Annual Report 2023

TeenHope Research and Development

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TeenHope Research and Development Report

2022-2023

Background

TeenHope's Mental Health Screening program began in 2013 to help identify youth who may be at-risk for depression, anxiety, and suicidal ideation. This year, the program used an education presentation and two screening tools with students to facilitate the screening process. The research this year provided an opportunity to engage in program evaluation and development. The purpose of this report is to discuss an annual review for the 22-23 screening year, the process of educating and screening students, share the 22-23 screening data, share the 22-23 student, school, and TeenHope staff program feedback and testimonials, and provide a forum for current program development discussions and opportunities.

Annual Review

For the academic year 2022-2023, TeenHope launched its first proprietary software application. Ultimately TeenHope decided not to continue with the software and will be using a different platform for the 2023-2024 screening year. Overall, switching to a digital platform from paper screenings allowed the program to test different aspects of the screening and data entry process. This allowed for further program development conversations and a better understanding of the needs of the program.

Another new addition to TeenHope this year was an updated staff training approach. TeenHope created a Thinkific training for onboarding new staff and for annual staff training. The modules provided structured

information to the TeenHope management team, case managers, and interns regarding job roles and responsibilities. The modules will be updated for the 23-24 screening year.

The TeenHope program continues to receive positive support from the community. The program screened two new schools and one community after school program this year. There have been three requests from schools in other counties for the TeenHope program to screen their students. Within the current TeenHope structure, the program can primarily screen students in Lancaster and Lebanon counties. The request have sparked additional program development and expansion conversations within Samaritan for future events.

Education and Screening Process

Students that are screened through TeenHope first receive an educational presentation. In each school, TeenHope presented a PowerPoint presentation that shared the purpose of the TeenHope program and universal screenings, current mental health statistics, brief mental health diagnosis descriptions, and shared national and community resources. After the presentation, students completed the screening process by providing self-reported responses on the PHQ-9 (Kroenke et al, 2001) and GAD-7 (Spitzer et al, 2006) screening instruments (Appendix A).

The PHQ-9 screened for depression and has a specific self-harm and suicidal ideation question, #9, that is used as a flag question for TeenHope staff to identify a potential crisis situation. The GAD-7 screened for anxiety. Students responded to all 15 questions using the following response options, not at all (0), several days (1), more than half the days (2), and nearly every day (3). Self-reported responses were totaled and a combined score of 10 or above considered the student in the at-risk for anxiety, depression, or self-harm and suicidal ideation. All students who marked the flag question for self-harm and suicidal ideation were automatically categorized as at-risk and had a tailored follow-up conversation with a case manager and the Screening

Specialist to determine if the student was in a potential crisis. If a potential crisis was identified, the TeenHope school point person was notified.

During student follow-up conversations, case managers helped students identify trusted adults in their life in and out of the school setting. Students were given a resource guide that shared local and national information and support for a variety of topics including mental health, multicultural, LGBTQ+, basic needs such as food, housing, and employment support, how to use an insurance card or apply for state insurance to schedule mental and behavioral health appointments, and crisis information including 988, the warmline number, and a local county crisis number.

Screenings

In total, 2,724(N) students were screened for anxiety, depression, and thoughts of self-harm or suicidal ideation and met with a TeenHope case manager during the 22-23 academic year. Students were screened in fourteen different public schools, three private schools, and one community-based program. Seventeen of the schools and the community organization were located in Lancaster County, and one school was in Lebanon County. Students screened were in 7th to 10th grade in Lancaster and Lebanon Counties, between the ages of 11 to 18 years of age. Basic demographic information was collected such as the student's age, gender identity, and race and ethnicity.

Of the 2,724 screened students, 75% (n = 2,045) of students were not at-risk for anxiety, depression, or suicidal ideation and 25% (n = 679) of students were found to be at-risk (Figure 1). Of the 679 at-risk students, 40% (n =272) reported thoughts of self-harm or suicidal ideation; that is 10% of the population sampled (Figure 2).

