the complexity of a phenomenon is a never-ending process (Creswell, 2006; Moustakas, 1994).

Results

Analyses revealed four overarching themes, including: (1) Cal-HOSA students recognize risk factors for mental health disorders and seek solutions to prevent and mitigate these disorders; (2) Cal-HOSA helps students develop meaningful conversations with peers and teachers; (3) Cal-HOSA helps students develop resilience to overcome adversities; and (4) Cal-HOSA promotes servant leadership and well-being of communities.

Theme 1: Cal-HOSA students recognize risk factors associated with mental health disorders and seek solutions to prevent and mitigate these disorders. Cal-HOSA students associated terminology such as “stigma and shame” and “stress and anxiety” with mental health issues and recognized that these factors can further isolate individuals with mental health disorders. One student stated, “It's hard to come out and say, ‘Oh, I have this’ and ‘I have that’ because it's so stigmatized and [lonely]” (Participant 1a3). As exemplified by the quote below, other students noted that stigma and shame were widespread problems at their schools:

...a lot of students are scared to ask for help. They're scared to admit that there's something going on in their lives...And mental health is...extremely vital in terms of how to cope with stress, to cope with struggles at home [and school]. (Participant 1a9)

The students also noted that failing to identify and treat mental health disorders early on could negatively impact students academically and personally. Most students described stigma as a barrier to seeking mental health care and emphasized that more conversations about mental health can help to normalize help-seeking behaviors. For example, one student highlighted the need for “opportunities for us to learn that mental health is not something that should be stigmatized or demonized” (Participant 1a10). When asked how they thought stigma could be reduced in schools, the students offered a variety of responses. Some students said reducing stigma could start by changing

perceptions in households and neighborhoods, and that “it happens out in the community [by] spreading the word about popping the stigma” (Participant sa4). An important takeaway message from the students’ comments is that increasing mental health literacy can be done through conversation. Nearly all the students cited their involvement in Cal-HOSA and knowing someone close to them who struggles with a mental illness as their motivation for reducing stigma:

I joined HOSA... [because] I wanted to break that stigma that is associated with mental illness and the depression that my father was going through...I wanted to help my father and communicate to him that asking for help was okay...with HOSA and NAMI as a partner, I was able to obtain information and become more knowledgeable and had that conversation with my father... I was able to influence him, and he got help. (Participant la9)

For example, three students identified themselves as having a personal story of feeling hopeless, disconnected from school life, and alone to deal with their hardships prior to joining Cal-HOSA. One student who exemplified these feelings stated, “I lost hope in high school...I started not caring about my grades...I started dealing with isolation, I needed therapy...it was a bad time” (Participant la4). Another struggling student said, “I was just a regular student that didn’t have any connections with school...I just felt like I wasn’t part of the school family” (Participant la6). An additional student who was feeling disconnected noted that, “Being a teenager and trying to find your place, it’s hard to find purpose in life...I thought I was the only one...that’s so hard to deal with feeling alone” (Participant la3).

Most students agreed that sharing stories can be a strategy and solution to reaching students who feel isolated and excluded. Storytelling can provide these students with hope and support.

I feel like my story relates to a lot of kids...those with suicidal thoughts, because I’ve had suicidal thoughts...those who feel isolated, I’ve been isolated and alone...I feel [my story] can help them and knowing someone else went through what they are going through and understands them. (Participant sw3)

I feel like sharing my story about my personal background with mental health can impact others because I can connect with them...help them see that they are not alone, and they can get better. (Participant sw6)

When prompted to expand on their responses to the question, “What is it about stigma and shame that creates a sense of urgency to act,” several students referred to stress and anxiety as a concern. One student noted that, “I’ve struggled with anxiety and depression for a while, but my family don’t believe in that, they don’t believe in getting help” (Participant sw14). Others emphasized empathy and said, for example, that “We relate to the problems youth go through...we know their struggles and stressors” (Participant sw11). Another student emphasized their “empathy for others” and reported they were “really good at looking at things from others’ perspectives” (Participant sa7).

