Implementation of an Evidence-Based Mental Health Protocol in a Juvenile Group Home

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Abstract

In the United States (US) juvenile justice system there is a significant amount of youth with mental health conditions. Numerous studies have identified regardless of gender and race, there are high prevalence rates for mental health and substance use disorders in the juvenile population. The purpose of this quality improvement project was to develop a standardized screening process using a protocol to identify mental health conditions in male adolescents who are transitioning from juvenile detention centers to group homes. Kurt Lewin's change theory and the changing as three steps (CATS) model was used to guide this project. The intervention of the DNP project focused on staff education and training on the administration of the evidence-based assessment tool with the Massachusetts Youth Screening Instrument, Version 2 (MAYSI-2). A pre- and post-intervention questionnaire was administered to participants to assess knowledge regarding the MAYSI-2. Evaluation included a retrospective chart audit to measure the compliance rate in the utilization of the MAYSI-2. Results from the project intervention illustrate an improvement in staff knowledge, which is evident in the subsequent evaluation of the pre- and post-intervention questionnaire. The result of the Wilcoxon Signed Rank Test (WSRT) revealed a statistically significance in the post-intervention score ($Z = -2.814$, $p = .005$) implying that the implementation of a mental health screening tool in comparison to current practices. The analysis indicates the significant impact of education of participants on the MAYSI-2. The findings suggest that the implementation of a mental health screening tool can improve early identification and management of mental health conditions in the male juvenile population.

Implementation of an Evidence-Based Mental Health Protocol in a Juvenile Group Home

In the US, there are disproportionate amounts of youth in the juvenile justice system due to accusations of committing a delinquent or criminal act. These youth often have mental health and possible substance abuse problems, which can impair their academic performance, behavior, and relationship with family, peers, and adults in a society (Youth.gov, n.d.). The underutilization of mental health services among juvenile offenders with emotional and behavioral disorders is a significant problem. According to Underwood and Washington (2016), there is a direct and indirect connection to future offending behavior and criminality in youth with mental health problems. The tendency of a convicted criminal to reoffend is termed recidivism. A group home is a residential care facility that provides juveniles a program for supervised contact with the community as they transition out of a juvenile detention center back into the public. Group homes are utilized when juveniles are placed in secure-care when transitioning back into the community. According to Shatzkin (2015), males are more prone than females to be in group placements following juvenile detention centers.

Current evidence suggests that the most effective models of treatment during this transition for juveniles include community-based interventions (Underwood & Washington, 2016). Through development of a standardized protocol within a group home, this project focuses on addressing the underutilization of mental health services in juvenile offenders by using a standardized approach to mental health screening. The mental health needs of the youth in the juvenile justice system should have individualized treatment with resources within the community. Group homes have an essential role in addressing the mental health problems of juveniles placed in their home since it is their initial contact as they transition back into society. The implementation of a standardized approach using an evidence-based screening tool to assess mental health problems in juveniles has the potential to improve their outcomes and decrease

predisposition to future delinquency as they leave a controlled environment and transition back into society.

Background

There is a significant amount of youth in in the US juvenile justice system, which can be illustrated in the 2.1 million youth under the age of 18 who are arrested in a single year (Youth.gov, n.d.). Current statistics show that overall rates of youth delinquency have decreased compared to previous years; however there are still 1.7 million juvenile delinquency cases annually in the US. This is significant because a high percentage, 65 to 70%, of juveniles in the justice system have a mental health problem that requires treatment (Youth.gov, n.d.). In regards to residential group homes after detention center placement and transition back into the community, males are more commonly placed than females. In 2015 males accounted for approximately 85% of all juveniles in residential placement (U.S. Department of Justice, 2017). Numerous studies have identified regardless of gender and race, high prevalence rates for mental health and substance use disorders in juvenile population (McCoy et al., 2014). Common themes for the prevalence of delinquency and mental health problems in this population of youth include predisposition to risk factors like a history of trauma, abuse, emotional, and behavioral problems. Cook et al. (2017) identifies the need for mental health treatment in adolescence to prevent poor outcomes due to the effects from exposure to trauma. Adverse family conditions, abuse, and neglect during childhood are common identified risk factors that predispose juveniles to delinquency or offensive behavior.

Problem Statement

In the population of male adolescents transitioning from the juvenile justice system back into the community through group homes, there is a significant amount of undiagnosed youth with mental health and behavioral problems not being treated. Mental, behavioral, and substance

use disorder in adolescence that is left untreated in this population increases a predisposition to an adult life of criminal activity and poor outcomes. There is a need to improve access to mental health services for youth in the juvenile justice system to prevent future criminality. This will be a quality improvement (QI) project, which will consist of the development of a protocol for implementation of a standardized approach to use an evidence-based tool to screen for mental health conditions, safety, and increase access to mental health services in a male adolescent group home within a 4-week time frame.

Purpose Statement

The purpose of this project is to develop a standardized screening process using a protocol to identify mental health problems in male adolescents who are transitioning from juvenile detention centers to group homes with the aim to improve access to mental health treatment. This will ensure appropriate treatment of mental health problems in male adolescents while in the group home, preventing harm to self and others, and improve outcomes when adolescents' transitions back into the public. Increased access to mental health treatment can improve the quality of life and decrease the risk of adult criminal behavior in juveniles.

Project Question

In the male juvenile population who is transitioning out of the juvenile system into a group home, does the implementation of a mental health screening tool in comparison to current practices, improve early identification and management of mental health conditions?

Project Objectives

1. Develop a standardized method of screening for mental health.
2. Improve staff's knowledge and skills on a mental health screening tool to be evaluated by a pre- and post-intervention questionnaire.
3. Provide response resources of screening results using a toolkit.

4. Measure the compliance rate of utilizing mental health screening tool by a retrospective chart audit.

Significance

In the US juvenile justice system, there is a disproportionate amount of youth that suffers from mental health disorders which is drastically higher than the general adolescent population (Underwood & Washington, 2016). The significance of mental health problems in youth who are in the juvenile system can be seen in current estimates, which indicate 50 to 75 % of the two million youth in this setting met criteria that corresponds to a presence of a mental health problem. Underwood and Washington (2016) suggest that in this population the severity of a mental health problem affects one in four children and their ability to function, as well as, develop into a responsible adult. The significance of mental health problems in this population of youth is that without adequate treatment, these youth are in predisposition to a future of delinquency and adult crime. Therefore, effective screening and assessments for mental health problems in this population of youth is vital. An appropriate response to the mental health needs of juveniles can decrease the risk of later delinquency and adult criminality, which in turn can produce better outcomes for these youth who are less likely to have a future of delinquency and adult crimes. Another issue that can impact mental health problems in juveniles is substance abuse, which is the most common dual disorder with a mental health diagnosis of juveniles in the justice system (Underwood & Washington, 2016). According to the Department of Justice's Arrestees Drug Abuse Monitoring Program, in nine separate sites approximately half of the male juveniles arrested were tested positive for one drug at minimum. Mental health problems in children and adolescents are very complex compared to adults because this developmental stage

is characterized by growth and change, which necessitates a need for ongoing assessment and treatment in this population of youth (National Conference of State Legislators, n.d.).