Figure 1

Total Not At-risk vs. At-risk
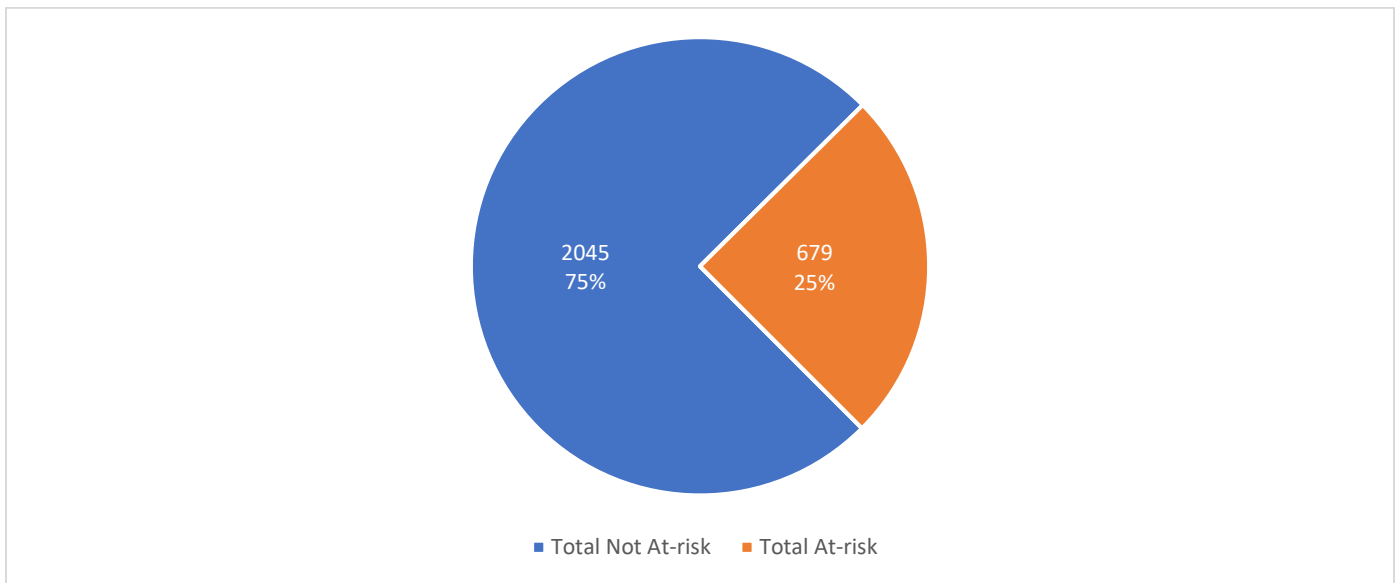
Figure 2

*At-Risk vs. Reported Thoughts of Self-harm or Suicidal Ideation*
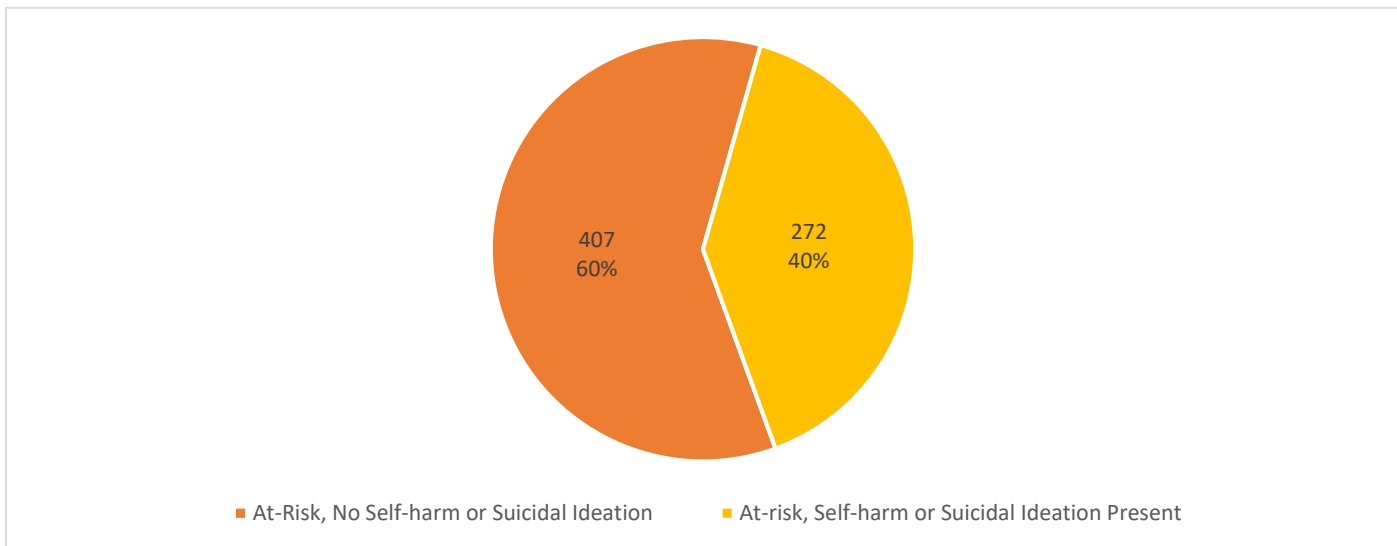
Demographics

