PEDIATRIC ANXIETY SCREENING IN A SCHOOL-BASED SETTING

UNIVERSITY OF HAWAIʻI AT MĀNOA SCHOOL OF NURSING AND DENTAL HYGIENE

A DOCTOR OF NURSING PRACTICE PROJECT SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAIʻI AT MĀNOA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF NURSING PRACTICE

MARCH 2025

By

Zoë L. Shih

Dissertation Committee:
Deborah Mattheus PhD, Chairperson
Marie DeMers, Content Expert

Keywords: anxiety, screening tool, school-based, elementary school

Abstract

Anxiety is one of the leading childhood mental health disorders and often goes undiagnosed. School based clinics play an important role in being able to screen students for anxiety and provide referrals if needed. Nurses working for Hawaii Keiki (HK): Healthy and Ready to Learn need guidance on what tool to use for screening elementary aged children.

A literature review and analysis were conducted and a comprehensive list of commonly used anxiety screening tools utilized in the school setting was collected. The Spence Children's Anxiety Scale (SCAS) was the most highly utilized and ideal for use by HK nurses as it is free and publicly available, has over 30 translations, and can be completed in under 10 minutes. It was recommended that HK utilize the SCAS in its elementary school clinics to screen students suspected of having anxiety.

An evidence-based practice implementation project was performed to train HK nurses on anxiety and how to use the SCAS. A survey was given prior to the training to collect baseline knowledge and then the same survey was given after the training to determine the amount of knowledge gained from the training. Analysis of the survey data indicated that this implementation project was effective in educating the staff about anxiety and the appropriateness of the SCAS for the elementary school setting.

Table of Contents

List of Tables

Pediatric Anxiety Screening in a School-Based Setting

Hawaii Keiki (HK): Healthy and Ready to Learn is a partnership between the University of Hawaiʻi at Mānoa (UHM) School of Nursing and the Hawaiʻi State Department of Education (HIDOE). HK provides much needed access to school nursing services in the Hawaiʻi public school system which services approximately 170,000 students. There are currently 33 Registered Nurses (RN) and 15 Advanced Practice Registered Nurses (APRN) in 58 clinics across the various Hawaiian Islands. Services include on-site school nursing services, telehealth, mental health, oral health, vaccines, and a health hotline.

Schools play an important role in addressing the mental health needs of children, as most children attend school. Unfortunately, many young children and adolescents with mental health issues go untreated. However, when they do receive services, the school is their primary source for treatment (Allison et al., 2014). School nurses are uniquely qualified to conduct anxiety screenings, refer for mental health services, educate parents/teachers and even implement brief interventions (Drake et al., 2015). As children with anxiety are more likely to visit the school nurse and become known as “frequent flyers,” this puts the school nurse in the prime position to initiate screenings for anxiety (Drake et al., 2015).

Background

Recent data from the Centers for Disease Control and Prevention (CDC) (2023) estimate that approximately 9.4% of children ages 3 to 17 have a diagnosis of anxiety. Anxiety is now among the most common childhood mental health disorders with three quarters of anxiety disorders having their origins in childhood (Griffiths & Fazel, 2016). The COVID-19 pandemic only increased the prevalence of anxiety in children (Gleason & Thompson, 2022). Childhood anxiety can lead to social, emotional and academic difficulties which can result in substance

abuse, substance dependence, or both, poor academic performance, functional impairment and even suicide (Viswanathan et al., 2022). Children with anxiety disorders are 3.5 times more likely to experience depression or anxiety in adulthood, which highlights the importance of early diagnosis and appropriate treatment during childhood (Griffiths & Fazel, 2016).

In 2022 the United States Preventive Services Task Force (USPSTF) developed a new recommendation for all clinicians to screen for anxiety in children and adolescents from ages 8 to 18. This new recommendation was the result of the increasing prevalence of anxiety disorders among children. The USPSTF concluded with moderate certainty that screening children ages 8 to 18 years old has a moderate net benefit. They found insufficient evidence on screening children younger than 8 years old (USPSTF, 2022).

In 2020 The American Academy of Child and Adolescent Psychiatry (AACAP) created clinical practice guidelines for the assessment and treatment of children and adolescents with anxiety disorders. They report that the median age of onset of pediatric anxiety disorders is 11 years old. While the first symptoms may appear during a specific developmental stage and be acute in nature, the overall course of anxiety tends to be chronic (Walter et al., 2020). Unfortunately, less than half of children with mental health concerns receive the care they need (Walter et al., 2020). Early identification and referral for treatment can have a positive impact on an individual. This can significantly change the course of illness as well as reduce the risks of comorbid conditions from developing (Walter et al., 2020).

Needs Assessment

Currently middle and high school HK clinics (n=31) staffed with an RN or APRN utilize the Generalized Anxiety Disorder scale (GAD-7), a self-reported anxiety screening questionnaire that is commonly utilized in outpatient and primary care settings. The psychometric properties

of the GAD-7 have been established for the adolescent population (Hughes et al., 2021) but it has not been validated for younger ages. For younger children it may be more difficult to assess their responses accurately because of the difference in how anxiety manifests in this age group. For younger children it is common for them to report somatic complaints such as headaches, stomach aches, fatigue or to exhibit behaviors such as school avoidance, disruptive classroom behaviors, or avoidance of social situations (Allison et al., 2014). It is therefore difficult to accurately assess the scope and magnitude of these issues that may not be captured using the GAD-7.

Currently the HK nursing staff do not have a clear process to screen an elementary aged child for anxiety. The nurses that work in elementary schools (n=23) frequently see the same children for somatic complaints as mentioned above. Studies show that school nurses are often occupied with students who utilize school health services because of their frequent, vague physical complaints that are a result of their untreated anxiety (Muggeo & Ginsberg, 2019). Oftentimes the children cannot elaborate on their feelings any further and continue to visit the clinics for these issues. The nurses may be informed, aware and concerned about anxiety but have no formal screening tool to address it in the elementary school setting.

According to Muggeo & Ginsberg (2019) school nurses are often the first to identify anxious students and are uniquely positioned to conduct early identification and intervention. Having a screening tool available in HK would assist in getting children connected to the appropriate services for further evaluation and treatment if needed.

Problem Statement

USPSTF and AACAP recommend screening for anxiety in pediatric patients as young as eight years old. There are multiple screening tools for anxiety that are developed for children but

they do not indicate the setting (primary care, hospital, behavioral health clinic, school, etc.) in which to utilize them. There is currently no recommendation regarding which screening tool would be appropriate for use in an elementary school setting to screen for anxiety. The focus of this evidence-based practice (EBP) project was to identify an age-appropriate tool to screen for anxiety in elementary school children, train the staff on its use and evaluate its effectiveness in improving school nurses' knowledge and comfort with this assessment tool.

PICOT

Can a pediatric anxiety assessment screening tool for children ages 5 to 12 in the school setting improve HK nurses' knowledge and comfort with evaluation of students with suspected anxiety compared to their baseline competencies?

Purpose and Objectives

The purpose of this EBP project was to identify an anxiety assessment screening tool that is appropriate for children ages 5 to 12 years old to be used in a HK school-based clinic. Having an evidence-based tool and training in its use can assist the HK nurses in properly assessing a young child with suspected anxiety and then connecting them to the necessary services. The objectives included:

1. Determine baseline knowledge and comfort level with assessment of anxiety in a pilot group of school nurses.
2. Train relevant staff on the use of the identified screening tool.
3. Determine change in knowledge and comfort level with the screening tool after the training.

Conceptual Framework

The conceptual framework used for this project was the Johns Hopkins Evidence-Based Practice model (Johns Hopkins Evidence Based Practice Model, 2024). It is designed for nurses and other healthcare professionals to make clinical decisions through a problem-solving approach. The model provides useful tools to facilitate the EBP process. It can be used to discover new knowledge or to update existing knowledge. The focus is on the learner's role and starts with an investigation of a specific topic or problem to gain insight into what is already known and where there are gaps in the knowledge. This can lead to the development of an inquiry question. An individual or team can look for the best evidence to support the practice question they developed and then how to translate the best evidence into practice (Dang et al., 2021).

Literature Review

A systematic review of the literature was conducted in January 2024. PubMed, CINAHL and APA PsycINFO online databases were utilized. Medical subject headings and Boolean operators (AND/OR) were utilized to help narrow the search for relevant articles. Search terms included: anxiety, anxiousness, worries, nervousness, school, schools, school-based, "school-based," screening, assessment, test, diagnosis, diagnostic, tool, tools, instrument, and instruments. Filters were applied in all databases to search for full text, English, the age range of "child: 6-12 years old," and a publication range within the past 10 years. The inclusion criteria included articles written in English that screened children between the ages of 5 to 12 years old for anxiety in the school setting and articles that recommended anxiety screening tools for use in school settings.

A total of 672 articles were identified using the Boolean search terms and the inclusion criteria. PubMed produced 349 articles, CINAHL produced 119 articles, and APA PsycInfo

produced 204 articles. All articles were combined into the reference managing software, Zotero, and duplicates were removed which resulted in 655 remaining articles. A title and abstract review were performed to identify applicable articles. Exclusion criteria included: age below 5 years old or above 12 years old, lack of an anxiety assessment tool listed, anxiety assessment tool requiring the use of a trained mental health professional, screening location other than a school based setting (primary care, hospital, mental health treatment facility, community center), screening tool indicated for depression or other mental health condition, articles based on animal research, and non-English text. This resulted in 642 articles being removed.