Search Terms

The literature search for this review was conducted using several databases including the Academic Search Complete, Cochrane Library, EBSCO, PubMed, PsycINFO, and Google Scholar utilizing the PICOT question as the primary search method. Hand searching was also employed. Key search terms included *male juvenile population, juvenile justice system, juvenile group homes, juvenile delinquency prevention*, *mental health screening tool, mental and behavioral health care needs of juveniles*, *youth mental health screening tool*, *access to mental health services in the juvenile justice system*, *and management of mental health conditions*. Inclusion criteria included the following: within five years, adolescence age group (13 to 17 years old), population group male, English language, linked full text, and peer reviewed publication. The inclusion criteria yielded results around 50 articles depending on database used. Exclusion criteria included: greater than 5 years, adult age group (greater than 18 years old), school age group (6 to 12 years old), female population group, language other than English, and publication with unknown status. Current policies and procedures at the practice site were examined and compared to current recommendations. Chosen articles were selected due to the presence of inclusion criteria and applicability to the doctor of nursing practice (DNP) project.

Review of Literature

Current literature and body of evidence related to the mental health needs of juveniles in the justice system is reviewed here. The impact of mental health problems in this population and associated risk factors are discussed. Common themes in the literature are identified to address

the mental problem in the juvenile population of the justice system. From the body of evidence regarding the topic, current recommendations are reviewed and summarized. The significance of findings as it relates to the nursing profession is also reviewed.

Impact of the Problem

When mental health problems in youth who are in the juvenile justice system are untreated, there is an increasing probability of adult delinquency and recidivism, which is the tendency of a convicted criminal to re-offend. Underwood and Washington (2016) identify a correlation between mental health problems being linked directly and indirectly to future delinquency and criminality. This highlights the importance of recognizing mental health problems of youth offenders through screening and assessment and creating a treatment plan.

Aalsma et al. (2015) performed a study in Indiana to examine behavioral health needs, treatment, and the occurrence of recidivism following release from a detention center. The findings of the study were significant and indicated 19.1% of youth had positive mental health screens and 25.3% of all youth reoffended within 12 months (Aalsma et al., 2015). The findings also reveal that of the youths with positive screens, only 29.2% was seen by a mental health clinician and 16.1% received behavioral health treatment during detention (Aalsma et al., 2015). These results show inadequate response to the mental health needs of the youth who had a positive mental health screen, which resulted in a corresponding amount of recidivism. The findings from Aalsma et al. (2015) supports previous studies that directly link mental health problems to recidivism and specifically African-American males being disproportionately rearrested after release from a detention center. If appropriate access to mental health treatment were provided to these juveniles with a positive mental health screen, it would have the potential to decrease the probability of recidivism.

Risk Factors

According to the Office of Juvenile Justice and Delinquency Prevention ([OJJDP], 2015), risk factors are individual traits of a person, specific features of their environment, or circumstances in their family, school, or community that is related to the probability of an adolescent involved in delinquency or offending behavior. The OJJDP (2015) states that the presence of risk factors in one's life has the potential to determine delinquency during adolescence and adulthood. This corresponds to an increasing probability of delinquency with the presence of more risk factors in one's life. A study by Cook et al. (2017) found that complex trauma exposure in children results in a loss of essential functions to for self-regulate and interpersonal relationships with others, which can affect their growth into an adult. Some examples of problems that children exposed to trauma can experience throughout their life is additional trauma exposure, impairments ranging from mental health and addictive disorders to delinquency. These problems can encompass from childhood through adulthood. Many youth in the juvenile system experience trauma and risk factors that predispose them to delinquency and adult criminality (Kerig & Becker, 2015).

Addressing the Problem with Current Evidence

After reviewing the body of evidence regarding the prevalence of mental health problems within the juvenile justice system, a common theme that is highlighted is a need for improved access to mental health care through screening and assessment. Identified mental health problems through screening and assessment require individualized choices for treatment because not all youth are the same. Current evidence identifies the crucial need for mental health screening in the underserved juvenile population to provide appropriate mental health services

which has the potential to decrease the risk of recidivism (Aalsma et al., 2015; Swank & Gagnon, 2016). To promote quality care in youth who are in the juvenile justice system, there is a need for a standardized approach to screening and assessment. Dölitzsch et al. (2017) identifies the importance of mental health screening of youth in juvenile justice system that need follow-up evaluation. Underwood and Washington (2016) emphasize this issue by indicating that there are youth who can function appropriately in society while having mental health problems, while others may not be able to and results in inappropriate behavior and actions. This illustrates how youth in the juvenile justice system can present differently and have varying mental health needs, which requires individualized mental health treatment (Underwood & Washington, 2016). Effective screening and assessment results in mental health treatment that is individualized and specific to the youth. Mental health screening of juveniles also helps to identify youth who require urgent mental health attention. Mental health assessments of juveniles can help to guide treatment options based on their needs (National Conference of State Legislators, n.d.). Screening and assessment tools are essential to responding to the problem of inadequate support of the mental health needs of the youth in the juvenile justice system (National Center for Mental Health and Juvenile Justice, 2014). From the information gathered in screening, an assessment provides a comprehensive examination of mental health problems and behaviors of the juvenile (OJJDP, 2015). Assessment of the juvenile is vital because it can determine their risk to harm self or others, mental health needs, and appropriate treatment.

Prevention. In the US juvenile justice system, mental health is a public health problem that has a major effect on society. Multiple factors contribute to problems with behavior, conduct and crime in youth. Research over the last three decades demonstrates that utilizing multisystemic therapy (MST) for juvenile offenders with intervention in the community reduces

the risk for recidivism (May, Osmond, & Billick, 2014). MST is considered an evidence-based-practice designed to help in the rehabilitation of juvenile offenders through a family and community based treatment program that targets the contributing factors a youth's social network. Support of MST use can also be seen in a study by Davis, Sheidow and McCart (2015) where MST is identified as addressing common causes of recidivism in juvenile offenders and providing quality mental health treatment. The effect of MST use is so significant in reducing the rate of recidivism in juvenile delinquents that in New York there is a mandate through the Juvenile Justice Initiative for implementation of interventions like MST to keep juvenile offenders in the community rather than incarceration (May, Osmond, & Billick, 2014). Currently the California Institute for Behavioral Health Services (CIBHS) has an evidence-based project initiative working with partner agencies and MST is one of their implementation projects. Through previous studies on MST with juvenile offenders, the results demonstrated decreased rates of criminal offense, reduced recidivism, improvement in family functioning, decreased behavior and mental health problems for serious offenders (CIBHS, 2015; Davis, Sheidow & McCart, 2015; May, Osmond, & Billick, 2014).