The following demographic data were based on self-reported data from the screened students. The population sample consisted of mostly White males aged 14-16. Students self-reported their age, gender identity, and race and ethnicity.
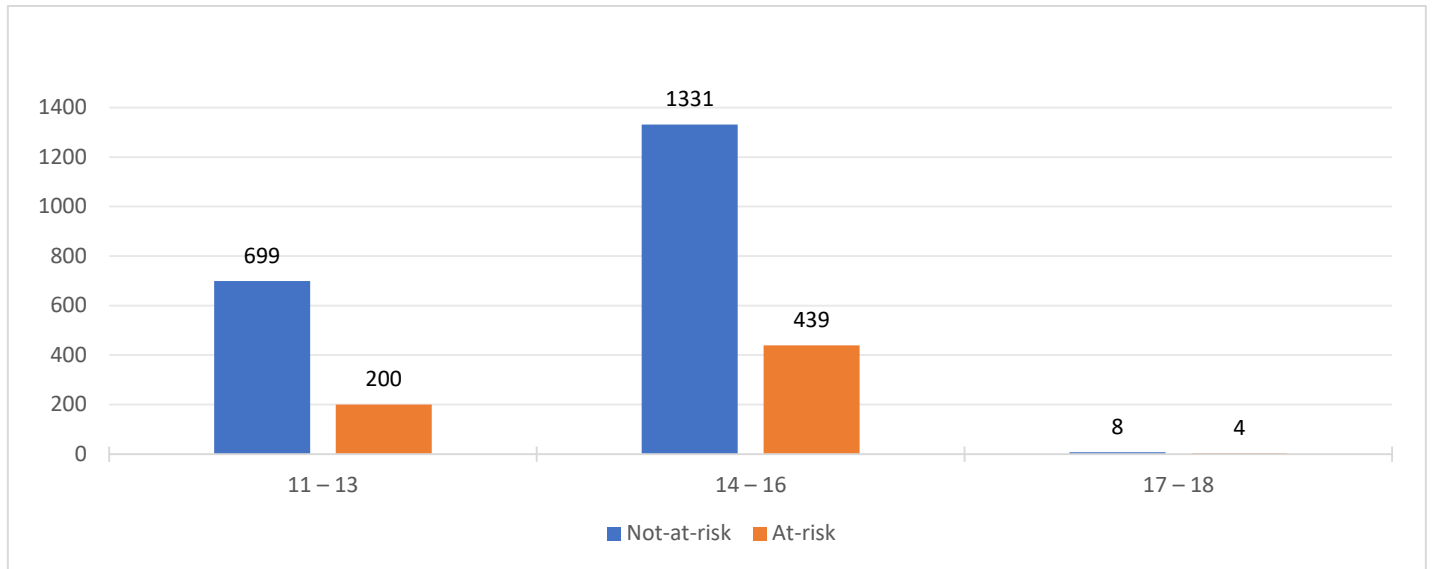
Age. Of the 2,724 screened students, 2,681(*n*) self-reported their age. 33.5% (*n* = 899) student responses reported 11-13 years old, 66% (n = 1,770) were 14-16 years old, and less than 1% (*n* = 12) were 17-18 years old (see Figure *3*). Figure 4 breaks down not at-risk and at-risk information based on student age. 78% (*n* = 699) of 11-13 year old students were found not at-risk and 22% (*n* = 200) of students were found at-risk. 75% (*n* = 1331) of 14-16-year-old students were found not at-risk and 25% (*n* = 439) of students were found at-risk. 66% (*n* = 8) of 17-18-year-old students were found not at-risk and 34% (*n* = 4) were found at-risk. (Figure 4).