The article screening process produced 13 relevant articles, and the necessary information was transferred into a literary critique table. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Flow Diagram (see Appendix A) contains details regarding the screening process. Since this was an individual project a blind review of the articles was not conducted.

For evaluating the level of evidence, the Johns Hopkins Evidence-Based Practice Model for Levels of Evidence was used (CEBM, 2023). For evaluating the quality of evidence, the Newcastle-Ottawa Scale for nonrandomized trials (Gierisch et al., 2014) was used. This information was included in the literary critique table. The quality of standardized reporting was guided by PRISMA and STROBE (Strengthening the Reporting of Observational Studies in Epidemiology). No automation tools were utilized.

The articles in this study included 23% quasi-experimental (3 articles), 23% randomized controlled trials (3 articles), 15.5% qualitative studies (2 articles), and 7.5% each for meta-analyses, co-design, systematic review, psychometric evaluation and cross-sectional studies

(1 article each). Study characteristics and outcomes were included in the literary critique table. The levels of evidence are broken down in Table 1.

Table 1

Johns Hopkins Hierarchy of Evidence Guide

Evidence Level	Type of Evidence	Number of Articles
I	Experimental study, RCT	3
II	Quasi-experimental study	6
III	Nonexperimental study	4
IV	Opinion of respected authorities and/or nationally recognized expert committees	0
V	Experiential and non-research evidence	0

Most of the studies reviewed were of good quality according to the Newcastle-Ottawa Scale. To determine good quality evidence a cut-off score of 5/9 was used and 77% (10 articles) met this criterion. One study was considered fair quality with a score of 3/9 and none of the studies were considered poor quality which is a score of less than 3/9. Two articles did not meet the criteria to be graded using the Newcastle-Ottawa Scale due to being a meta-analysis and a systematic review for anxiety screening tool recommendations in schools.

All studies performed anxiety assessment tool screenings to students in the school setting only or were already tested and recommended for use in the school setting. Studies that were conducted outside of the school setting were eliminated at the beginning of the EBP project. In all included studies, participants ranged from as young as 5 years old up to 21 years of age. Studies that only included children older than 12 were excluded. However, some studies included a varying range of ages, such as 8 to 18 years old. The main characteristic of contributing studies was the use of a specific anxiety assessment screening tool and how often it was utilized between the studies.

A manual analysis was conducted to determine how many times each screening tool was utilized or mentioned in the remaining 13 articles. Many were utilized only once, and others were reported on more frequently. Most of the articles mentioned more than one screening tool at a time. Screening tools that were specific to depression were removed.

The final article selection revealed 20 separate anxiety assessment screening tools utilized at least once. The screening tools were: Revised Children's Manifest Anxiety Scale, Revised Children's Anxiety and Depression Scale, Spence Children's Anxiety Scale, Short Mood and Feelings Questionnaire, Screen for Child Anxiety Related Disorders, Child Behavior Checklist, State Trait Anxiety Inventory, Fear Survey Schedule for Children, Anxiety and Related Disorders Interview Schedule, Social Phobia and Anxiety Inventory, Self-rating Anxiety Scale, Multidimensional Anxiety Scale for Children, Beck Anxiety Inventory, Hamilton Anxiety Rating Scale, Strengths and Difficulties Questionnaire, Social and Health Assessment, Child RADAR, Children's Anxiety Scale, Pediatric Index of Emotional Distress, and Penn State Worry Questionnaire for Children.

Literature Synthesis

The information gathered from the articles included which anxiety assessment screening tools were utilized. Once this information was collected then the evidence was synthesized in order to determine the results. The screening tools that were utilized more than once were focused on and then data regarding each screening tool was compared. The indicated age range for the screening tool was a focus, along with the subscales that each screening tool measures for. The cost of a screening tool could be a prohibitive factor for HK so any screening tool with an associated fee was eliminated.

Four screening tools were utilized more than once. They were the Spence Children's Anxiety Scale (SCAS), the Revised Children's Anxiety and Depression Scale (RCADS), the Screen for Child Anxiety Related Disorders (SCARED), and the Multidimensional Anxiety Scale for Children (MASC). The SCAS was utilized the most and mentioned in 54% of the articles, followed by the RCADS which was mentioned in 31% of the articles. The SCARED and MASC were mentioned in 23% and 15% of the articles respectively. More than one screening tool was commonly mentioned in an article at a time. Four of the articles, or 31%, mentioned a combination of the above screening tools (RCADS, MASC, SCARED, SCAS) together.

For this EBP project, the top three screening tools utilized (SCAS, RCADS, SCARED) were highlighted because they are all free and publicly available. The MASC, which was the least mentioned, has an associated fee which could limit its usage in school-based settings and so for that reason it was eliminated.

The SCAS assesses six domains of anxiety including generalized anxiety, obsessive-compulsive disorder, panic/agoraphobia, physical injury fears, separation anxiety, and social phobia. It is indicated for ages 8 to15 years old and is free for non-commercial use. It is designed to be relatively easy and quick to complete in approximately 10 minutes (SCAS, 2021). It consists of 44 items and children are asked to rate the degree to which they experience each symptom on a 4-point frequency scale (SCAS, 2021). A parent form is also available.

The SCAS is mentioned in the Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders by AACAP. It is one of four screening tools identified with acceptable psychometric properties and is freely available (Walter et al., 2020). It is translated into 38 other languages besides English (SCAS, 2021).

The RCADS is a 47 item self-report that includes subscales for separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder, and low mood (major depressive disorder) (CORC, 2024). It is indicated for children 8 to18 years old with the potential to use in younger ages also (RCADS, 2024). The questions are rated with a Likert scale of never, sometimes, often and always. It can take 5 to 10 minutes to complete the self-report and is free for non-commercial use. If needed, a clinician can read the questions to a child for easier administration (CORC, 2024). It is translated into 23 different languages besides English (RCADS, 2024). The RCADS is not listed on either the USPSTF or the AACAP clinical guidelines; however, it is important to note that neither of the two are exhaustive lists.

SCARED consists of a parent and child self-reporting form with 41 questions each. For each question, there is a Likert Scale with 0 for not true or hardly ever true, 1 for somewhat true or sometimes true, and 2 for very true or often true. The child version is suitable for ages 8 and up and it is recommended that a clinician explain all the questions or have the child sit by an adult in case they have questions. It is designed to measure generalized anxiety, separation anxiety, social anxiety, school avoidance, and panic disorder (Birmaher et al., 1999).

According to the USPSTF Recommendation Statement (2022), the SCARED is one of two screening tools currently being widely used in clinical practice for detecting anxiety. It is free and publicly available, which adds to the desirability of this screening tool. In addition to being included in the USPSTF list of screening tools, it is also listed in the Clinical Practice Guidelines for the Assessment and Treatment of Children and Adolescents with Anxiety Disorders by the AACAP.

Table 2

Anxiety Screening Tool Comparison

	SCAS	RCADS	SCARED
Age Indication	8-15 years old	8-18 years old	8-18 years old
Number of Questions	44	47	41
Time to Complete	10 minutes	5-10 minutes	10 minutes
Parent Version Available?	Yes	Yes	Yes
Subscales/Domains	Generalized anxiety Panic/agoraphobia Social phobia Separation anxiety **Obsessive-compulsive** **Physical injury fears**	Generalized anxiety Panic disorder Social phobia Separation anxiety **Obsessive-compulsive** **Low mood (major depressive disorder)**	Generalized anxiety Panic disorder Social anxiety Separation anxiety **School avoidance**
Translations	38	23	13
Cost	Free	Free	Free

*Bolded subscales/domains are unique to that specific assessment tool

It is important to note the difference in the subscales measured with the three highlighted assessment tools in Table 2. All three screening tools measure generalized anxiety disorder, panic disorder, separation anxiety and social phobia/anxiety disorder. Besides those, they each measure a unique subscale that the others do not: SCAS measures physical injury fears, RCADS measures low mood (major depressive disorder), and SCARED measures school avoidance. SCAS and RCADS measure obsessive-compulsive disorder which the SCARED does not.

RCADS is the only screening tool to also include a measure for depression. For this EBP project, screening tools that measure for only depression were eliminated initially. While the RCADS could still be a useful screening tool in the school setting, it does not meet the needs of the nurses in HK. The current process for the HK mental health program in middle and high schools is to utilize the GAD-7 for anxiety and the PHQ-9 (Patient Health Questionnaire) for depression. HK is in need of an anxiety-only screening tool, as a separate screening tool will be utilized for depression.

After eliminating the RCADS, the SCARED and the SCAS remained for selection as the anxiety assessment screening tools for this project. Since the SCAS was mentioned more than twice the amount that the SCARED was in the literature review it was chosen as the anxiety assessment screening tool for recommended use in the HK elementary school clinics.

Methods

Project Design

This quality improvement project was conducted in conjunction with UHM and HK to assist with identifying an anxiety assessment screening tool appropriate for the elementary school setting. The initial needs assessment detailed the lack of a protocol in place to address anxiety in the elementary school setting. This EBP project identified a screening tool appropriate for use in the elementary school setting and planned to train staff in its use. The study method utilized was pre and post-test surveys to determine knowledge acquisition from the training. Survey questions were developed with the input of the project chair and content expert to determine knowledge acquisition from the training. The questions were not tested for validity and reliability. The goal was to determine if the SCAS is a suitable screening tool to be utilized in the HK elementary school clinics.

This project did not qualify as human subject research and therefore did not require Institutional Review Board approval, as it was an educational EBP project focused on identifying knowledge acquisition from training on anxiety and the use of an anxiety assessment screening tool. All data was collected voluntarily and de-identified.