Evidence from Pardini (2016) suggests that the prevention of juvenile delinquency involve treatment protocols that focus on therapeutic approaches and cognitive-behavioral treatment (CBT), which target risk factors thought to cause delinquent behavior. The implementation of such interventions for youth who may be at risk for delinquency can help to prevent the occurrence of offending conduct in the future. This is relevant for the implementation of MST to address the various risk factors of juvenile delinquency (Henggler & Schaeffer, 2016). The development of applicable policies and procedures that support the implementation of evidence-based delinquency prevention practices should be offered in various settings to prevent

juvenile delinquency and crime in the US. To further support prevention programs, de Vries et al. (2015) state positive effects have resulted with the use of such programs in preventing juvenile delinquency and suggests to improve program effectiveness through interventions that individualized, based on the risk of risk of the juvenile. MST is an evidence-based treatment that has resulted in improved outcomes for youth and families (Henggler & Schaeffer, 2016).

Current management. Currently in the US juvenile justice system, there is a move from a punitive model back to a rehabilitative model (Underwood & Washington, 2016). This involves relying on the juvenile justice system to be responsible in meeting the mental health needs of the youth. However, this change resulted in the juvenile justice systems without the appropriate resources or access to meet the needs of youth with mental health disorders. The current management of mental health problems in the US juvenile justice system is inadequate or unavailable for youth with an identified need for mental health treatment. Identified barriers to providing effective mental health treatment include inadequate resources and administrative ability, and lack of staff (Underwood & Washington, 2016). Contributing factors to the current management of mental health include ineffective models of care, insufficient advances in policy to promote a standardized approach to mental health problems, and lack of staff training. This results in an inadequate ability to provide youth offenders with mental health treatment.

Current recommendations. Common themes found in the literature support community-based treatment interventions that involve the youth are more effective to meet their mental health needs. Underwood and Washington (2016) state that improvement has taken place over the last decade in juvenile justice with new research, program, and resource development. This has resulted in the implementation of new tools and knowledge in juvenile justice to improve the mental health needs of the youth. These advancements include up-to-date mental health

screening and assessment tools, implementation of protocols for use within the juvenile justice system utilizing evidence-based intervention and treatment (National Center for Mental Health and Juvenile Justice, 2014). These advancements have not only influenced juvenile justice law and policy but also resulted in a better understanding of the youth and a positive effect in the youth by meeting their needs.

Benefits of current recommendations. Youth in the juvenile justice system who are screened and assessed for mental health are more likely to have their problems identified and treated, resulting in a decreased risk of delinquency and recidivism. The screening and assessment of a juvenile for mental health problems primarily take place after a juvenile has been convicted and detained in an institution (OJJDP, 2015). However, the use of mental health screening and assessment tools for juveniles more promptly at the initial court intake can affect their disposition in the juvenile justice system and the mental health service available. The advancements in mental health screening of the juvenile justice population has resulted in multiple screening tools for mental health. The Massachusetts Youth Screening Instrument version 2 (MAYSI-2) is a mental health screening tool primarily used in the juvenile population. Other mental health screening tools that are being used within the juvenile justice system includes the following: the Child and Adolescent Functional Assessment Scale (CAFAS), the Global Appraisal of Individual Needs Short Screener (GAIN-SS), and the Substance Abuse Subtle Screening Inventory for Adolescents version 2 (SASSI-A2).

The child and adolescent functional assessment scale (CAFAS). The CAFAS is a screening tool aimed to evaluate impairment in children and adolescents who suffer from emotional, behavior, or substance use problems. CAFAS can be used in youth in various settings including those who are in the juvenile justice system. CAFAS provides assessment data that is

specific to the youth and useful to evaluate outcomes of treatment. Studies indicate that CAFAS is an effective tool in assessing and tracking outcomes of youth in diverse settings that utilize evidence-based treatment and evidence informed practices (Hodges, 2019). CAFAS scores can also be used to predict recidivism in youth as well.

The global appraisal of individual needs short screener (GAIN-SS). The GAIN-SS is a evidence-based screening tool that is self-administered to quickly identify individuals who would be flagged as having a disorder in the full, complete version of the Global Appraisal of Individual Needs Initial (GAIN-I). This tool can be applied in the general population including adolescents and takes around five minutes to complete. GAIN-SS The tool targets the following four conditions: internalizing disorder, externalizing disorder, substance disorder, and crime/violence (Henderson, Chaim, & Hawke, 2017). The GAIN-SS is efficient in screening for behavioral health issues and evaluating behavioral change over time. In a recent study by Henderson, Chaim, and Hawke (2017), they found the screening tool to be effective in identifying addiction and mental health needs of youth using the GAIN-SS.

The substance abuse subtle screening inventory for adolescents second version (SASSI-A2). The SASSI-A2 is a screening tool that identifies the probability of substance dependence and the presence of substance abuse disorders specifically in the adolescent population. The screen takes around 15 minutes and addresses four identified types of problems related to the substance abuse or alcohol in individuals between the ages of 12 to 18 years old. This screening tool has a 94% overall accuracy of identifying substance related problems in adolescents (Miller, Miller, & Lazowski, 2013). The results of SASSI-A2 helps to determine an appropriate treatment plan. It is often used in the juvenile justice system to identify substance

related problems quickly and accurately, which increases opportunity for early interventions and better treatment outcomes (Miller, Miller, & Lazowski, 2013).

The Massachusetts youth screening instrument version 2 (MAYSI-2). The MAYSI-2 is a screening tool that assesses the presence of disorders in the following seven subscales: alcohol/drug use, alcohol/drug use, angry, irritable, depressed-anxious, somatic complaints, suicidal ideation, thought disturbance, and traumatic experience. The purpose of the screening tool is to identify youth who may have symptoms, feelings, or behaviors that require immediate attention involving possible suicide risk, emergency mental health, and substance abuse needs that are present in various psychiatric diagnostic conditions (Colins et al., 2014; Grisso et al., 2014). The MAYSI-2 is not intended to be a diagnostic tool, rather a tool to provide information that identifies youth who require mental health response like suicide precautions, further evaluation, and referral for consultation (Grisso et al., 2012). The MAYSI-2 can be easily administered within a fifteen minute screening. It is often administered by non-clinical personnel, to all youth at the time of intake in juvenile probation offices, juvenile pre-trial detention centers, and juvenile justice corrections and residential facilities. To illustrate the reliability of the MAYSI-2, individual scales' alpha coefficients ranged from a low of .54 to a high of .90, with most scales being above .70 (Grisso et al., 2012). Donaldson (2018) identifies school counselors in a unique position to address issues like trauma as an early link in mental and behavioral health problems. This illustrates the usefulness of the MAYSI-2 tool to identify mental and behavioral issues, not only in juveniles, but also the youth and adolescent population in Idaho. The MAYSI-2 is implemented statewide in 49 states for use in various aspects of the juvenile justice system like probation, detention, and correction programs in 39 states (Grisso et al., 2012; National Center for Mental Health and Justice, n.d.). An example of the MAYSI-2 being a useful tool is when it was used in an Idaho juvenile detention center to identify youth

entering the juvenile justice system that may benefit from mental and behavioral health services (Donaldson, 2018).