Some students pointed out an urgency to reach people and detect early signs of distress and prevent a more debilitating condition from developing. One student who felt this concern said, “there are problems happening in our community and if we don’t try to help them as early as possible, their [mental condition] will get worse... the earlier we reach out to someone suffering, the better the chances they have to be helped” (Participant gh3). Similarly, another student stated:

...learning about how to prevent mental illness...makes you want to act more...because you know that there are so many people that you know could be affected by a mental illness...Since we’re future [health] professionals...mental health is a part of healthcare...we’re going to have patients who struggle with mental illness...we need to know about prevention. (Participant sa1)

Some of the students’ responses were more specific to solutions for mitigating risk factors rather than describing challenges. For example, some students highlighted the role that students in Cal-HOSA play as agents of change and addressing stigma, with one student stating that “it feels like it’s my responsibility to do my best to help make a difference and create change toward preventing stigma” (Participant sw20). Other students stated the importance of taking the message of change into communities:

We must reach out to them...I know you can only help people who want help, but some people just feel so lost...You must reach out to them; you can’t expect them to come to us...There are people out there that are dying, and it can be prevented. Death by suicide can be prevented if we reach out to people. (Participant gh9)

I am a mental health project leader...I feel like I can make a difference in this society. My role is to help prevent the stigma...I want people to know what mental health is and why it’s okay to talk about it and it shouldn’t be ignored. (Participant sw20)

Theme 2: Cal-HOSA helps students develop meaningful relationships and engage in meaningful conversations. Students reported that Cal-HOSA provides safe and judgment-free spaces for peer-to-peer and student-to-teacher support networks. Trust was critical in helping students participate in meaningful conversations with others in the Cal-HOSA community and engaging fully with the community. With the tightly knit network that is HOSA, students described the relationships with caring adult mentors as an important factor that helped them overcome challenges that could have resulted in a range of negative outcomes or set them on a path that would lead to other problems. The following three quotes exemplify the importance of the relationships the students develop in Cal-HOSA:

Cal-HOSA gives you mentors who are there for you and help you...having a mentor to reach out to, I feel like I’m not alone when dealing with a problem...Cal-HOSA reminds me that I’m not alone...gave me a little family at school and I feel safe. (Participant gh2)

Cal-HOSA brings all of us together from everywhere [and from] different backgrounds... [in Cal-HOSA] I know that I have my mentor that's going to take me there [heal me] ...she's probably the first one that has made me feel like there is hope in life. (Participant gh5)

You build relationships...and with relationships comes trust, you trust people because there is unity and a feeling that people care for you...people you can talk to that care about how you feel. (Participant va6)

Many students made comments during the interviews that highlighted their awareness of the vital role of establishing relationships with their peers, and they credited these relationships for them feeling connected and purposeful in their aspirations to serve those in need. For example, one student reported: "I feel really connected with my peers...we are all in it for the same thing...it helps me be more active in my community and help my community" (Participant va8). Another student mentioned the collective resilience of their peers in Cal-HOSA "...we have all gone through similar struggles...we've become a family...we've overcome...we've grown as people" (Participant sw9). Other students reported this sense of community as a transmittable quality that permeates throughout the school. One student noted "it's the people that are in HOSA that allow you to have these caring relationships because once one person shows that they care, everybody else does too. It's kind of a chain reaction...I believe that we create trusting bonds" (Participant la1). Furthermore, Cal-HOSA students adopt a sense of identity synonymous with love and compassion for vulnerable populations, which is typified by the quote below.

I love loving people, it [relationships] brought out the caring in me so that I can show my love for other people...We're all people and we all have needs. We all need to be included and work together to be whole...I've learned to be more caring toward others...show more compassion for others...I need to care for people, let them know they are loved, and they are surrounded by people that love them. (Participant gh8)

Expanding on the prior theme of storytelling, students cited their lived and life experiences as a strategy to empathically communicate and connect with people who are dealing with personal issues and negative thoughts, and too afraid to open up and share their struggles. To create safe spaces and allow meaningful conversations to happen within these spaces, students mentioned that discussing four different types of life experiences could be a protective factor. These experiences, which are exemplified by the quotes below, include personal experiences with trauma, family members' experiences with mental health disorders, experience relevant to their generation, and experiences interacting in HOSA culture.