Setting

The HK program consists of RNs, pediatric, family and psychiatric mental health nurse practitioners (PMHNP), medical assistants, certified nursing assistants, dental assistants and an

administrative team. A portion of the middle and high school nursing staff participate as part of the HK mental health team. They routinely administer anxiety and depression screening tools to identify students and refer them for additional services or schedule them for telehealth appointments with the PMHNPs. The mental health team meets monthly via a virtual platform and the meetings are led by the mental health program manager. This EBP implementation project was performed during a routine monthly meeting.

Participants

Participants included approximately 10 HK RNs and APRNs along with the mental health program manager. All staff present for the intervention were from middle and high school clinic settings. There are no elementary school nurses on the mental health team and none of the PMHNPs were present at the meeting. All participants were informed that their participation in this project was voluntary and no personal or student data was collected.

Intervention

On October 15, 2024, the information from this EBP project was presented during the monthly HK mental health team meeting. The training was aimed at educating the participants about anxiety and the SCAS. A pre-test Google Forms survey was sent out via email prior to the virtual presentation to gather baseline knowledge about the topic. A QR code that linked to the survey was also shared at the beginning of the presentation to promote participation. Extra time at the beginning of the training was given to facilitate pre-survey completion.

Google Slides was utilized for the presentation (see Appendix B) and the training lasted approximately 20 minutes total. The training started with an introduction about anxiety in children, a brief summary of the literature review and synthesis and then focused on the SCAS

and its feasibility within HK. The utility of the SCAS was demonstrated to show the ease of use and scoring in the elementary school setting.

After the presentation the same survey was conducted to determine the effects of the training. The QR code was shared again and an email with the survey link was sent to remind participants to complete the survey. The training was recorded so that members of the mental health team that missed the meeting could still participate and help to increase the survey participation.

Data Collection

The data collection method deemed most appropriate for this project was the use of pre and post-test surveys. The intention was to determine baseline knowledge and comfortability with anxiety screening prior to the intervention and then to measure any change detected after the intervention. The pre and post-test surveys were the same and anonymous however, participants were asked to create an identifier at the end of the survey to link their pre-and post-test survey results. The instructions were to include: "the last two letters of your first name, the last letter of your middle name and the first three digits of your street address."

There were 10 questions total, most of them utilizing a Likert scale and one free-text answer (see Appendix C). The questions were created by all project members and included topics such as anxiety screening in the school setting, anxiety screening in autism and socio-cultural considerations for assessing anxiety. Five specific questions pertained to this EBP project. Two of those questions were specific to the use of the SCAS and its use in the school setting.

Data was collected from the pre- and post-test surveys via Google Forms. The results from both the pre and post-test surveys were exported to Google Sheets for review and analysis..

Results

Seventeen total responses were received from both the pre and post-test surveys; however, only five sets were able to be linked together with identical identifiers to evaluate both the pre and post-test survey responses. The remaining seven responses were omitted due to a lack of identifying information to link them together.

To gauge a baseline understanding for staff's experience dealing with anxiety, they were asked how often they see students experiencing symptoms of anxiety. They answered on a 5-point Likert scale ranging from never to everyday. While the mean score was 3.4 out of 5 it is important to note that eighty percent (4 out of 5 respondents) reported seeing students with anxiety every other day to every day.

Table 3

Survey Question 1 (N=5)

Following question was answered based on a 5-Point Likert scale (1 = Never, 2 = Once a Month, 3 = Once A Week, 4 = Every Other Day, 5 = Everyday)	Mean Score (pre-test)	Mean Score (post-test)
Approximately how often have you encountered students who showed signs of anxiety in your practice?	3.4	3.4

Participants were also asked if they had used an anxiety assessment screening tool before and if so, which one. Despite asking this question to staff that were already a part of the mental health team there were 2 responses left blank. Of those that answered the question, the most used screening tool currently is the GAD7. The GAD7 is presently used in practice in the HK middle and high school clinics which is indicated for that age range. Since it is for ages 11 and up it is not possible to use this screening tool in the elementary school setting.

Table 4

Survey Question 6 - Two Part Question (N=5)

Have you used an anxiety assessment screening tool in practice before?	Yes - 3 Blank - 2
If so, which screening tool do you most commonly use in your practice?	GAD7 - 3 PHQ9 - 1 Blank - 2

The remaining questions that pertained to this EBP project were the most important in determining the effects of this project in meeting its objectives. To gauge an understanding of how much participants learned about anxiety in the training they were asked if they were comfortable with the process of assessing children for anxiety and referring them for services. A one on the Likert scale indicated strongly disagree and a five indicated strongly agree. Pre-test survey results revealed a mean score of 3.8 out of 5 and that increased slightly to 4.2 out of 5 after training. However, their comfort level utilizing the SCAS to screen for anxiety in the general education population saw a greater increase. Pre-test survey results were 2.8 out of 5 and then post-test survey results increased up to 4.0 out of 5. This showed increased favorability towards this screening tool since prior to the intervention none of the survey participants were comfortable with utilizing the SCAS. Plans to use the SCAS also increased from 2.4 out of 5 in the pre-test survey to 4 out of 5 in the post-test survey.

Table 5

Survey Question 2, 7 and 10 (N=5)

Following questions were answered based on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree)	Mean Score (pre-test)	Mean Score (post-test)	Percent Increase
I am comfortable with the process of assessing children for anxiety and referring them to additional services if needed.	3.8	4.2	8
I am comfortable using the SCAS to screen for anxiety in the general education population.	2.8	4.0	24

I plan to use the SCAS tool in my practice to screen for anxiety.	2.4	4.0	32

The purpose of this EBP project was to identify an anxiety assessment screening tool that was appropriate to use in the elementary school setting. It was determined that this was the SCAS after completing the literature review and analysis. Then the objectives outlined at the start of the project focused on determining baseline knowledge of and comfort levels with assessing anxiety, training the staff on the use of the anxiety assessment screening tool and then determining any change in knowledge and comfort after the training. These objectives guided this project and the survey development. The mean score for knowledge and comfort level with assessment of anxiety and referring to additional services increased 0.4 points from the pre-test to the post-test which equates to an 8% increase. This was a modest increase but it's important to note that this training was presented to the HK mental health team that already has a high baseline knowledge for this issue. Increased knowledge of the SCAS and comfort level with using it had a sizable gain. Pre-test results indicated a lack of knowledge of the SCAS and there was a 24% increase in knowledge from the post-test results. Plans to use the SCAS in the future also had favorable results with an increase of 32% before and after the training.

Overall, this EBP project was favorable towards the use of the SCAS for HK staff in the future. Analysis of the data indicated that this implementation project was effective in educating the staff about anxiety and the appropriateness of the SCAS for the elementary school setting. The pre and post-test survey results indicated an overall increase in knowledge and comfort with assessing anxiety and utilizing the SCAS in the future.

Discussion

The purpose of this EBP project was to assist HK nurses to assess elementary aged students with suspected anxiety utilizing an appropriate screening tool. The literature review and

analysis identified commonly utilized anxiety assessment screening tools and were able to identify the SCAS as the ideal screening tool to be utilized in HK elementary school clinics. The SCAS was the most mentioned article in the literature review over the SCARED, RCADS and MASC. It assesses only anxiety, is free and publicly available, can be completed in 10 minutes, and has over 30 translations. For these reasons it was selected as the focus of this EBP implementation project.

This project was able to adequately educate the HK mental health team on this new screening tool and saw favorable results in regard to the SCAS. There was limited knowledge of the SCAS prior to the training however afterwards the staff's comfort level with the SCAS was considerably increased. Most promising was the high rate of increase in plans to use the SCAS in the future. The findings of this EBP project support the use of the SCAS for the HK mental health program to implement in elementary school clinics.

Strengths

A strength of this EBP project is the commitment of HK since they are currently without an anxiety assessment screener for elementary school students. Their participation in this project has provided them with the necessary tools to assist in screening for anxiety in the elementary school setting in the future.

Limitations

The limitations of this project include limiting the search terms in the literature review to include only those screenings that were conducted in schools or already recommended for schools. This limited the number of articles to review considerably. More data concerning pediatric anxiety assessment screeners could have been gathered if the inclusion criteria were expanded. This would have produced more pediatric anxiety assessment screening tools and

possibly strengthened the results towards the SCAS or another pediatric anxiety assessment screening tool.

While the results were favorable for this implementation project it's crucial to note that overall, the respondent rate was considerably low (N=5). This limited the information available to evaluate this project because it was set up to evaluate each individual participant's pre and post-test scores. The use of such a detailed system to create a unique identifier for each participant was a limiting factor. Forty-one percent of the responses (7 out of 17) were not usable because they could not be linked.

This training was also given to middle and high school HK staff who are currently using an anxiety and depression screening questionnaire already. They have been previously trained in assessing anxiety and utilizing a screening tool as needed. Their student population would also be considered generally easier to screen for anxiety as compared to elementary school students. It may have been more effective to present this project and intervention to elementary school staff since that is the group that is ultimately in need of an anxiety assessment screening tool.

Relation to DNP Essentials

This EBP project addressed the eight DNP essentials (American Association of Colleges of Nursing, 2006). Essentials I and III were demonstrated through the scientific underpinnings of this project in evidence-based practice and an extensive review and synthesis of the available literature. Essential II was demonstrated by the implementation of this project under the direction of myself, the DNP student. Essential IV was demonstrated through effective use of electronic surveys, Google documents, and conferencing software. Essential V was demonstrated by advocating for increased mental health services for the DOE students serviced by the HK nurse. Essential VI was demonstrated by collaborating with the HK mental health

team and the members of this DNP group. Essential VII and VIII were demonstrated by addressing pediatric mental health in the school setting and designing, implementing and evaluating this project's findings to improve population health.