Summary of Findings and Significance

Due to the shift in the approach of management of juveniles in the justice system from punitive to rehabilitative, the mental health needs of youth are inadequately untreated. Youth, who enter the juvenile justice system with untreated mental health problems, enter a system that is not prepared to assist them appropriately, which then leads to poor outcomes of the juvenile. A common theme seen in the body of evidence relating to the mental health needs of juveniles, is a need for improved access to mental health care through screening and assessment (Aalsma et al., 2015; Dölitzsch et al., 2017; Swank & Gagnon, 2016). The benefits of current recommendations include meeting the mental health needs of the youth in the juvenile justice system, which result in better outcomes, decreased risk of delinquency, and recidivism due to treatment of the mental health problem.

The MAYSI-2 will be used for this DNP project because of the reliability and validity of the screening tool has significant supporting evidence to promote its intended use in the juvenile justice setting and population (Colins et al., 2014; Donaldson, 2018; McCoy, Vaughn, Maynard, & Salas, 2014). The screening tool can be easily administered to juveniles to identify mental health needs in various settings of the juvenile justice system. The MAYSI-2 would be helpful to identify the mental health needs of juveniles discharged from detention centers and entering group homes. Current research in the US validates the use of the MAYSI-2's reliability and validity, as well as, effectiveness in American juvenile detention facilities (Colins et al., 2014; Donaldson, 2018; McCoy, Vaughn, Maynard, & Salas, 2014). This tool is significant because it can be used to identify mental health and substance use problems in youth. When mental needs are identified, appropriate resources for treatment can be provided. An increase in access to

mental health services within the juvenile justice system is an appropriate response to meet the needs of the youth with identified mental health problems. Underwood and Washington (2016) suggest youth in this population would benefit from an understanding in the importance of mental health treatment for mental health problems and decreased dependence on the juvenile justice system to respond to youth mental health needs. Current research proposes that the function of the juvenile justice system in regards to mental health should focus on collaboration with the community to meet the needs of the youth (Washington & Underwood, 2016). Current recommendations to respond to the mental health needs of the youth include a community-based system of care that involves available resources for mental health.

The juvenile justice system is not adequately prepared to meet the needs of youth with mental health problems. Many communities are pushing for a change in response to the rising number of youth in the juvenile justice system with mental health problems and the lack of proper care offered. Mental health screening is an effective response to identifying youth with mental health needs. It also increases mental health awareness and competency among professionals who work in the juvenile system. Initial screening of juveniles is essential because it is needed to identify both risk and treatment needs. Current recommendations have evolved where many screening and comprehensive assessment tools are now available to juvenile justice system (National Center for Mental Health and Justice, 2014). These findings are significant to the nursing profession because it identifies screening and assessment tools being proven methods to aide in the identification of youth with mental health needs. Experts recommend that the juvenile justice systems use current evidence-based practice and tools for use in youth with mental health needs in the juvenile justice system. These tools promote a change in policy objectives in the juvenile justice system for the management of mental health problems.

Theoretical Framework

Due to the growing complexity in various settings, like healthcare, change is essential in the success of an organization (Hussain et al., 2018). Kurt Lewin's (1951) change theory and model involves prior learning to be rejected and replaced with a planned change. Lewin's change theory can be used to improve the effectiveness of an organization by modification in strategies, processes, and structures (Cummings, Bridgman, & Brown, 2016). The theory is characterized by changing as three steps (CATS) model which involves the phases of unfreezing, change, and refreezing (see Appendix A). The theory and model provide a high level approach to change management (Hussain et al., 2018). Many believe that the theoretical framework in the Lewin's theory is a fundamental approach to implementing and managing change (Cummings, Bridgman, & Brown, 2016; Hussain et al., 2018). Lewin's change theory is relevant to the nursing profession because it can be utilized to implement a change in practice. Lewin's force field analysis can be used to identify driving and restraining forces to improve practice. This results in better understanding of factors affecting change and identifies areas to support transition to a practice change. The theoretical framework of Lewin's change theory can also be utilized in nursing to disseminate a change in practice with the desired goal of improving outcomes.

Historical Development of the Theory

Lewin is a social psychologist highly regarded as the founding father of change management with the development of the Change Theory (Cummings, Bridgman, & Brown, 2016). The theory developed after Lewin's death in 1947 and his study on force field analysis which is a framework that looks at forces that influence situations. Force field analysis includes forces that move toward a goal known as helping forces and those that block movement toward a goal, hindering forces (Cummings, Bridgman, & Brown, 2016; Hussain et al., 2018). Lewin

(1951) defined behavior as a dynamic balance of forces working in opposite directions. The presence of change in the human system is based on fundamentals from Lewin's change theory and is regarded as a paradigm to managing change (Cummings, Bridgman, & Brown, 2016). The CATS was first discussed in Lewin's (1947) paper *Frontiers in Group Dynamics*, which assessed the behavior of different groups and how their behavior affected the process of change. Lewin, being a physicist as well, described organizational change with the analogy of the shape change of a block of ice in a three-step process of unfreezing, changing, and freezing (Cummings, Bridgman, & Brown, 2016). After his death, the Lewin's theory developed with three major components that include driving forces, restraining forces, and equilibrium (Lewin, 1947). Driving forces are forces that move toward a desired direction, which results in change and a shift in the equilibrium towards change (Lewin, 1947). Restraining forces are forces that work against driving forces and cause a shift in the equilibrium that opposes change (Lewin, 1947). Lastly, the concept of equilibrium is described as a state of being where no change is present as a result of driving forces equal to restraining forces (Lewin, 1947).

Applicability of Theory to Current Practice

Lewin's change theory and CATS model is applicable to the current practice of mental health screening in the juvenile justice system. It can be used as a guide for implementation of a screening tool as a standardized approach to assess the mental health needs of juveniles. In a study done by Miranda and Scharf (2018) the change theory was used to implement a new nursing position in a pulmonary practice as a specialized nurse coordinator for pulmonary hypertension (PH) patients. One major component of the study by Miranda and Scharf (2018) for implementing the change in practice was structured on the principles of Lewin's change theory. The practice change involved the care coordinator nursing position in a PH practice to act as a

link between the patient, local physicians, specialty pharmacies, and the provider. In the study by Miranda and Scharf (2018), the care coordinator position was imperative for standardizing evidence-based practice for improving patient outcomes. This shows the relevance and applicability of the change theory in practice.

Currently in the US juvenile justice system, there is a shift from a punitive approach back to a rehabilitative approach in the management of juveniles, which includes a focus on addressing the presence of mental health needs (Underwood & Washington, 2016). This change occurred due the identified problem in the lack of resources and access to mental health services for juveniles in need (Underwood & Washington, 2016; National Conference of State Legislators, n.d.). Lewin's theory and CATS model can be utilized to reject past practice, which is counterproductive and replaced with a standardized approach in the screening of juveniles for mental health issues. Successful change occurs when an organization or system has an understanding of behaviors or patterns that hinder or drive change then work to strengthen positive forces (Hussain et al., 2018). Lewin's change theory and CATS model can be applied in the juvenile justice system to implement screening tools that assess mental health needs of juveniles. With the identification of juveniles with mental health needs appropriate resources and treatment can be made available, resulting in better outcomes for the juveniles.