Personal experiences with trauma.

Relating experiences [story] because most stories have something that deals with past pains or they've gone through something traumatic...You

may not see it on the outside, but it's there sitting on the inside. (Participant la1)

I feel like when you share your own story, people are more open to sharing their story after hearing about the traumatic events you've gone through and see similarities between the two...there is a connection. (Participant sa9)

Family members' experiences with mental health disorders.

They don't give you a manual when you have a family member with a physical and mental disability...what allows me to connect with people is to share my experience...a story of hope. I believe that if I share my story [and experiences], it will help people to see that they are not alone in their struggles and they can overcome. (Participant la3)

Experiences relevant to their generation.

We connect with people by sharing our own experiences and how our generation sees mental health...we are changing stigma [and] stereotypes about mental health...[we] are servant leaders impacting change not only within the school community, but the entire community. (Participant sw9)

We advocate for engagement...sharing our personal stories...we connect and make us relatable, and we have open conversations...It's really cool to see what's happening and the ideas [solutions] that our age group is coming up with for our school [and community]. (Participant sw14)

Experiences interacting in HOSA culture.

Everyone wants to feel part of a community...Cal-HOSA gives me a sense of community and belonging...HOSA teachers are the most trusting adults that I look forward to seeing every day because they create that caring classroom environment. (Participant sw10)

I think Cal-HOSA creates a culture of acceptance and safety that no matter where you go in HOSA, you'll find someone you can identify with or feel comfortable with...you find others [with common experiences] who accept you and you them...you are able to care for them and [from that experience] learn to care for yourself. (Participant sw13)

Overall, students saw themselves as servant leaders who could advocate for school and community engagement and build on community strengths. For example, one student reported that “we spread our message [of well-being] to our neighbors...we just want to get the community involved and learn as much as we are learning about mental wellness...when you bring it into a real-life experience perspective, it really hits you close to home because it's something that happened to you” (Participant wu2). Another student highlighted an experience of discovering purpose through acts of kindness: “I

realized just how much I love the feeling of helping someone or when giving back to my community...Cal-HOSA confirmed what I want to do...my purpose in life, a sense of purpose that I connect with" (Participant sw22).

Theme 3: Cal-HOSA helps students develop resilience to overcome adversities. Resilience was a common theme often expressed in Cal-HOSA students' responses to the interview questions, and they described their experiences overcoming a range of obstacles. Additionally, they discussed how they used their own lived experiences as examples of perseverance and as sources of motivation to succeed. One student noted that because of Cal-HOSA, "I am a stronger person and more confident to overcome fears so that I can enjoy working with others" (Participant sw7). The quotes below further highlight the impact that Cal-HOSA has on helping students overcome life's obstacles.

I look at things in a whole new perspective now and I keep this mindset that if I have overcome something this tragic in my life, I can overcome a lot of things now...That was like a war for me that I overcame. (Participant la4)

I went through depression my freshman year and kept it to myself...being in HOSA and with everything I went through, I [opened up] ...became stronger...I realize I can overcome anything no matter what...everything that we do in HOSA has a purpose. (Participant ms3)

When asked to "define resiliency and what it means to you," several students defined it as being "HOSA resilient." Three students expanded on what it meant being HOSA resilient. One student stated, "it means that no matter what your background is, what you've gone through, what problems you have, you can still come out as a leader" (Participant va1). Another student linked compassion with being HOSA resilient, as a personal asset used to cope: "When coping with issues...it's really the compassion for me...I need to care for people, let them know we need each other to pull through and be whole" (Participant ma1). The third student used a metaphor relating HOSA resilient to protecting oneself and coping with the negative effects of life stressors: "It's like being a caterpillar in your own hands. You're not going to squish it...you want to hold it and take care of it, be patient and know it's going to take time to transform and work from there...The result will be a butterfly... [being HOSA resilient] means we have the capacity to transform into beautiful masterpieces" (Participant la7).