Table 6

The Essentials of Doctoral Education for Advanced Nursing Practice

The Essentials of Doctoral Education for Advanced Nursing Practice		Application of the Essential
I.	Scientific Underpinnings for Practice	The Johns Hopkins Evidence-Based Practice model was utilized to guide this project.
II.	Organizational and Systems Leadership for Quality Improvement and Systems Thinking	This project aimed to improve the availability of mental health services for Hawaiʻi Keiki staff.
III.	Clinical Scholarship and Analytical Methods for Evidence-Based Practice	A detailed literature review and analysis was conducted to translate the available evidence into a practice change.
IV.	Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care	Technological resources such as conferencing platforms, electronic surveys and Google docs/slides were used to perform the training.
V.	Health Care Policy for Advocacy in Health Care	A practice change was advocated to increase services available to DOE students that Hawaiʻi Keiki services.
VI.	Interprofessional Collaboration for Improving Patient and Population Health Outcomes	Collaboration with Hawaiʻi Keiki mental health team and this EBP project team.
VII.	Clinical Prevention and Population Health for Improving the Nation's Health	Anxiety, a leading mental health diagnosis in children, was the focus of this group's EBP projects.
VIII.	Advanced Nursing Practice	A focus on anxiety in the elementary school setting guided this project in order to design, implement and evaluate the project's findings to address the problem.

To further this EBP project, it would be beneficial to create an implementation protocol to test the use of the SCAS in the elementary school setting with the HK mental health team. A review of the current anxiety screening protocols for middle and high schools would have to be adapted for the elementary school setting. The protocol would include how to recognize a child experiencing anxiety and indications for usage of the screening tool, specific age range that the screening tool is indicated for, administration guidelines, scoring guidelines, and a flow chart for referrals and follow-up care. Children would be able to complete the screening tool in school with or without the help of a trained HK staff. Parent versions could be sent home digitally or via paper copies. Results would be scored by the HK nurses and they will follow the protocol for handling positive screeners. Previously school counselors have always been a referral source and could still help to work with a child. However, children with anxiety need to be referred to a mental health provider. This could be with the HK mental health program, Hazel Health, or an outside mental health provider. In rare cases, the use of the Crisis Hotline would be utilized for a child in extreme need.

Conclusion

There is not one specific anxiety assessment screening tool that is recommended for use in an elementary school setting. Upon review of the current literature, the SCAS was the most highly utilized tool and therefore recommended for use in the HK elementary school clinics. A presentation was made to HK nursing staff to educate them about the findings of this project and determine knowledge acquisition from the presentation. The results were favorable in that the training was effective, and staff felt comfortable utilizing the SCAS and would plan to use it in the future. Future projects could benefit from evaluating the actual use of the SCAS in the elementary school setting.

References

Adriaanse, M., van Domburgh, L., Zwirs, B., Doreleijers, T., & Veling, W. (2015). School-based screening for psychiatric disorders in Moroccan-Dutch youth. *Child and Adolescent Psychiatry and Mental Health*, *9*.

Allison, V. L., Nativio, D. G., Mitchell, A. M., Ren, D., & Yuhasz, J. (2014). Identifying Symptoms of Depression and Anxiety in Students in the School Setting. *Journal of School Nursing*, *30*(3), 165–172. CINAHL with Full Text. https://doi.org/10.1177/1059840513500076

American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice.* Washington, DC: AACN.

Andrews, J. H., Cho, E., Tugendrajch, S. K., Marriott, B. R., & Hawley, K. M. (2020). Evidence-Based Assessment Tools for Common Mental Health Problems: A Practical Guide for School Settings. *Children & Schools*, *42*(1), 41–52. https://doi.org/10.1093/cs/cdz024

Ball, S., Reardon, T., Creswell, C., Taylor, L., Brown, P., Ford, T., Gray, A., Hill, C., Jasper, B., Larkin, M., Macdonald, I., Morgan, F., Pollard, J., Sancho, M., Sniehotta, F. F., Spence, S. H., Stainer, J., Stallard, P., Violato, M., & Ukoumunne, O. C. (2024). Statistical analysis plan for a cluster randomised controlled trial to compare screening, feedback and intervention for child anxiety problems to usual school practice: Identifying Child Anxiety Through Schools-identification to intervention (iCATS-i2i). *Trials*, *25*(1), 62. https://doi.org/10.1186/s13063-023-07898-6

Birmaher, B., Khetarpal, S., Brent, D., Cully, M., Balach, L., Kaufman, J., & Neer, S. M. (1997). The Screen for Child Anxiety Related Emotional Disorders (SCARED): Scale construction and psychometric characteristics. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(4), 545–553. https://doi.org/10.1097/00004583-199704000-00018

Burns, J. R., & Rapee, R. M. (2019). School‐based assessment of mental health risk in children: The preliminary development of the Child RADAR. *Child & Adolescent Mental Health*, *24*(1), 66–75. https://doi.org/10.1111/camh.12258

CDC. (2023, July 25). *Anxiety and Depression in Children | CDC*. Centers for Disease Control and Prevention. https://www.cdc.gov/childrensmentalhealth/depression.html

Dang, D., Dearholt, S. L., Bissett, K., Whalen, M., & Ascenzi, J. (2021). *Johns Hopkins evidence-based practice for nurses and healthcare professionals: Model & guidelines* (Fourth edition). Sigma Theta Tau International.

Drake, K. L., Stewart, C. E., Muggeo, M. A., & Ginsburg, G. S. (2015). Enhancing the Capacity of School Nurses to Reduce Excessive Anxiety in Children: Development of the CALM Intervention. *Journal of Child and Adolescent Psychiatric Nursing*, *28*(3), 121–130. https://doi.org/10.1111/jcap.12115

Erford, B. T., & Lutz, J. A. (2015). Choosing Assessment Instruments for Anxiety Practice and Outcome Research With School-Aged Youth. *Measurement & Evaluation in Counseling & Development*, *48*(3), 214–225. https://doi.org/10.1177/0748175615578755

Gierisch, J. M., Beadles, C., Shapiro, A., McDuffie, J. R., Cunningham, N., Bradford, D., Strauss, J., Callahan, M., Chen, M., Hemminger, A., Kosinski, A., & Williams, J. W. (2014). *Health Disparities in Quality Indicators of Healthcare Among Adults with Mental Illness*. Department of Veterans Affairs (US). http://www.ncbi.nlm.nih.gov/books/NBK299080/

Gleason, M. M., & Thompson, L. A. (2022). Depression and Anxiety Disorder in Children and Adolescents. *JAMA Pediatrics*, *176*(5), 532. https://doi.org/10.1001/jamapediatrics.2022.0052

Griffiths, H., & Fazel, M. (2016). Early intervention crucial in anxiety disorders in children. *The Practitioner*, *260*(1794), 17–20, 2–3.

Home | Child FIRST – Focus on Innovation and Redesign in Systems and Treatment. (n.d.). Retrieved February 18, 2024, from https://rcads.ucla.edu/

Home—2020. (n.d.). The Centre for Evidence-Based Medicine. Retrieved February 29, 2024, from https://www.cebm.net/

Hughes, J. L., Grannemann, B. D., Trombello, J. M., Martin, W. B., Fuller, A. K., & Trivedi, M. H. (2021). Psychometric properties of the Generalized Anxiety Disorder 7-item scale in youth: Screening in a primary care sample. *Annals of Clinical Psychiatry: Official Journal of the American Academy of Clinical Psychiatrists*, *33*(4), 241–250. https://doi.org/10.12788/acp.0047

Johns Hopkins Evidence-Based Practice Model. (n.d.). Retrieved February 29, 2024, from https://www.hopkinsmedicine.org/evidence-based-practice/model-tools

Klaufus, L., Verlinden, E., van der Wal, M., Kösters, M., Cuijpers, P., & Chinapaw, M. (2020). Psychometric evaluation of two short versions of the Revised Child Anxiety and Depression Scale. *BMC Psychiatry*, *20*(1), 47. https://doi.org/10.1186/s12888-020-2444-5

Martinsen, K. D., Holen, S., Neumer, S.-P., Waaktaar, T., Rasmussen, L. M. P., Kendall, P. C., & Patras, J. (2017). The Factor Structure of MASC Youth Report in Norwegian School Children. *Journal of Child and Family Studies*, *26*(7), 1808–1816. https://doi.org/10.1007/s10826-017-0705-9

Muggeo, M. A., & Ginsburg, G. S. (2019). School Nurse Perceptions of Student Anxiety. *The Journal of School Nursing: The Official Publication of the National Association of School Nurses*, *35*(3), 163–168. https://doi.org/10.1177/1059840517752457

O'Connor, S., Ferguson, E., Carney, T., House, E., & O'Connor, R. C. (2016). The development and evaluation of the paediatric index of emotional distress (PI-ED). *Social Psychiatry and Psychiatric Epidemiology*, *51*(1), 15–26. https://doi.org/10.1007/s00127-015-1134-y

Reardon, T., Harvey, K., & Creswell, C. (2020). Seeking and accessing professional support for child anxiety in a community sample. *European Child & Adolescent Psychiatry*, *29*(5), 649–664. https://doi.org/10.1007/s00787-019-01388-4