Major Tenets

Unfreeze. Unfreezing is the first phase of change that involves preparation for the necessary change (Cummings, Bridgman, & Brown, 2016; Lewin, 1947). This involves key stakeholders learning new ways of reaching objectives by stopping limitations. In this phase, current practices and processes have to be reassessed to implement a change, which gives individuals the ability to evaluate current practices and understand importance to reject it and

move toward the implemented change (Lewin, 1951). In order to achieve unfreezing there are three methods. According to Cummings, Bridgman, and Brown (2016), the first step is to increase the driving forces that move behavior away from the current practice. The second step involves the decrease in restraining forces that negatively impact the movement toward change (Cummings, Bridgman, & Brown, 2016). Lastly, the third step focuses on a combination of the first two steps which aides in completion of the unfreezing phase (Cummings, Bridgman, & Brown, 2016).

Change. Following the unfreezing phase is the change phase also known as “moving” or “movement” (Cummings, Bridgman, & Brown, 2016; Lewin, 1947). In this phase there is a progression of change in one’s thoughts, feelings, or behavior that is more productive (Lewin, 1951). Contributing factors for a successful transition in this phase include understanding the benefits of the desired change (Lewin, 1951). The change in practice is a result of a shift in equilibrium where there is a reduction in of restraining forces and increase in driving forces that support the change (Lewin, 1951). The implementation of change has the goal to produce the desired change (Lewin, 1951).

Refreeze. The refreezing phase happens after implementation when the change is embraced and being utilized (Cummings, Bridgman, & Brown, 2016; Lewin, 1947). The focus of this phase establishes the change as the new standard and makes it permanent. Signs of refreezing include positive outcomes from the change. In this phase the change is implemented as the new standard in practice (Cummings, Bridgman, & Brown, 2016). Making the change permanent, as a standard, is necessary to prevent going back to prior practice. In this phase the desired change can be evaluated for its stability and overall effectiveness (Lewin, 1951).

Theory Application to the DNP Project

Lewin's theory and CATS model will guide the DNP project as a framework to implement use of the MAYSI-2 screening tool at the project site. The application of the Lewin's theory and CATS model supports stakeholders through the transition to the desired change.

Unfreeze. With the implementation of the DNP project in the stage of unfreezing, key stakeholders at the project site will identify a need for change and evaluate current practices in the group home to produce better outcomes to address the mental health needs of juvenile residents. In this phase, the examination of current practices and identification of need for necessary improvement at the project site will increase driving forces toward change. A pre-intervention questionnaire will be completed in this phase to assess staff knowledge, skills, and attitudes regarding the desired change. Stakeholders will be made aware of current recommendations and benefits of a screening tool to identify mental health needs of juveniles through the presentation of the body of evidence. Open communication will be promoted and will aide in their understanding of importance of the desired change. When key stakeholders will decrease restraining forces by understanding and accepting the benefit of the implementation of the MAYSI-2 tool at the project site to juvenile residents and rejecting current practices. The combination of driving forces toward change and decreasing restraining forces supports the unfreezing phase.

Change. Moving toward change is the next phase of change. Stakeholders at the project site will have a change in thoughts, feelings, and behavior toward the desired change in practice. This will happen through an understanding of the desired change being better than current practice. In this phase, the author will spend time to educate and communicate with all stakeholders. This time spent with stakeholders aides in the transition and understanding of the benefits in the desired change in practice by meeting the mental health needs of the juvenile

residents, which results in positive outcomes of the juveniles residents. Any questions or concerns regarding desired changes in practice will be addressed and support will be provided to stakeholders during this transition. A post-intervention questionnaire will be completed in this phase to assess change in staff knowledge, skills, and attitudes the desired change. The desired change in practice with the utilization of the MAYSI-2 screening tool will then be implemented.

Refreeze. The refreezing phase will begin the implementation of the desired change as the new standard in practice for the screening of mental health needs in the juvenile residents at the practice site. During this phase, staff and stakeholder support is essential to prevent reverting back to past practice. After the implementation of the desired change, it can then be evaluated and reassessed for areas of improvement. The compliance rate of the utilization of the MAYSI-2 screening tool will be completed by chart audit. If areas of improvement are assessed, further education and support of staff and stakeholders will be provided. When the implementation of the desired change is successful it will then be 'frozen' in place as the new standard in practice.

Project Design

The project design for this DNP project will be a quality improvement (QI) approach. This project aims to identify adolescents with mental health conditions and increase access to mental health services in male adolescents who are transitioning from the juvenile justice system to a group home. A QI approach is necessary to address the problem of undiagnosed youth with untreated mental health problems and to improve efficiency at a group home in identifying the mental health needs of its juvenile residents. The purpose of project implementation is to identify juvenile residents with mental health needs with the MAYSI-2 screening tool, assess staff learning utilizing the tool with a pre- and post-intervention questionnaire, and provide staff a toolkit with response resources. Applying evidence-based recommendations of mental health

screening in this population of youth improves outcomes and quality of life (National Center for Mental Health and Juvenile Justice, 2014; Underwood & Washington, 2016). Addressing the mental health needs of adolescence juveniles improves outcomes associated with recidivism, adult criminality, legal competency, and untreated mental illness (Cook et al., 2017; Underwood & Washington, 2016). Contributing factors to the current management of mental health include ineffective models of care, insufficient advances in policy to promote a standardized approach to mental health problems, and lack of staff training which results in an inadequate ability to provide adolescent offenders with appropriate mental health treatment (Underwood & Washington, 2016). The project objectives include developing a standardized method of screening for mental health which involve improvement in staff knowledge and skills regarding mental health screening. The QI project design can accomplish objectives by education, training, and implementation of a standardized approach to mental health screening with the MAYSI-2 tool. The benefits of the QI project design include improving efficiency in identifying the mental health needs of its juvenile residents, resulting in improved outcomes in this population related to reduced rates of recidivism and adult criminality.

Youth in the juvenile justice system who are screened and assessed for mental health are more likely to have their problems identified and treated, resulting in a significant decreased risk of delinquency and recidivism (Aalsma et al., 2015; Underwood & Washington, 2016). The DNP project consists of the implementation of the MAYSI-2 screening tool to assess for the presence of disorders in the following seven subscales: alcohol/drug use, angry, irritable, depressed, anxious, somatic complaints, suicidal ideation, thought disturbance, and traumatic experience. Lewin's theory and CATS model will guide the DNP project as a framework to implement the use of the MAYSI-2 screening tool at the project site. The population of interest is the staff at the

group home who will be implementing the screening. Project variables to address quality measures include staff knowledge, skill, and compliance of the mental health-screening tool. Project variables will be assessed with a pre- and post-intervention questionnaire, as well as, a retrospective chart review to examine compliance utilizing the tool. The content validity index (CVI) will be used to establish validity of the pre- and post-intervention questionnaire. Data will then be analyzed using IBM SPSS Statistics, version 24. Descriptive statistics will be used to evaluate responses of the pre- and post-intervention questionnaire.