Figure 3

Total Age
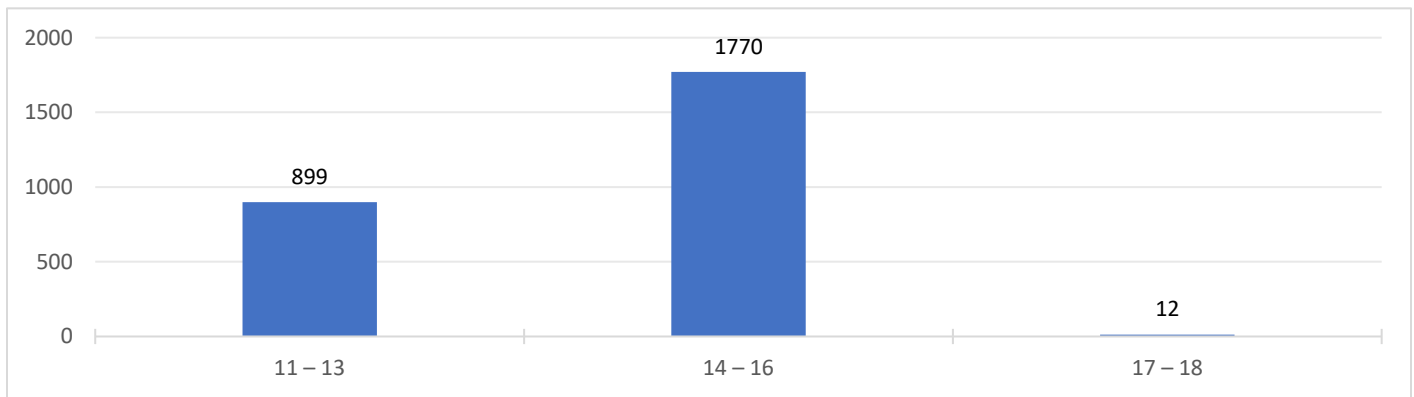
n = 2,681

Figure 4

Not At-risk vs. At-risk by Age

n = 2,681

Gender Identity. Of the 2,724 screened students, 2,667 (n) self-reported their gender identity as either male, female or other. 49% (n = 1,310) of students identified as male, 48.6% (n = 1,296) identified as female, and 2.3% (n = 61) identified as other (see Figure 5). Figure 6 shows a breakdown of gender identity compared to not at-risk and at-risk responses. 86% (n = 1,131) of self-identified male students were not at-risk and 14% (n = 179) were at-risk. 65% of self-identified female students were not at-risk and 35% were at-risk. 28% of self-identified other students were not at-risk and 72% (n = 44) were at-risk (see Figure 6).
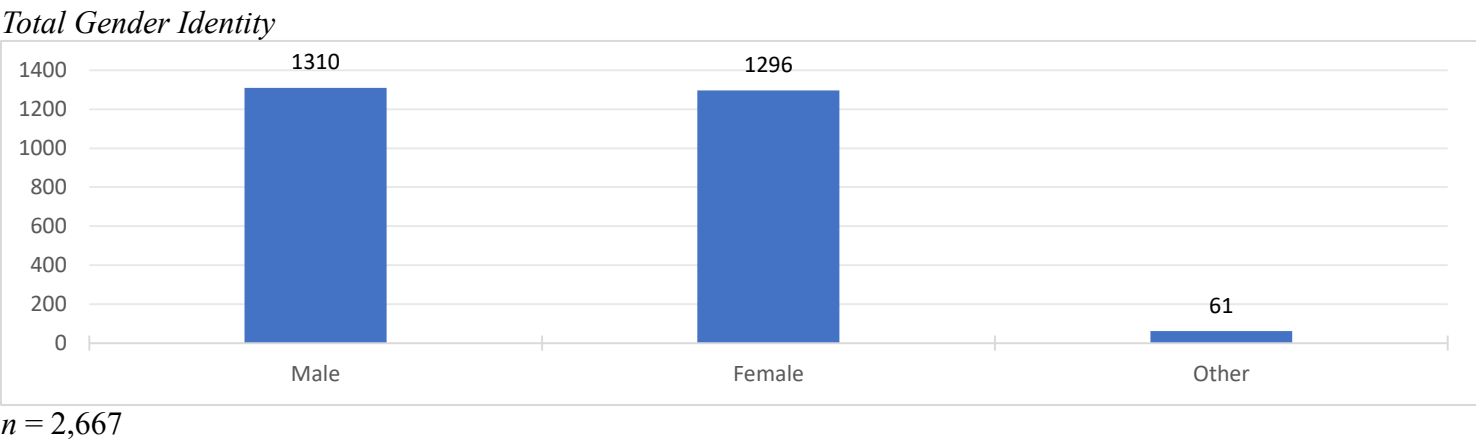
Figure 5