Reardon, T., Harvey, K., Young, B., O'Brien, D., & Creswell, C. (2018). Barriers and facilitators to parents seeking and accessing professional support for anxiety disorders in children: Qualitative interview study. *European Child & Adolescent Psychiatry*, *27*(8), 1023–1031. https://doi.org/10.1007/s00787-018-1107-2

Revised Children's Anxiety and Depression Scale (RCADS). (n.d.). Retrieved February 18, 2024, from https://www.corc.uk.net/outcome-experience-measures/revised-childrens-anxiety-and-depression-scale-rcads/

SCAS Home—The Spence Children's Anxiety Scale. (2021, June 29). https://www.scaswebsite.com/, https://www.scaswebsite.com/

Stewart, R. W., Villalobos, B. T., Dueweke, A. R., Rodriguez, J. H., Nicasio, A. V., Alto, M., & Orengo-Aguayo, R. (2021). A Pilot Trial of Universal School-Based Mental Health Screening in El Salvador: Traumatic Stress in an Underresourced School Environment. *Journal of Traumatic Stress*, *34*(5), 955–966. https://doi.org/10.1002/jts.22716

US Preventive Services Task Force, Mangione, C. M., Barry, M. J., Nicholson, W. K., Cabana, M., Coker, T. R., Davidson, K. W., Davis, E. M., Donahue, K. E., Jaén, C. R., Kubik, M., Li, L., Ogedegbe, G., Pbert, L., Ruiz, J. M., Silverstein, M., Stevermer, J., & Wong, J. B. (2022). Screening for Anxiety in Children and Adolescents: US Preventive Services Task Force Recommendation Statement. *JAMA*, *328*(14), 1438. https://doi.org/10.1001/jama.2022.16936

Viswanathan, M., Wallace, I. F., Cook Middleton, J., Kennedy, S. M., McKeeman, J., Hudson, K., Rains, C., Vander Schaaf, E. B., & Kahwati, L. (2022). Screening for Anxiety in Children and

Adolescents: Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*, *328*(14), 1445. https://doi.org/10.1001/jama.2022.16303

Walter, H. J., Bukstein, O. G., Abright, A. R., Keable, H., Ramtekkar, U., Ripperger-Suhler, J., & Rockhill, C. (2020). Clinical Practice Guideline for the Assessment and Treatment of Children and Adolescents With Anxiety Disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *59*(10), 1107–1124. https://doi.org/10.1016/j.jaac.2020.05.005

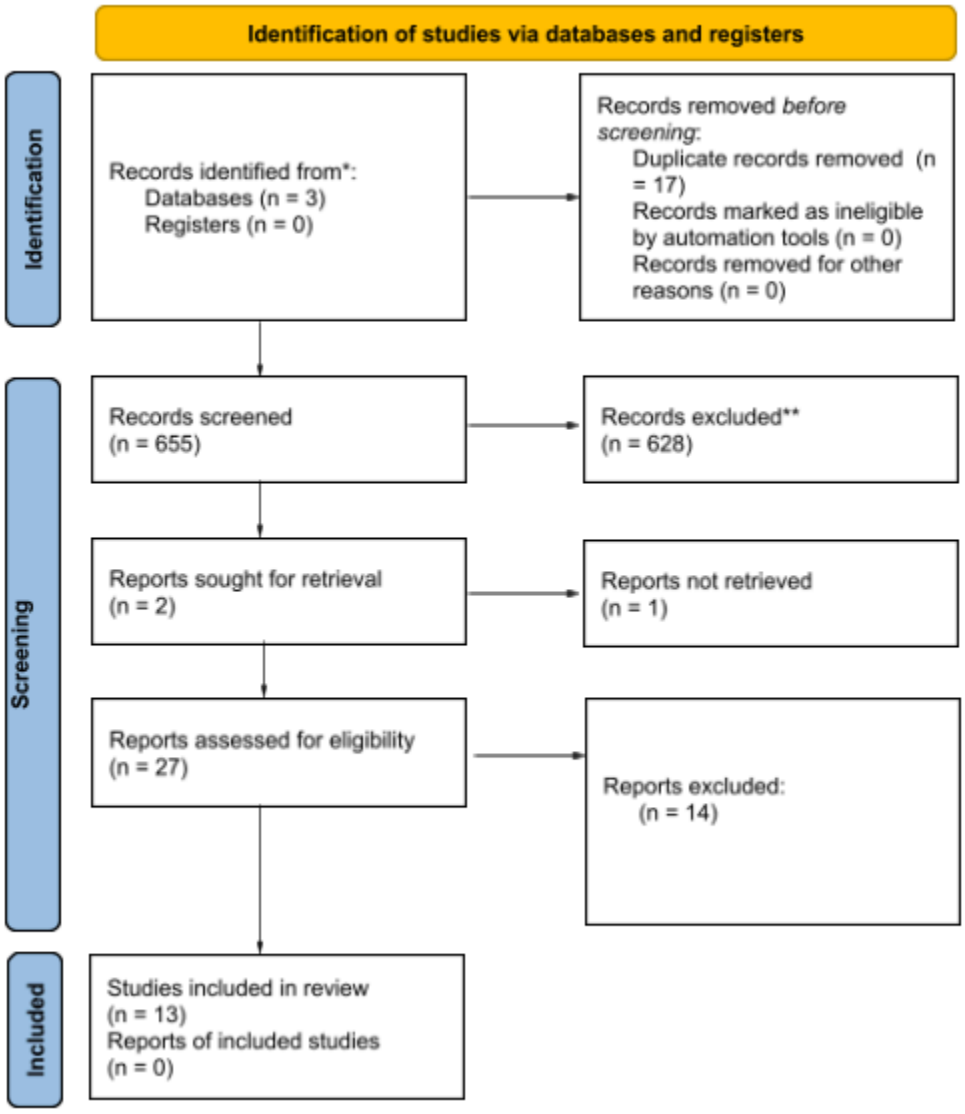
Waters, A. M., Candy, S. G., Zimmer-Gembeck, M. J., Groth, T. A., Craske, M. G., Bradley, B. P., & Mogg, K. (2019). A School-Based Comparison of Positive Search Training to Enhance Adaptive Attention Regulation with a Cognitive-Behavioural Intervention for Reducing Anxiety Symptoms in Children. *Journal of Abnormal Child Psychology*, *47*(11), 1821–1840. https://doi.org/10.1007/s10802-019-00551-4

Williamson, V., Larkin, M., Reardon, T., Pearcey, S., Hill, C., Stallard, P., Spence, S. H., Breen, M., Macdonald, I., Ukoumunne, O., Ford, T., Violato, M., Sniehotta, F., Stainer, J., Gray, A., Brown, P., Sancho, M., & Creswell, C. (2021). Codesign and development of a primary school based pathway for child anxiety screening and intervention delivery: A protocol, mixed-methods feasibility study. *BMJ Open*, *11*(4), e044852. https://doi.org/10.1136/bmjopen-2020-044852

Appendix A

PRISMA Flow Diagram

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only.