Population of Interest

The population of interest for this project includes staff members at the group home who have direct contact with juvenile residents. The staff involved in the DNP project will consist of an executive director, an administrator, five group home counselors, and two therapists. The degrees of the staff range from PhD, master's, bachelor's, and associate prepared. The project intervention will target the population of interest for the implementation of the MAYSI-2 screening tool in juvenile residents of the group home. A pre- and post-intervention questionnaire will be given to the population of interest to evaluate learning. The population of interest will demonstrate a wide variety of generations and diverse backgrounds. Inclusion criteria for this project include all staff members with direct contact with juvenile residents of the group home. This project will not have any exclusion criteria as the project intends to implement a change in practice with a standardized approach to address the mental health needs of juvenile residents of the group home. The indirect population of interest for this project are the male adolescent residents, between the ages of 13 to 18 years old who are transitioning to the group home from the juvenile justice system.

Setting

The project site is a residential group home located in Vallejo, California for male adolescents designed to provide a structured environment with 24-hour supervision. Verbal and written permission was obtained from the executive director by the project lead to conduct the DNP project at the project site (see Appendix B). The community-based, nine-month program at the group home accepts referrals from County Juvenile Courts and the Department of Social Services. The project site is a non-profit organization, licensed by the State of California, committed to meeting needs of male adolescents who have been neglected, abandoned, or abused, or in the juvenile justice system. The current capacity of the group home is 20 residents. The project site allows juveniles contact with the community through attendance of school and participation in youth activities like sports. Therapeutic services are also employed by specialty-trained staff to assist youth with emotional and behavioral difficulties.

Stakeholders

There are both internal and external stakeholders who have interest in the outcome of this project. Individual external university stakeholders that partnered with the student include the DNP project chair and members, who were responsible for guiding and mentoring the project lead through the project process. These external stakeholders should be vested in the DNP project to support leadership for quality improvement in this adolescent population. Individual internal stakeholders include the executive director, administrators, staff members, and therapists at the project site who will influence the identification of juvenile mental health needs through MAYSI-2 screening tool implementation. These internal stakeholders, who comprise the organization and have a direct relation to juvenile adolescents placed in the group home, are

vested in the DNP project because they are in unique positions to identify mental health needs of their residents. By using the MAYSI-2 screening tool, they can provide resources for those with identified mental health needs. Their role will be critical as they all have the potential to improve identification of mental health needs and provide resources for mental health problems. The project lead will establish rapport by attending weekly staff meetings throughout the DNP project to cultivate a relationship based on effective communication, active listening, and respect.

Recruitment Methods

The DNP project requires active participation from stakeholders, which will be voluntary. A one on one meeting with the executive director will occur to present the plan and overview of the process of this project to develop and implement a change in practice with the standardized approach using a toolkit to address mental health needs of the juvenile residents in the group home. Participation in the DNP project will be advertised at the weekly staff meetings. An incentive for participation includes time toward one's professional development, which is required yearly at their workplace. The project lead will conduct an intervention presentation regarding the project to all stakeholders directly involved with the implementation. The participants will be assured of their safety, confidentiality, and privacy of their individual results of the pre- and post-intervention questionnaires. The project lead will then distribute an informational recruitment email with a link to the DNP project pre-intervention questionnaire to all participants. This link will allow anonymous responses for collection and analysis by Survey Monkey website. The survey responses will be anonymous and coded using individual identification numbers that are random to protect privacy and confidentiality. The survey responses will then be analyzed using descriptive statistics. For future quality improvement

following the DNP project at the group home, the data will be available for only six months and then will be ultimately deleted.

Tools/Instrumentation

The MAYSI-2 mental health-screening tool kit will be introduced to staff at the intervention presentation (see Appendix C). It is selected for this DNP project because of significant supporting evidence on its reliability and validity in the juvenile justice setting and population (Colins et al., 2014; Donaldson, 2018; McCoy, Vaughn, Maynard, & Salas, 2014). The MAYSI-2 was developed by Dr. Thomas Grisso and Dr. Richard Barnum at the University of Massachusetts Medical School in the 1990s with the assistance from the William T. Grant Foundation and was made available in 2000 after sufficient research was completed to establish initial reliability and validity. The purpose of the screening tool is to identify youth between 12 to 17 years old who may have symptoms, feelings, or behaviors that require immediate attention or need for further assessment to make a diagnosis (Colins et al., 2014). Administration of the screening tool can take up to fifteen minutes and scoring around three minutes. Current research in the US validates the use of the MAYSI-2's reliability and validity, as well as, effectiveness in American juvenile detention facilities (Colins et al., 2014; Donaldson, 2018; McCoy, Vaughn, Maynard, & Salas, 2014). Studies examining the internal consistency of the MAYSI-2 showed alpha coefficients across individual scales ranging from 0.48 to 0.90 with most over 0.70 (Grisso et al., 2012; McCoy et al, 2014). This tool is significant because it is typically used in juvenile justice settings to identify mental health and substance use problems in youth. When mental needs are identified, appropriate resources for treatment can be provided. An increase in access to mental health services within the juvenile justice system is an appropriate response to meet the needs of the youth with identified mental health problems. The MAYSI-2 is a copyrighted,

proprietary product. The *MAYSI-2 Manual and Technical Report* will be purchased by the project site for DNP project and future implantation, cost $125.

Previously systematic mental health screening of youth in the juvenile justice system did not occur due to the lack of appropriate tools and methods. With the availability of evidence-based resources, development of various mental health screening tools in juvenile justice have emerged. While there are several validated mental health screening tools currently being used within the juvenile justice system across the US such as the Child and Adolescent Functional Assessment Scale (CAFAS), the Global Appraisal of Individual Needs Short Screener (GAIN-SS), and the Substance Abuse Subtle Screening Inventory for Adolescents version 2 (SASSI-A2), the MAYSI-2 is the most widely used screening in juvenile justice facilities.

All participants in the QI project will complete a pre- and post-intervention questionnaire. The CVI of the pre- and post-intervention questionnaire indicates that all questions were relevant. Data collection includes a pre- and post-intervention questionnaire to assess the variables of staff knowledge and skills regarding the implementation of the MAYSI-2 screening tool. The pre-intervention questionnaire will assess staff knowledge prior to the intervention. The project lead will then provide staff education and training on the MAYSI-2 screening tool in preparation for its application. The intervention will consist of a 60-minute PowerPoint presentation, including a 15-minute question and answer session, and review of the *MAYSI-2 Administration & Referral Protocol Manual* (see Appendices H and C). The practice intervention will focus on using the MAYSI-2 evidence-based screening and utilization of a toolkit to provide recommended resources to adolescents based on their score on the MAYSI-2. The toolkit will serve as a reference to staff for administration of the MAYSI-2 tool. It will include a brief description of the components of the MAYSI-2 scale, steps for administration, and recommended resources in

response to MAYSI-2 score. To evaluate staff competency, the project lead will distribute an email with a link to the DNP project post-intervention questionnaire to all voluntary participants. This link will allow anonymous responses for collection and analysis by Survey Monkey website. Privacy and confidentiality will be protected by the anonymity of the survey responses with no identifiers, which will then be analyzed using descriptive statistics.