Theme 4: Cal-HOSA promotes servant leadership and well-being of communities. At least half of all students interviewed identified as servant leaders. When asked to react to "why were Cal-HOSA students from earlier interviews describing themselves as 'servant leaders' promoting well-being," the students provided a range of motivations. For example, one student stated that, "we promote mental wellness because we are youth and the future healthcare workers...We are the starting point for change" (Participant wu7). Another student said, "We've done so many things in the community

to help others, we just know this is what we should do to help our community...recognize that it is so much more than just us...we want to be a bigger part of our communities” (Participant yv1). Two quotes from students who were explicit about their roles as leaders are included below.

Cal-HOSA connects students to their community...Cal-HOSA has taught me and peers to be community (servant) leaders and we feel responsible to engage with the community. (Participant sw1)

Through HOSA, I learned how widespread our mental health crisis is, and it made me want to act on it, ‘My goodness, so many people are suffering,’ I feel responsible knowing that I can make a difference...That’s what people mean when they refer to themselves as a servant leader. (Participant sw21)

A couple of students were confident in asserting that real change in reducing stigma and promoting mental wellness must happen with youths leading the way. According to one student, “we are a student-led organization...we are the next generation [of professionals] ...we want to be the change agents...we need to be out in the community...we need to be hands-on in finding solutions to these problems” (Participant sw5). Another student noted, “We are setting the foundation...in Cal-HOSA we’re all working to build one foundation and become a voice with a strong message [of hope] ...regarding our physical and mental health” (Participant sw6).

Discussion

The current study provides support for the idea that students who join HOSA and participate in activities organized by HOSA are more likely to report having an interest in learning more about mental and behavioral health and advocating for vulnerable communities. The use of terms such as stigma and shame and stress and anxiety are common among youths who feel marginalized and excluded from participating in school life. While HOSA students had heard these terms before joining HOSA, they had rarely associated them with mental health issues. After participating in HOSA and learning more about these terms, students were more likely to engage in conversation about mental and behavioral health because they no longer feared being labeled by others.

The interview data reported in this study showed that HOSA students who connected with their lived/life experiences and participated in HOSA activities were more likely to demonstrate positive attitudes consistent with being well-informed and engaging in well-being behaviors. To-date, this may be the first study that has looked at CTSOs (e.g., HOSA) implementing prevention and early identification programs that promote mental wellness. However, some results of the present study are consistent with other studies of school-based prevention and early intervention models (Neil & Christensen, 2009; Domitrovich et al., 2010; Colizzi et al., 2020). These findings suggest that when students are provided with a safe and caring environment where they can develop meaningful relationships with peers, it leads to discoveries of personal strengths, connectedness, and resilience in overcoming adversities. This phenomenon of engaging

in conversations about mental health led by peers with real-life experiences as an effective intervention has been supported by prior studies (Naslund et al., 2016; Reupert, et al., 2019). Mental and behavioral health impacts people from all walks of life, including youth. Early identification and prevention are critical to a youth's positive development and career pathway. HOSA can advance the practice and promotion of mental and behavioral health and wellness for other CTSO's.

Our findings lead to several encouraging key implications. First, a CTSO serves as a protective factor that mitigates the many risk factors to which young people are exposed. If left unresolved, these risk factors could lead to a life trajectory of more adversities, psychological distress, and suicidal ideation. A CTSO can be seen as an intervention to improve low school engagement and poor academic achievement, which are important risk factors. Several studies have linked school-based mental health programs and mental wellness with improvements in students' academic outcomes (Murphy et al., 2015; Agnafors et al., 2020). Second, because a CTSO is already integrated into a school's academic infrastructure, it can incorporate and promote students' mental health and well-being. For example, students in HOSA associate terms like, "sense of purpose," "sense of identity," and "servant leadership" with the organization's name. Joining a CTSO like HOSA can translate to strengthening self-efficacy, acquiring meaningful roles that increase health literacy inside communities, and a personal belief that "I Can Make A Difference." Finally, exposing students to leadership and training opportunities may facilitate a career path into the mental and behavioral health fields. The Carl D. Perkins Career Technical Education (CTE) Act of 2006, which mandated training for CTE students to equip them with competencies for high-skills jobs, may help alleviate the shortage of mental and behavioral health professionals. Importantly, a 2017 report from the National Council for Behavioral Health indicated that the need for treatment is expected to increase while the number of well-trained mental and behavioral health professionals will remain a critical gap.