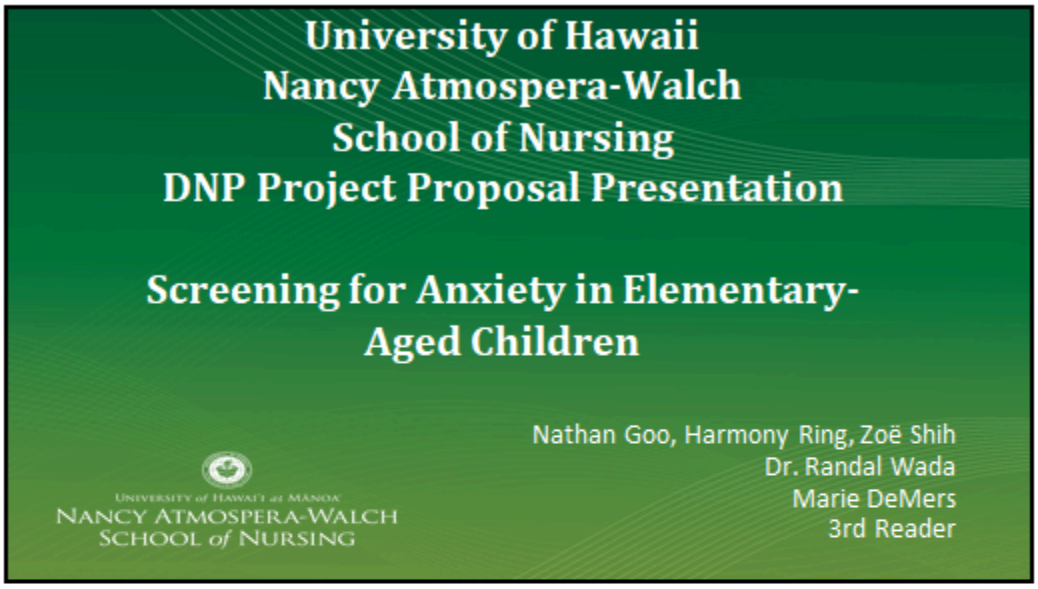


From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

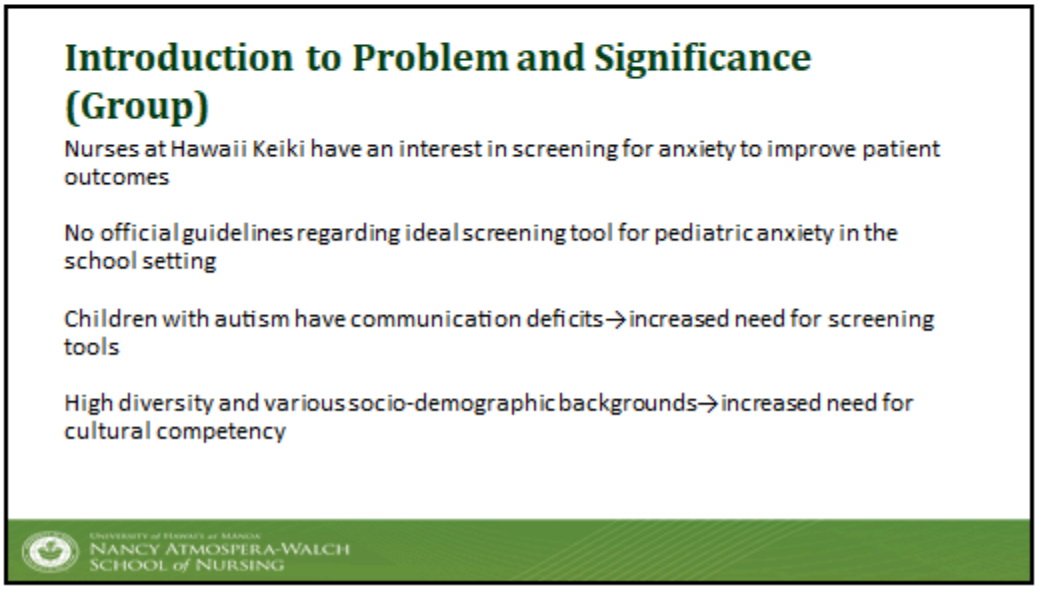
For more information, visit: http://www.prisma-statement.org/

Appendix B

Implementation Presentation



1



2

Background - Anxiety in Children (Group)

9.4% of children ages 3 to 17 had a diagnosis of anxiety (Centers for Disease Control and Prevention, 2023)

Children with anxiety are 3.5 times more likely to experience depression/anxiety in adulthood (Griffiths, Fazel, 2016)

Childhood anxiety can lead to long-term health issues (Viswanathan et al., 2022)

USPSTF Guidelines and AACAP Guidelines

Cultural competence increases the rate of therapeutic alliance to facilitate trust and self-disclosure (Grad, 2022)

University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

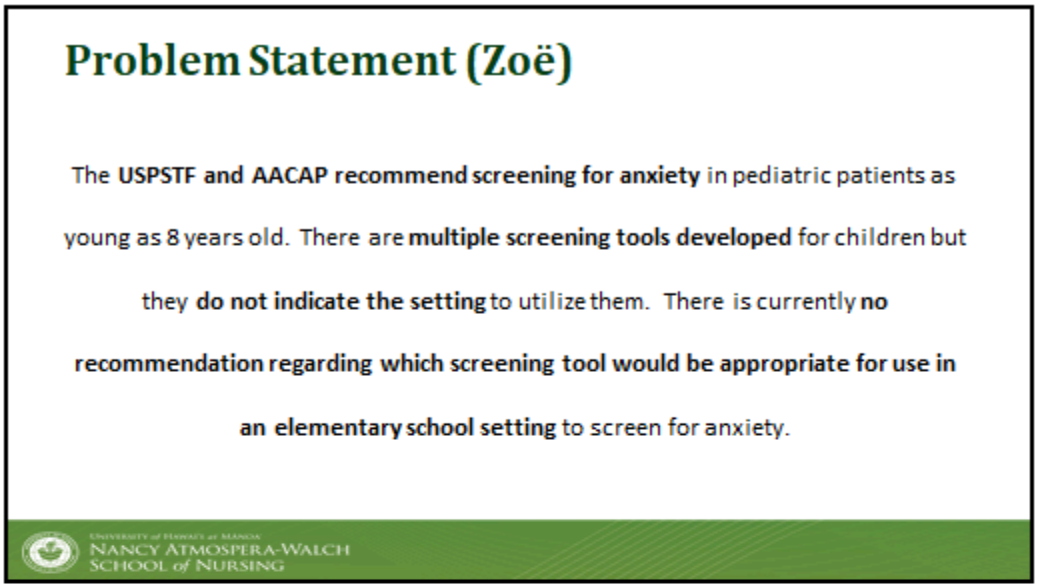
3

Conceptual Framework (Group)

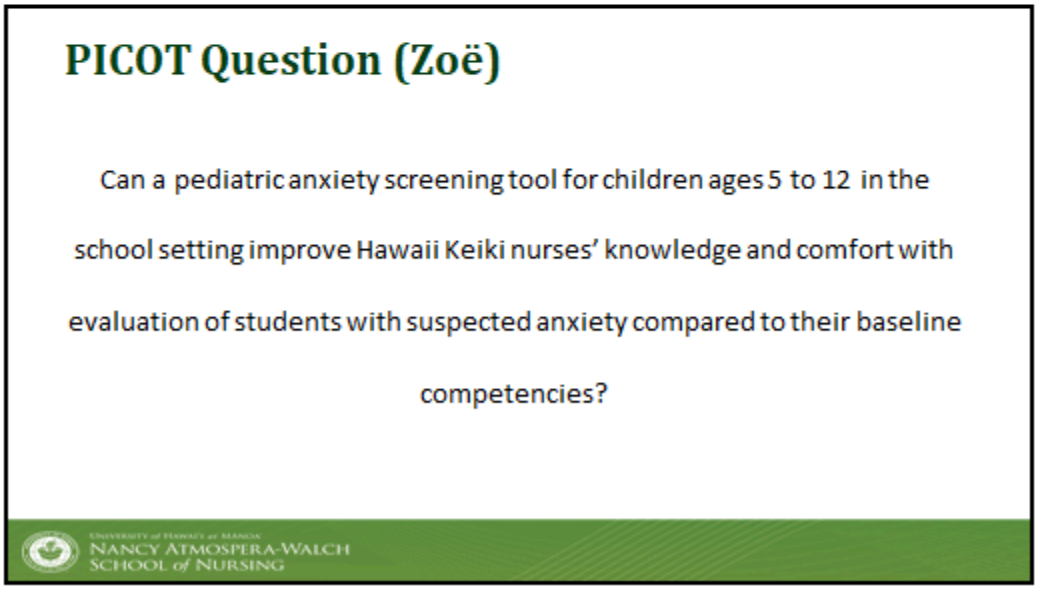
Johns Hopkins Evidence-Based Practice Model (Dang et al., 2022)

University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

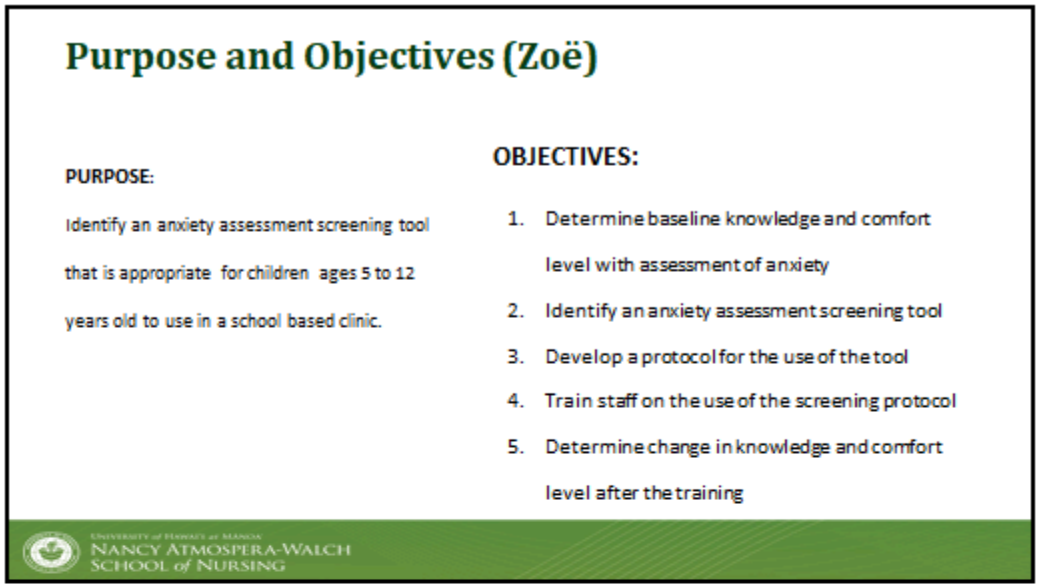
4


Problem Statement (Zoë)
The USPSTF and AACAP recommend screening for anxiety in pediatric patients as young as 8 years old. There are multiple screening tools developed for children but they do not indicate the setting to utilize them. There is currently no recommendation regarding which screening tool would be appropriate for use in an elementary school setting to screen for anxiety.
University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