Data Collection Procedures

There will be two data collection and analysis periods completed during the DNP project, with the pre- and post-intervention questionnaire. The pre-intervention questionnaire will be completed by participants one week prior to the intervention. The post-intervention questionnaire will be completed by participants one week after the intervention. All data from the questionnaires will be collected anonymously through an online questionnaire using Survey Monkey. Survey responses will be collected anonymously by selection of the project lead in Survey Monkey to exclude all respondent information, including first name, last name, email address, and IP address from the results. The project lead will distribute the survey web link to all voluntary participants via email. Access to the questionnaire results will remain solely with the project lead to maintain participant confidentiality. The data from the questionnaires will be collected from Survey Monkey, distributed into an Excel sheet to develop a codebook. Once the codebook is developed and all results of the questionnaires entered, the coded responses will be run through IBM SPSS Statistics, version 24 by the project lead and verified by a statistician. The first data analysis phase will occur after the pre-intervention data is collected from all participants. The purpose of this phase is to analyze the data for descriptive statistics to determine areas of focus during the intervention. The second data analysis will occur after the post-intervention data is collected. The purpose of this phase is to compare the pre- and post-

intervention data. Once all pre- and post-intervention is collected and deemed reliable, the Kolmogorov Smirnov's test of normality and Wilcoxon Signed Rank Test (WSRT) will be performed to compare the pre- and post-intervention results to determine if the intervention met the project variables. The Kolmogorov Smirnov's test of normality examines if scores are likely to follow some distribution in two samples (Pallant, 2013). The WSRT is designed for use with repeated measures when your participants are measured on two occasions or under two different conditions (Pallant, 2013). The DNP project meets these testing criteria by measuring the participants prior to and after the intervention on teaching of the toolkit. A retrospective chart audit will also be completed to measure the compliance rate in the utilization of the MAYSI-2 tool. Frequency and descriptive statistics (means and standard deviation) will also be conducted to evaluate trends between the pre- and post-intervention data. The data will be beneficial in improving the identification of mental health needs and improving resources for mental health treatment of adolescents in this population.

Intervention

The intervention of the DNP project will focus on staff education and training on the administration of the MAYSI-2 tool at the project site to juvenile residents. The purpose of the DNP project will be presented to staff at the project site that are involved in managing the juvenile residents, and all other staff— administrators, counselors, and therapists—will be invited to voluntarily participate in this project. These staff members will be educated on the purposes of the project to develop a standardized screening process using a toolkit to identify mental health problems in male adolescents who are transitioning from juvenile detention centers to group homes with the aim to improve access to mental health treatment. This will ensure appropriate treatment of mental health problems in male adolescents while in the group home,

preventing harm to self and others and improving outcomes when adolescents' transition back into the public. Increased access to mental health treatment can improve the quality of life and decrease the risk of adult criminal behavior in juveniles. The goal of intervention is to adequately prepare all staff members to administer the MAYSI-2 tool, interpret results, and provide resources.

A pre- and post-intervention questionnaire will be administered to participants to assess the following variables of staff knowledge and skills regarding the implementation of the MAYSI-2 screening tool. The pre-intervention questionnaire will assess staff knowledge prior to the intervention. The project lead will then provide staff education and training on the MAYSI-2 screening tool in preparation for its application. The intervention will consist of a 60-minute PowerPoint presentation, including a 15-minute question and answer session, and review of the *MAYSI-2 Administration & Referral Protocol Manual* (see Appendices H and C). The practice intervention will focus on using the MAYSI-2 evidence-based screening and utilization of a toolkit in the protocol to provide recommended resources to adolescents based on their score on the MAYSI-2. The post-intervention questionnaire will assess staff knowledge after the intervention. Post-intervention questionnaire scores less than 80% will require remediation that will include review of presentation and *MAYSI-2 Administration & Referral Protocol Manual* (see Appendix C).

Project Timeline

The timeline (see Appendices E and F) for the DNP project began at the start of the 2018 fall semester (i.e. November 2018) with the development of the DNP project proposal at the selected project site. The anticipated duration of the DNP project from beginning to end will be approximately 12 months. The project lead will obtain approval for implementation of DNP project by executive director of project site and DNP project chair committee at Touro

University. The intervention of the project will be within a four-week time frame and will include the following components: pre-intervention questionnaire, education and training on the MAYSI-2 tool, utilization of MAYSI-2 toolkit, post-intervention questionnaire, and a retrospective chart audit to measure the compliance rate in the utilization of the MAYSI-2 tool. Week one will consist of recruitment of staff for participation in the DNP project with an intervention presentation at a staff meeting followed by an informational recruitment email that will link to the DNP pre-intervention questionnaire. Week two will consist of education and training on the MAYSI-2 tool based on the *MAYSI-2 User's Manual & Technical Report*, as well as, utilization of the MAYSI-2 toolkit. Week three will consist of post-intervention questionnaire, and remediation if needed. Week four will consist of retrospective chart review to measure compliance in the utilization of the MAYSI-2. The timeline (see Appendices E and F) illustrates time spent to prepare all sections of the proposal, obtain approval for implementation, recruit participants, carry out implementation, and evaluate the project.

Ethics/Human Subjects Protection

The university Institutional Review Board (IRB) approval was not required for this project since the project lead will not be conducting research with human subjects. The project lead completed the *Social and Behavioral Research* course from Collaborative Institutional Training Initiative (CITI) program (see Appendix I). Actions to protect ethical project implementation will include following *Health Insurance Portability and Accountability Act* ([HIPAA], 2004), which protects the medical records and personal health information of individuals. HIPAA will be applied to this project through staff education on confidentiality of juvenile responses during the MAYSI-2 screening and exceptions to confidentiality that include the juvenile being a victim or committing an offense involving child abuse or neglect, which

must be reported to law enforcement and the Department of Human Services. There are minimal to no identified risks to participation in this project. Benefits include participant competency in administering an evidence-based screening tool to assess mental health needs in juvenile residents. No compensation for participation will be necessary since this QI project is voluntary.

To protect privacy and confidentiality of participants in the DNP project methods include all information collected, as part of evaluating the impact of this project will be anonymous, aggregated data from the project participants and will not include any potential identifiers. The data will be will be available for six months and then deleted. The participants will be coded using individual identification numbers that will ensure participant confidentiality. The list of participants and their identifying numbers will be kept secured on a USB, only accessible to the project lead. Presence of any identifiable information electronically will be password protected to prevent access by unauthorized users and only the DNP project team will have access to the passwords.