Limitations

There are at least three limitations in this study. First, the underrepresentation of the sample in terms of gender, race, and ethnicity and therefore generalizing the findings should be interpreted with caution. Second, the effects of the lack of representation linked to students' lived experiences is another limitation. Finally, with the stigma surrounding the topic of mental health, it is possible that students may have withheld information due to fear of openly disclosing to a stranger (interviewer). Although efforts were made to stress the participants' anonymity in reporting, there was no guarantee that they fully divulged their experiences relevant to the topic.

Conclusions and Recommendations

This study has provided insight into HOSA students' participation in prevention and early identification practices. This study represents an initial step in recognizing the role that a CTSO can play in helping students understand the consequences of stigma and shame in seeking services for mental health issues. We hope that our research can start conversations about other CTSOs and their school sites becoming ideal places to: (a) engage youth leaders to start conversations about mental health that lead to a better understanding of risk and protective factors associated with mental health; (b) increase training opportunities for students and CTSO advisors to gain the knowledge and skills on early identification and prevention; and (c) improve awareness and promotion of mental wellness, and incorporate it into traditional school curricula.

A better understanding of the unique mechanism of how HOSA is achieving key components of its prevention and early intervention framework and how it is applicable in its practices for other CTSOs are important for future research. Another recommendation that can advance this research is piloting Cal-HOSA's mental wellness framework in at least two other CTSOs and examine the challenges and solutions for a CTSO's role in leading and advancing youth mental wellness in school and community life. With this research, we hope that by highlighting the various aspects of HOSA as a protective factor we will inspire more CTSOs and CTE programs to replicate Cal-HOSA's prevention, early identification, and early intervention model.

References

- Advance CTE. (2020, March 22). Broadening the path: Designing principles for middle school grades CTE. <https://careertech.org/resource/expanding-middle-school-cte>.
<https://careertech.org/resource/broadening-path-middle-grades>.
- Agnafors, S., Barmark, M., & Sydsjö, G. (2020). Mental health and academic performance: A study on selection and causation effects from childhood to early adulthood. *Social Psychiatry and Psychiatric Epidemiology*, 56(5), 857-866. DOI: 10.1007/s00127-020-01934-5.
- Alfeld, C., Hansen, D. M., Aragon, S. R., & Stone, J. R. III. (2006). Inside the black box: Exploring the value added by career and technical student organizations to students' high school experience. *Career and Technical Education Research*, 31(3), 121-155. DOI: [10.5328/CTER31.3.121](https://doi.org/10.5328/CTER31.3.121).
- Aragon, S., Alfeld, S. R., & Hansen, D. M. (2013). Benefits of career and technical student organizations on female and racial minority students' psychosocial and achievement outcomes. *Career and Technical Education Research*, 38(2), 105-124. DOI: <https://doi.org/10.5328/cter38.2.105>.
- Bandura, A. (1977). Self-efficacy: Toward a unified theory of behavioral change. *Psychological Review*, 84, 191-215. [DOI.org/10.1037/0033-295X.84.2.191](https://doi.org/10.1037/0033-295X.84.2.191).
- Brand, B., Valent, A., & Browning, A. (2013). *How career and technical education can help students be college and career ready: A primer*. Washington, DC: The College and Career Readiness and Success Center, American Institutes for Research.
- Colizzi, C., Lasalvia, A., & Ruggeri, M. (2020). Prevention and early intervention in youth mental health: Is it time for a multidisciplinary and transdiagnostic model for care? *International of Mental Health Systems*, 14(23), 1-14. DOI: [10.1186/s13033-020-00356-9](https://doi.org/10.1186/s13033-020-00356-9).