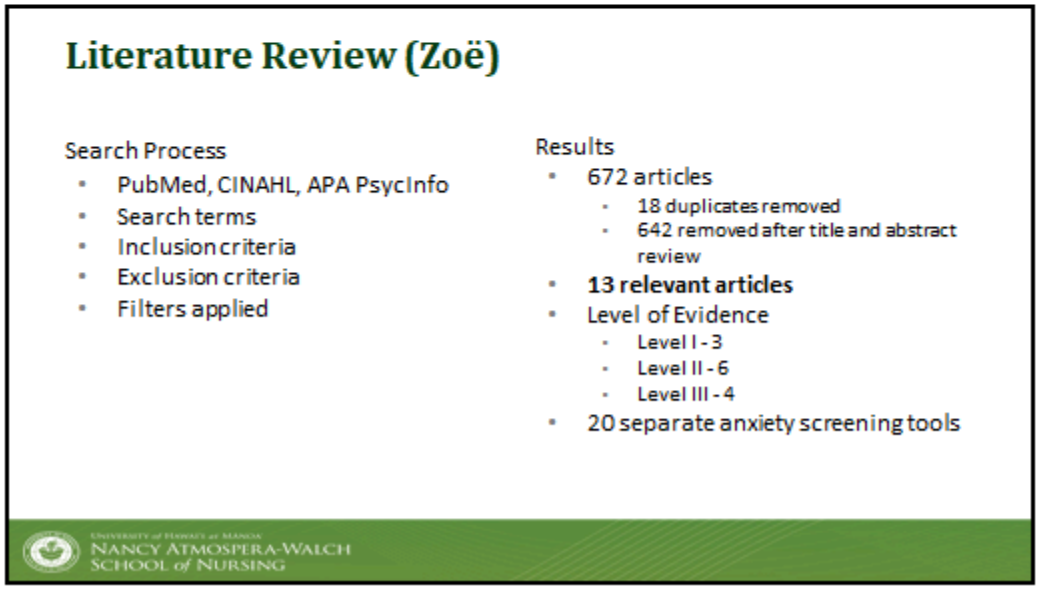
5


PICOT Question (Zoë)
Can a pediatric anxiety screening tool for children ages 5 to 12 in the school setting improve Hawaii Keiki nurses' knowledge and comfort with evaluation of students with suspected anxiety compared to their baseline competencies?
University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

6


Purpose and Objectives (Zoë)
PURPOSE:
Identify an anxiety assessment screening tool that is appropriate for children ages 5 to 12 years old to use in a school based clinic.
OBJECTIVES:
1. Determine baseline knowledge and comfort level with assessment of anxiety
2. Identify an anxiety assessment screening tool
3. Develop a protocol for the use of the tool
4. Train staff on the use of the screening protocol
5. Determine change in knowledge and comfort level after the training
NANCY ATMOSPERA-WALCH SCHOOL of NURSING

7


Literature Review (Zoë)
Search Process
PubMed, CINAHL, APA PsycInfo
Search terms
Inclusion criteria
Exclusion criteria
Filters applied
Results
672 articles
18 duplicates removed
642 removed after title and abstract review
13 relevant articles
Level of Evidence
Level I - 3
Level II - 6
Level III - 4
20 separate anxiety screening tools
NANCY ATMOSPERA-WALCH SCHOOL of NURSING

8

Synthesis of Evidence (Zoë)

	SCAS	RCADS	SCARED
Age Indication	**8-15 years old**	8-18 years old	8-18 years old
# of Questions	**44**	47	41
Time to Complete	**10 minutes**	5-10 minutes	10 minutes
Parent Version	**yes**	yes	yes
Unique Subscales/ Domains	**Obsessive-compulsive Physical injury fears**	Obsessive-compulsive Low mood (MDD)	School avoidance
Translations	**38**	23	11
Cost	**free**	free	free

University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

9

Problem Statement (Harmony)

Anxiety screening for pediatric populations is important for early intervention and treatment (Zwaigenbaum, et al., 2019; Walter, et al., 2020)

Anxiety symptom presentation in children with autism spectrum disorder (ASD) may be impacted by communication deficits (Lohr, et al., 2017).

Therefore, guidance for anxiety screening for children with ASD is unclear, which may impact provider's comfort with providing appropriate services to patients

University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

10

PICOT Question (Harmony)

In Hawaii Keiki medical professionals, how does the implementation of a training presentation on anxiety screening tools for children aged 6-12 with ASD affect medical professionals' knowledge and comfort with anxiety screening before and after the training module presentation?

University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

11

Purpose and Objectives (Harmony)

Purpose:

Increase health care professionals' knowledge and comfort with anxiety screening for children with ASD.

Objectives:

Perform a systematic review on screening tools for anxiety in children aged 6-12 with ASD.

Develop and deliver an educational presentation to present to Hawaii Keiki medical professionals.

Synthesize data gathered from pre- and post-presentation surveys to measure knowledge and comfort with the subject matter.

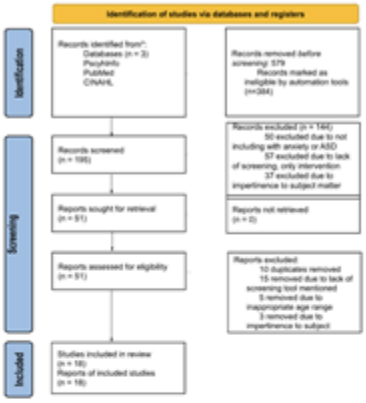
University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

12

Literature Review (Harmony)

Search Process

- PubMed, CINAHL, APA PsycInfo
- Search terms
- Inclusion criteria
- Exclusion criteria
- Filters applied



Based on PRISMA 2020 Flow Diagram (Page, et al., 2021)

University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

13

Synthesis of Evidence (Harmony)

Spence Children's Anxiety Scale (SCAS) outperformed other tools

- Highest frequency
- Most studies with validation/reliability measures
- Parent/child differences
- Affordability

Implications:

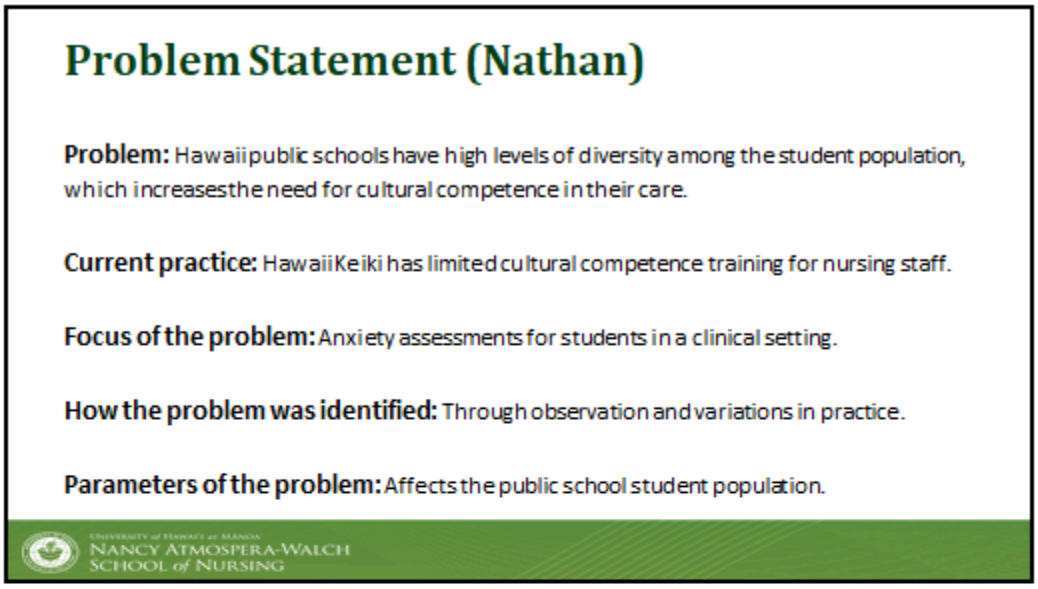
- SCAS outperformed SCARED and GAD-7

Limitations:

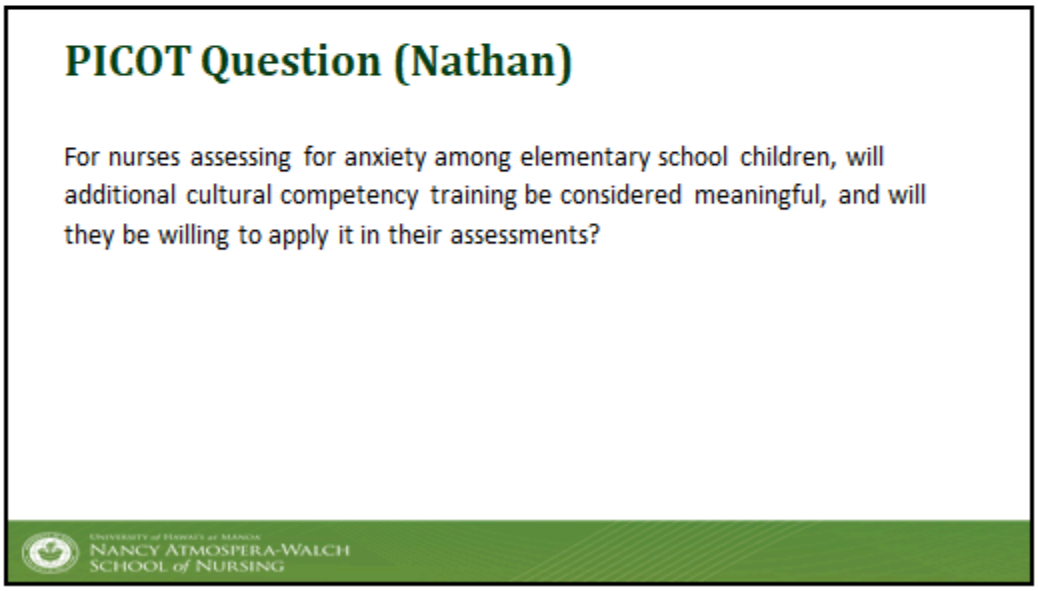
- Small sample size
- Narrow range
- Lack of high-level studies

University of Hawai'i at Mānoa
Nancy Atmospera-Walch
School of Nursing

14


Problem Statement (Nathan)
Problem: Hawaii public schools have high levels of diversity among the student population, which increases the need for cultural competence in their care.
Current practice: Hawaii Keiki has limited cultural competence training for nursing staff.
Focus of the problem: Anxiety assessments for students in a clinical setting.
How the problem was identified: Through observation and variations in practice.
Parameters of the problem: Affects the public school student population.
University of Hawai'i at Manoa
Nancy Atmospera-Walch
School of Nursing

15


PICOT Question (Nathan)
For nurses assessing for anxiety among elementary school children, will additional cultural competency training be considered meaningful, and will they be willing to apply it in their assessments?
University of Hawai'i at Manoa
Nancy Atmospera-Walch
School of Nursing

16

Purpose and Objectives (Nathan)

Purpose:
To increase Hawaii Keiki nurses' knowledge and application of cultural competence in the assessment of anxiety in children.