Total Gender Identity

n = 2,667

Figure 6

Not At-risk vs. At-risk by Gender Identity

n= 2,667
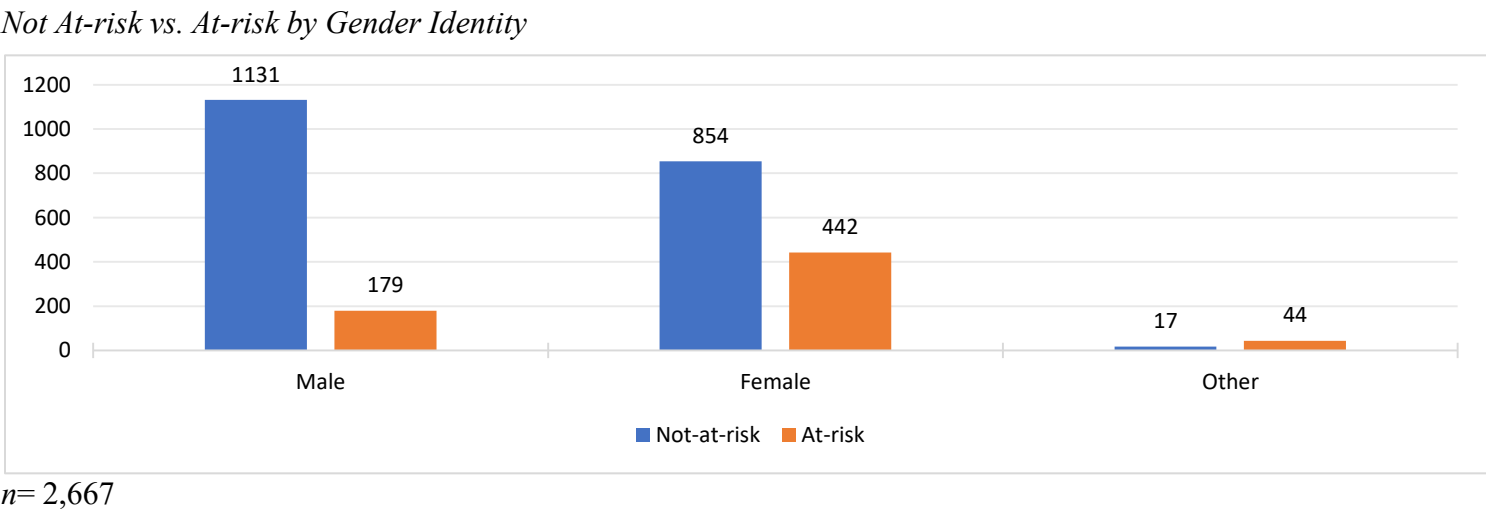
Race and Ethnicity. Of the 2,724 screened students, 2,716 (n) self-reported their race and ethnicity as American Indian, Asian, Black, Black and Latino, Multi-racial, Other, White, or White and Latino. 0.7% (n = 19) self-identified as American Indian, 4.3% (n = 119) self-identified as Asian, 8% (n = 214) self-identified as Black, 4.4% (n = 121) self-identified as Black and Latino, 4.2% (n = 115) self-identified as multi-racial, 3.4% (n = 92) self-identified as other, 67.3% (n = 1829) self-identified as White, and 7.6% (n = 207) self-identified as White and Latino. See figure 7.