- Creswell, J. W. (2006). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage Publications, Inc.
- Cusack, L., Desha, L. N., Del Mar, C. B., & Hoffmann, T. C. (2017). A qualitative study exploring high school students' understanding of, and attitudes towards, health information and claims. *Health Expectations*, 20, 1163-1171. DOI: [10.1111/hex.12562](https://doi.org/10.1111/hex.12562).
- Dias P. C., & Cadime, I. (2019). Protective factors and resilience in adolescence: The mediating role of self-regulation. *Psicología Educativa*, 23(1), 37-43. DOI:10.1016/j.pse.2016.09.003.
- Domitrovich, C. E., Bradshaw, C. P., Greenberg, M. T., Embry, D., Poduska, J. M., & Jalongo, N. S. (2010). Integrated models of school-based prevention: Logic and theory. *Psychology in the Schools*, 47(1), 71-88. DOI: [10.1002/pits.20452](https://doi.org/10.1002/pits.20452)
- Easton, P., Entwistle, V. A., & Williams, B. (2013). How the stigma of low literacy can impair patient-professional spoken interactions and affect health: Insights from a qualitative investigation. *BMC Health Services Research*, 13(319). <https://doi.org/10.1186/1472-6963-13-319>.
- Ewing, J. C., Clark, R. W., & Threeton, M. D. (2014). Career development event preparation and experiential learning strategies employed by Pennsylvania secondary agricultural education teachers. *Career and Technical Education Research*, 39(1), 37-53. <https://doi.org/10.5328/cter39.1.37>
- Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health*, 26(1), 399-419. DOI: [10.1146/annurev.publhealth.26.021304.144357](https://doi.org/10.1146/annurev.publhealth.26.021304.144357).
- Flynn, S. V., Duncan, K. J., & Everson, L. L. (2013). An emergent phenomenon of American Indian secondary students' career development process. *The Career Development Quarterly*, 2(61), 124-140. DOI: [10.1002/j.2161-0045.2013.00042.x](https://doi.org/10.1002/j.2161-0045.2013.00042.x).
- Gronholm, P. C., Nye, E., & Michelson, D. (2018). Stigma related to targeted school-based mental health interventions: A systemic review of qualitative evidence. *Journal of Affective Disorders*, 240, 17-26. DOI: [10.1016/j.jad.2018.07.023](https://doi.org/10.1016/j.jad.2018.07.023).
- Henderson, C., Evans-Lacko, S., & Thornicroft, G. (2013). Mental illness stigma, help seeking, and public health programs. *American Journal of Public health*, 103(5), 777-780. DOI: [10.2105/AJPH.2012.301056](https://doi.org/10.2105/AJPH.2012.301056).
- Kemple, J. J., & Willner, C. J. (2008). *Career academies: Long-term impacts on labor market outcomes, educational attainment, and transitions to adulthood*. New York, NY: MDRC.
- Knaak, S., Mantler, E., & Szeto, A. (2017). Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. *Healthcare Management Forum*, 30(2), 111-116. DOI: [10.1177/0840470416679413](https://doi.org/10.1177/0840470416679413).
- Kövesdi, A., Törő, K., Hadházi, É., Takács, S., Rózsa, S., Csikós, G., et al. (2020). The protective role of self-efficacy for resilience in the COVID-19 period. *Acta Scientific Neurology*, 3(11), 87-91. DOI: [10.31080/ASNE.2020.03.0276](https://doi.org/10.31080/ASNE.2020.03.0276).
- Loera, G., Nakamoto, J., Boal, A. L., Wendt, S. J., Author, C., & Cherry, C. (2016). Growth in career academy students' experience, knowledge, and self-confidence related to health care careers. *Career and Technical Education Research*, 41(1), 13-31. DOI: 10.5328/cter41.1.13.
- Loera, G., Nakamoto, J., Oh, Y. J., & Rueda, R. (2013). Factors that promote motivation and academic engagement in a career technical education content. *Career and Technical Education Research*, 38(3), 173-190. DOI: <https://doi.org/10.5328/cter38.3.173>.