Objective:
Conduct a systematic review for the assessment of anxiety and cultural competence.

Deliver a presentation based on best evidence recommendations to Hawaii Keiki nurses.

Synthesize data gathered from pre- and post-presentation surveys to determine knowledge acquisition and willingness for implementation.

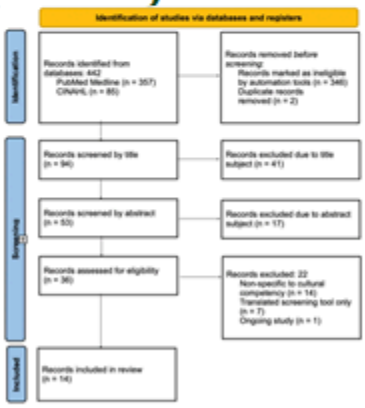
University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

17

Literature Review (Nathan)

Search Process

- PubMed, CINAHL
- Search terms
- Inclusion criteria
- Exclusion criteria
- Filters applied



Based on PRISMA 2020 Flow Diagram (Page, et al., 2021)

University of Hawai'i at Mānoa
Nancy Atmospera-Walch School of Nursing

18

Synthesis of Evidence (Nathan)

Internalized Thought: Self-awareness and being non-judgmental (Groot et al., 2020)

Externalized Action: Cross-cultural communication and acknowledgement of differences (Groen et al., 2018)

Implications:

- Facilitates trust
- Improves communication
- Develops therapeutic relationship

Study Limitations:

- Inclusion criteria
- Narrow range
- Small sample size

NANCY ATMOSPERA-WALCH SCHOOL of NURSING

19

Project Design (Group)

A training presentation will be presented to Hawaii Keiki nurses/practitioners

Education on anxiety screening for:

- Children in elementary school-based settings
- Children with autism
- Children of different socio-demographic backgrounds

NANCY ATMOSPERA-WALCH SCHOOL of NURSING

20

Evaluation Plan (Group)

To gauge understanding and ease of application of the subject matter, Hawaii Keiki nurses will be given a questionnaire before and after the presentation.

The pre- and post-survey results will be analyzed for trends to determine the efficacy of the project implementation in increasing literacy and comfort with the subject material

21

References

CDC. (2023, July 25). *Anxiety and Depression in Children | CDC*. Centers for Disease Control and Prevention. https://www.cdc.gov/childrensmentalhealth/depression.html

Dang, D., Dearholt, S., Bissett, K., Ascenzi, J., & Whalen, M. (2022). *Johns Hopkins evidence based practice for nurses and healthcare professionals: Model and guidelines*. 4th ed. Sigma Theta Tau International.

Data and Statistics on Children's Mental Health. (2023, March 8). Centers for Disease Control and Prevention. Retrieved April 10, 2024, from https://www.cdc.gov/childrensmentalhealth/data.html

Grad, R. "Therapeutic Alliance and Childhood Interpersonal Trauma: The Role of Attachment, Cultural Humility, and Therapeutic Presence." *Journal of Counseling & Development* 100, no. 3 (July 2022): 296–307. https://doi.org/10.1002/jcad.12423

Groen, S., Richters, A., Laban, C., & Devillé, W. "Cultural Identity Among Afghan and Iraqi Traumatized Refugees: Towards a Conceptual Framework for Mental Health Care Professionals." Culture, Medicine, and Psychiatry 42, no. 1 (March 2018): 69–91. https://doi.org/10.1007/s11013-016-9514-7

Groot, G., Waldron, T., Barreno, L., Cochran, D., & Carr, T. "Trust and World View in Shared Decision Making with Indigenous Patients: A Realist Synthesis." Journal of Evaluation in Clinical Practice 26, no. 2 (April 2020): 503–14. https://doi.org/10.1111/jep.13307

22


References
Griffiths, H., & Fazel, M. (2016). Early intervention crucial in anxiety disorders in children. The Practitioner, 260(1794), 17–20, 2–3.
Lohr, W. D., Daniels, K., Wiemken, T., Williams, P.G., Kelley, R.R., Kuravackel, G., & Sears, L. (2017). The Screen for Child Anxiety Related Emotional Disorders Is Sensitive but Not Specific in Identifying Anxiety in Children with High Functioning Autism Spectrum Disorder: A Pilot Comparison to the Achenbach System of Empirically Based Assessment Scales. Frontiers in psychiatry, 8, 138. https://doi.org/10.3389/fpsyt.2017.00138
Page, M., McKenzie, J., Bossuyt, P., Boutron, I., Hoffmann, T., Mulrow, C., Shamseer, L.,Tetzlaff, J., Akl, E., Brennan, S., Chou, R., Glanville, J., Grimshaw, J., Hróbjartsson, A.,Lalu, M., Li, T., Loder, E., Mayo Wilson, E., McDonald, S., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. PLOS Medicine. https://doi.org/10.1371/journal.pmed.1003583
Viswanathan, M., Wallace, I. F., Cook Middleton, J., Kennedy, S. M., McKeeman, J., Hudson, K., Rains, C., Vander Schaaf, E. B., & Kahwati, L. (2022). Screening for Anxiety in Children and Adolescents: Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA, 328(14), 1445. https://doi.org/10.1001/jama.2022.16303
Walter, H. J., Bukstein, O. G., Abright, A. R., Keable, H., Ramtekkar, U., Ripperger Suhler, J.,& Rockhill, C. (2020). Clinical Practice Guideline for the assessment and Treatment of Children and Adolescents with Anxiety Disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 59(10), 1107–1124. https://doi.org/10.1016/j.jaac.2020.05.005
Zwaigenbaum, L., Brian, J. A., & Ip, A. (2019). Early detection for autism spectrum disorder in young children, Paediatrics & Child Health 24(7), pp. 424–432. Doi: https://doi.org/10.1093/pch/pxz119
NANCY ATMOSPERA-WALCH SCHOOL of NURSING
23

Appendix C

Implementation Survey Questions

Anxiety Survey for Hawaii Keiki

Consent to Participate

Introductory Statement

Thank you for taking the time to complete this survey. Our names are Nathan Goo, Harmony Ring, and Zoë Shih. This survey is a part of our Doctorate of Nursing Practice Research Project for the University of Hawaii at Mānoa Nancy Atmospera-Walch School of Nursing. This survey is part of our research project to improve your knowledge and comfort with screening for anxiety in elementary-aged children. We will be assessing the impact of our informational presentation using the results of this survey. The responses received will be non-identifiable and only aggregate data will be reported.

Why is this Study Being Done?

This study is being performed to assess the effectiveness of our informational presentation on your comfort and knowledge of the discussed material before and after the presentation. We hope the information that we review will be useful to your practice.

What Am I Expected to Do?

We humbly ask you to complete the pre-presentation survey before the presentation, and complete the post-presentation survey after the presentation.

What are the risks and benefits of taking part in this survey?

There are no risks to you for taking part in this research project. If you are uncomfortable answering any of the questions, then you may skip them or take a break. You can also stop taking the survey altogether. There is no compensation for participating in this survey.

Confidentiality and Privacy

Data will be collected anonymously in this survey. To correlate before and after data with the same individual, we ask that you please enter the last two letters of your first name, the last letter of your middle name and the first three digits of your street address. For example, ANG185.

Data may be analyzed and distributed for future research studies, and may be utilized for our final project presentation.

If you have any questions about this study you can email any of us:

Nathan Goo nls4@hawaii.edu

Harmony Ring hring@hawaii.edu

Zoë Shih zoel@hawaii.edu

1. Approximately how often have you encountered students who showed signs of anxiety in your practice?

   1 = Never, 2 = Once A Month, 3 = Once A Week, 4 = Every Other Day, 5 = Everyday

   Mark only one oval.

	1	2	3	4	5	
Nev	◯	◯	◯	◯	◯	Every day

2. I am comfortable with the process of assessing children for anxiety and referring them to additional services if needed.

   Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

3. I am able to apply concepts of cultural competency to self-awareness and cross-cultural communication.

   Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

4. I am able to self-reflect and remain non-judgemental when assessing students for anxiety.

   Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

5. I am able to acknowledge differences and facilitate mutual respect when assessing students for anxiety.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

6. Have you used an anxiety assessment screening tool in practice before? If so, which screening tool do you most commonly use in your practice?

_____

7. I am comfortable using the SCAS to screen for anxiety in...

Mark only one oval per row.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
The general education population	◯	◯	◯	◯	◯
Children with autism spectrum disorder	◯	◯	◯	◯	◯
Students of different socio-economic backgrounds	◯	◯	◯	◯	◯

8. I plan to use the SCAS tool in my practice to screen for anxiety.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

9. Data will be collected anonymously in this survey. To correlate before and after data with the same individual, we ask that you **please enter the last two letters of your first name, the last letter of your middle name and the first three digits of your street address**. For example, ANG185.