Figure 7

Total Race and Ethnicity
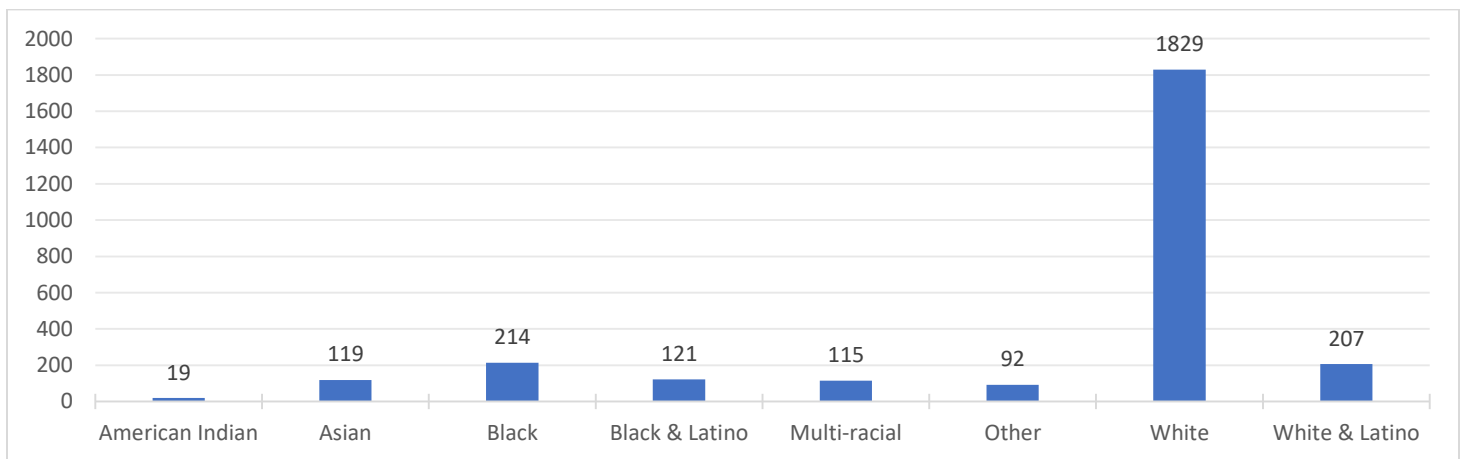
n = 2,716

Figure 8

Not At-risk vs. At-risk by Race and Ethnicity

n = 2,716

Significant Findings and Implications

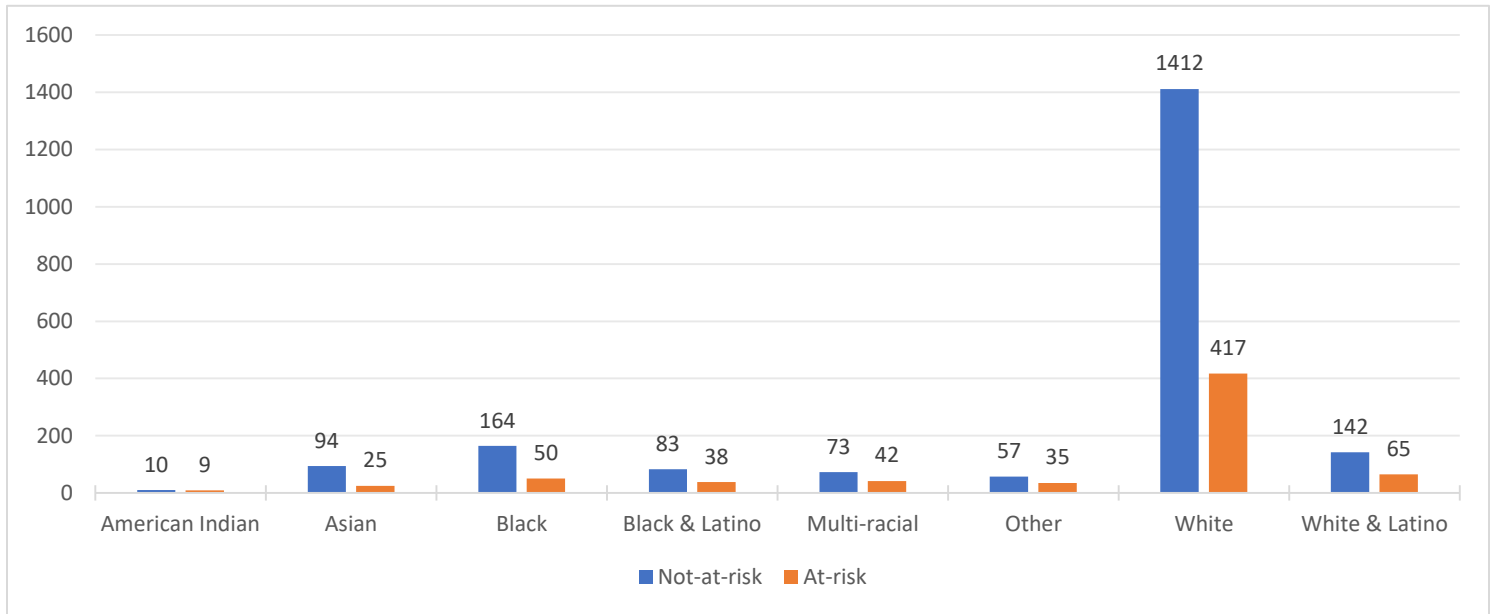In total, based on the sampled population, White not Latino females in the age range of 14-16 years old were the most at-risk population during the 2022-2023 school year for anxiety, depression, and suicidal ideation. Most of the screening data were collected on the tablets using the digital platform. However, due to Wi-Fi, technology, and platform issues, some of the student screenings were completed on paper and the data were entered in a separate Excel sheet. Using the paper screening resulted in missing data because students did not self-report all the demographic responses. Using a digital platform was convenient during the screening process. It provided a faster scoring time and a single location to keep student and case manager information. However, there were limits to the platform's use when needed for the TeenHope outcome reports and overall data retrieval.