- Lopez, D. F., & Little, T. D. (1996). Children's action-control beliefs and emotional regulation in the social domain. *Developmental Psychology*, 32(2), 299-312. DOI: [10.1037/0012-1649.32.2.299](https://doi.org/10.1037/0012-1649.32.2.299).
- Manganello, J. A., (2008). Health literacy and adolescents: A framework and agenda for future research. *Health Education Research*, 23(5), 840-847. DOI: [10.1093/her/cym069](https://doi.org/10.1093/her/cym069).
- Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications, Inc.
- Murphy, J. M., Guzmán, J., McCarthy, A. E., Squicciarini, A. M., George, M., Canenguez, K. M., et al. (2015). Mental health predicts better academic outcomes: A longitudinal study of elementary school students in Chile. *Child Psychiatry and Human Development*, 46(2), 245-256. DOI: [10.1007/s10578-014-0464-4](https://doi.org/10.1007/s10578-014-0464-4).
- Naslund, J. A., Aschbrenner, K. A., Marsch, L. A., & Bartels, S. J. (2016). The future of mental health care: Peer-to-peer support and social media. *Epidemiology and Psychiatric Sciences*, 1(2), 1-10. DOI: [10.1017/S2045796015001067](https://doi.org/10.1017/S2045796015001067).
- National Coordinating Council for Career and Technical Student Organizations. (2019). CTSOs Definitions, Mission, Purpose and Criteria for Membership. <https://www.ctsos.org/about-us/>.
- National Council for Behavioral Health. (2017). The Psychiatric Shortage: Causes and Solutions. <https://www.thenationalcouncil.org/about/national-council/medical-director-institute/access-paper-release-final-3-28-17-final/> 2017. DOI: <https://doi.org/10.1176/appi.pn.2017.4b24>.
- Neil, A. L., & Christensen, H. (2009). Efficacy and effectiveness of school-based prevention and early intervention programs for anxiety. *Clinical Psychology Review*, 29(3), 208-215. DOI: [10.1016/j.cpr.2009.01.002](https://doi.org/10.1016/j.cpr.2009.01.002).
- Noddings, N. (1995). Teaching themes of care. *Phi Delta Kappan*, 76(9), 675-679.
- Nyblade, L., Stockton, M. A., Ginger, K. et al. (2019). Stigma in health facilities: Why it matters and how we can change it. *BMC Medicine*, 17(1), 1-15. DOI: <https://doi.org/10.1186/s12916-019-1256-2>.
- Patton M. (1990). *Qualitative evaluation and research methods* (2nd ed.). Sage Publications, Inc.
- Patton M. (2002). *Qualitative Research and Evaluation Methods* (3rd ed.). Sage Publications, Inc.
- Reupert, A., Bartholomew, C., Cuff, R., Foster, K., Matar, J., Maybery, D. J., & Pettenuzzo, L. (2019). An online intervention to promote mental health and wellbeing for young adults whose parents have mental illness and/or substance use problems: Theoretical basis and intervention description. *Frontiers in Psychiatry*, 10(59), 1-8. DOI: [10.3389/fpsyt.2019.00059](https://doi.org/10.3389/fpsyt.2019.00059).
- Scoloveno, R. L. (2018). Resilience and Self-efficacy: An integrated Review of the literature. *International Journal of Science and Research Methodology*, 9(1), 1-17.
- Smith, R. A., & Applegate, A. (2018). Mental health stigma and communication and their intersections with education. *Communication Education*, 67(3), 382-393. DOI: [10.1080/03634523.2018.1465988](https://doi.org/10.1080/03634523.2018.1465988).
- Stern, D., Dayton, C., & Raby, M. (2010). *Career academies: A proven strategy to prepare high school students for college and careers*. Berkeley, CA: CASN.
- Threeton, M. D., Ewing, C. J., & Clark, R. W. (2010). An informational analysis of career and technical student organization competitive even competencies via Kolb's experiential learning theory. *Online Journal of Workforce and Development*, 4(3), 1-13.
- Ullrich, D. R., Pavelock, D., Fazarro, D., & Shaw, B. (2007). Effectiveness of career and technology student organizations (CTSOs) in Texas. *Online journal of Workforce Education and Development*, 2(4), 1-11.

- Watkins D. C. (2017). Rapid and rigorous qualitative data analysis: The “RADaR” technique for applied research. *International Journal of Qualitative Methods*, 16, 1-9. DOI: <https://doi.org/10.1177/1609406917712131>.
- Zirkle, C., & Jeffery, J. (2019). Vocational student organizations and student success. In McGrath, S., Mulder M., Papier, J., Suart R. (Eds.). *Handbook of Vocational Education and Training* (pp 1-17). Springer International Publishing.