Feedback

TeenHope collected Survey Monkey and personal feedback responses from students, school personnel, and TeenHope staff. These data were themed into positive, neutral, and needs improvement responses (Table 1). All responses were anonymous and confidential.

Table 1

Student, School Personnel, and TeenHope Staff Feedback

Positive	Neutral	Needs Improvement
93% of school personnel believe the sign up process was clear and easy.	Experience using a tablet to take the screening: 73% responded "Good" 26% responded "Ok" 1% responded "I did not like using the tablets"	Students would like more information during the education presentation about the screening process
Students reported the process being quick and non-invasive	Student response- Did you watch the TeenHope video? 28% yes, and it was helpful to better understand the TeenHope program and why it is in the school 72% no, did not watch the video	School personnel would like to have a better idea of the screening process and how long the screening process will take
94% of students believed the PowerPoint presentation proved valuable information	Less than 20% of school staff added the TeenHope video link to their school website	Students need more clarity on how to access a copy of their screening during the 2-week post screening period.
100% of school personnel responded that TeenHope staff were professional while in the school.	TeenHope should find a way to accommodate ESL, specifically Spanish speaking, students	Some students believed that the TeenHope case managers could do a better job at sharing screening information and presenting the resource guide.
97% of school personnel responded that TeenHope staff are open and easy to communicate with before, during, and after the screening process	Update TeenHope staff introduction to students during education and screening process.	Students would like more follow up and information on how to deal with identified "issues" and what to do with their screening results
School staff that viewed the TeenHope video found it helpful in sharing the TeenHope process with staff, students, and parents		Some students reported they waited a long time to be seen by a case manager
TeenHope staff enjoyed the convenience and speed of using a digital platform in schools.		TeenHope staff shared desired improvements with the digital platform structure, information, and process

Positive
Students and school personnel believe TeenHope provided space and support for mental health conversations
School personnel feel supported in screening a large number of students
90% of school personnel would recommend TeenHope to other schools. 94% of students would recommend TeenHope to others.
TeenHope case managers and management team believed the Thinkific training modules were helpful in understanding their roles and responsibilities
95% of students reported a positive experience with TeenHope: feelings of being safe and welcomed, provided a space for self-reflection, and staff were kind and made students feel comfortable
Students felt respected when they decided to opt-out

Testimonials

"My friend was being bullied and the school knew. The TeenHope staff identified that he was going to end his life and they helped notify the school, which took further action with my friend and the bullies. Thank you TeenHope, you saved my friends life"- *Ephrata High School Student*

"TeenHope cares about students and our mental health. I am grateful our school has this program."- *Warwick High School Student*

"TeenHope helps us screen a large number of students quickly, we are grateful for the program"- *Lancaster County School Counselor*

"TeenHope has been very helpful for us as counselors and administrators as we relate with students. The screenings have allowed us to have more open dialogue about mental health and we have valued the TeenHope program which has made such a positive impact on our entire school community."-*Kirk Benner, Director of School Counseling at Lancaster Mennonite School*

Dear Neighbor,

While we have all gone through challenging times over the last few years, the staff at Penn Manor wanted to use that opportunity to teach our students to appreciate the things they do have and count everything as a blessing.

While our committee was brainstorming different ways to recognize our blessings here at Penn Manor, one of our members mentioned how grateful we are that our local businesses have continued to support our students and their activities even during those challenging times. Rather than just sitting around and talking about our gratitude amongst ourselves, we decided to let those for whom we are grateful know it.

I am happy to say that you and your business made our list! Please know that we are forever grateful for all that you do for us to make Penn Manor a better community. We are blessed that you are a part of it.

With Sincerest Gratitude,
The Penn Manor Staff and
Members of the Comet Cares Committee

Significant Findings

The feedback findings indicated that when viewed and shared, the TeenHope video is a valuable tool in providing the community with a better understanding of the TeenHope program and respective education and screening process. TeenHope continues to provide a quality positive experience for schools and students. The program can continue to update paperwork and school communication to provide clarity on the TeenHope structure.

Program Development

Based on the community feedback received, one project TeenHope is working on this summer is updating the education presentation. Our team is excited to announce a new education presentation is coming for the 23-24 screening year. The presentation will now be an interactive animated presentation between the TeenHope speaker, students, and the program's new mascot, Hope the hedgehog. Research has shown that a multimedia approach to education enhances learning when both visual and auditory information processing systems are engaged simultaneously (Mayer, 2008; Noetel et al, 2022). For instance, students find it easier to absorb text, such as PowerPoint bullets, when the text is presented concurrently with a spoken lecture. Also, the use of dynamic visuals and animated graphics to draw attention to meaningful information shows significantly greater educational benefit in comparison to static images (Noetel et al, 2022). Studies specific to the use of an animated, two-dimensional "teacher" found it improves information retention, especially when the character serves the function of signaling that a concept is important (Noetel et al, 2022). The TeenHope research and development team are working on Hope's story and incorporating her into TeenHope programing.

TeenHope is also working on ways to better support students based on survey responses. The management team will update the resource guide for the 23-24 screening year and do more research on best practices to screen ESL students. The TeenHope management team will review the screening tools and update demographic questions and responses to match the American Psychological Association (APA, 1990) current standards.

The TeenHope program continues to provide excellent service to the community. Samaritan Center and TeenHope are working towards finding other ways to share the program and see more students. The TeenHope management team will review the TeenHope structure and process in the upcoming annual review.

Future Research

This year, TeenHope screened English-as-a-Second Language (ESL) students in two school districts. There has been a call from the community to increase mental health resources for ESL students (see Table 1). In Lancaster County, 16.1% of residents speak a language other than English at home (U.S. Census Bureau, 2021). In one of the schools, a school approved staff member provided translation during the screening process. In another, students used *Microsoft Translator*, a free translation app the school installed on student iPads, to hold conversations.

While computerized translation services may provide adequate tools for everyday conversations, there is limited research on the use of language apps in clinical health care environments. One study reported that such translation tools are better suited for use in production of educational and promotional resources rather than in mental health care (Xie et al, 2021). As technology continues to advance in facilitating multi-lingual conversations, it is beneficial for TeenHope to continue exploring ways to screen ESL students.

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Appendix

Appendix A Screening Tools

PHQ-9

Student Number: _____ **Date:** _____ ____ **Age:** _____ **Gender Identity:** (Circle One) **Male Female Other**

(Circle one)

Black (but not Latino)   White and Latino   Multi-racial

White (but not Latino) Black and Latino   American Indian Asian   Write in: _____

Instructions: How often have you been bothered by each of the following symptoms during the past **two weeks**? For each symptom put an **"X"** in the box beneath the answer that best describes how you have been feeling.				
	(0) Not at all	**(1)** Several days	**(2)** More than half the days	**(3)** Nearly every day
1. Feeling down, depressed, irritable, or hopeless?				
2. Little interest or pleasure in doing things?				
3. Trouble falling asleep, staying asleep, or sleeping too much?				
4. Poor appetite, weight loss, or overeating?				
5. Feeling tired, or having little energy?				

6. Feeling bad about yourself – or feeling that you are a failure, or that you have let yourself or your family down?				
7. Trouble concentrating on things like schoolwork, reading, or watching TV?				
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you were moving around a lot more than usual?				
9. In the past two weeks, have you had thoughts that you would be better off dead, or of hurting yourself in some way?				

Total:

GAD-7

Over the <u>last 2 weeks</u>, how often have you been bothered by the following problems? *(Please circle your answer.)*

	Not at all	**Several days**	**Half the days**	**Nearly Every Day**
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3