Plan for Analysis/Evaluation

The first data analysis phase will occur after the pre-intervention data is collected from all participants. The purpose of this phase is to analyze baseline data, which can then be used to determine areas of focus during the intervention. The second data analysis will occur after the post-intervention data is collected. The purpose of this phase is to assess staff learning after the intervention by comparing the pre and post-intervention data. Participants will be required to show evidence of completing the post-intervention questionnaire to their supervisor and those who score less than 80 percent will require remediation, which will consist of review on the MAYSI-2 screening toolkit and retesting. When the pre- and post-intervention data is collected and deemed reliable, the Kolmogorov Smirnov’s test of normality and WSRT will be performed.

The Kolmogorov Smirnov's test of normality is a non-parametric test of the equality of continuous probability distributions in a population. An assessment of the normality of data with the Kolmogorov Smirnov test will be used as a prerequisite to determine validity (Ghasemi & Zahediasl, 2012). The WSRT is the non-parametric alternative to the repeated measures t-test and will be used to compare the pre- and post-intervention questionnaire results to determine if the intervention met the project variables. The WSRT is designed for use with repeated measures, when participants are measured on two occasions or under two different conditions (Pallant, 2013). The DNP project meets these testing criteria by measuring the participants prior to and after the intervention on teaching administration of the MAYSI-2 tool and use of the toolkit. A threat to the internal validity is the pre- and post- design of testing (Pallant, 2013). Interpretation from the Kolmogorov Smirnov's test of normality and the WSRT will reveal if there is a statistical significance in the pre- and post-intervention results following participation in the education and training intervention.

Assumptions of the Kolmogorov Smirnov's test of normality include the comparison of the two samples, the pre- and post-intervention scores, to assess the normality of the distribution of scores. The results of the Kolmogorov Smirnov's test of normality determines if the normality assumption has normal distribution and found valid with p-value greater than or equal to .05. A p-value less than or equal to .05 suggests a rejection of the hypothesis that the score is normally distributed (Ghasemi & Zahediasl, 2012). Assumptions of the WSRT include two samples that need to be dependent observations of the cases. WSRT assesses for differences before and after measurement while accounting for individual differences in the baseline. Assumptions with non-parametric testing are that each participant will only be observed and coded once except in repeated measures techniques like the WSRT where the same participants are retested on

different occasions or under different conditions (Pallant, 2013). With the WSRT, the Z-value and the associated significance levels are the results of interest. In conclusion, the results of statistically significant value and the significant level value indicated a result of equal to or less than .05. The effect size will take the computed z-value and divide it by the square root of N (total number of participants with all valid data), using Cohen's criteria of .1 = small effect, .3 = medium effect, .5 = large effect (Pallant, 2013). Frequency and descriptive statistics (means and standard deviation) will also be conducted to evaluate trends between the pre- and post-intervention data.

Implications for Nursing

Mental health problems impact a significant amount of youth in the juvenile justice system. Findings from mental health studies conducted within the last five years among youth in various juvenile justice settings consistently indicate a high number of youth with mental health problems (National Center for Mental Health and Juvenile Justice, 2014). In the body of evidence relating to the mental health needs of juveniles a common theme is the need for improved access to mental health care through screening and assessment (Aalsma et al., 2015; Dölitzsch et al., 2017; Swank & Gagnon, 2016). These findings are significant to the nursing profession because it identifies screening and assessment tools being proven methods to aide in the identification of youth with mental health needs. Experts recommend that the juvenile justice systems use current evidence-based practice and tools for screening with youth. In comparison to current literature, the findings of this project will support the use of evidence-based practices with utilization of the MAYSI-2 screening tool to address the mental health needs of juveniles. Nursing leadership in this DNP project has the potential to enhance the support of the MAYSI-2 tool to identify mental health needs of juvenile residents. In addition, the implementation of a

standardized approach to address mental health problems in juvenile residents would help to provide resources for those juveniles with identified mental health needs. This project can have great significance for nursing in the juvenile population by identifying mental health needs and improving access to mental health resources. Obtaining the stated objectives will substantiate the success of this project.

Analysis of Results

The DNP project seeks to improve early identification and management of mental health conditions in the juvenile population. The project objectives were met by the development of the *MAYSI-2 Administration & Referral Protocol Manual* including a toolkit as a standardized method of mental health screening at the project site (see Appendix C), providing staff education and training on the MAYSI-2 with evaluation by a pre- and post-intervention questionnaire, and a retrospective chart review to assess compliance of the MAYSI-2 after the project intervention. The goal of the DNP project is to answer the following research question, “In the male juvenile population who is transitioning out of the juvenile system into a group home, does the implementation of a mental health screening tool in comparison to current practices, improve early identification and management of mental health conditions?” The findings from the project implementation will be discussed.

The DNP project implementation group consisted of ten staff participants who completed a pre- and post-intervention questionnaire ($N = 10$). The average pre-intervention score is 5.8 ($SD = 2.394$) with a minimum and maximum score of 1 and 8 respectively while the average post-intervention score is 9.3 ($SD = 1.252$) with a minimum and maximum score of 6 and 10, respectively. This is displayed below in Table 1 and illustrated in Figure 1.

Table 1

Descriptive Statistics of Pre and Post-Intervention Scores

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-Intervention Score	10	5.80	2.394	1	8
Post-Intervention Score	10	9.30	1.252	6	10

The Kolmogorov Smirnov's Test of Normality

The Kolmogorov Smirnov's test of normality was used to compare the two samples, the pre-and post-intervention scores (Table 2). This test compares the cumulative distribution of two data sets and is important to determine if two datasets differ significantly. The Kolmogorov Smirnov's test was completed under the hypothesis that the pre- and post-intervention score are normally distributed. The results indicate that the normality assumption was found valid only for pre-intervention score with a reported p-value >.05 and indicates normal distribution. The post-intervention score has a p-value <.05, which suggests a rejection of the hypothesis that the post-intervention score is normally distributed. With the intervention of education and training, the scores are now skewed to the right. This is an indication that there is an improvement in the post-intervention scores as a result from the education and training.

Table 2

Tests of Normality for Pre- and Post-Intervention Scores

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pre-Intervention Score	.221	10	.182	.863	10	.082
Post-Intervention Score	.312	10	.007	.622	10	.000

The Wilcoxon Signed Ranks Test

The Wilcoxon Signed Rank Test (WSRT) also referred to as the Wilcoxon Matched Pairs Signed Ranks test was designed to answer the project question. The WSRT is used with repeated measures; i.e. when subjects are measured on two occasions, or under two different conditions (Pallant, 2013). It is the non-parametric alternative to the repeated measures t-test, but instead of comparing means, the Wilcoxon converts scores to ranks and compares them at time 1 and at time 2. The WSRT was used to answer the research question "In the male juvenile population who is transitioning out of the juvenile system into a group home, does the implementation of a mental health screening tool in comparison to current practices, improve early identification and management of mental health conditions?" The null hypothesis (Ho) is stated as: There is no significant difference between the pre- and post- intervention mean score. Similarly, the alternative hypothesis (Ha) was stated as: There is a significant difference between the pre- and post- intervention means scores. Subsequently, the outcome of the WSRT will lead to the acceptance or the rejection of one of the hypothesis. The result of the WSRT is shown in Table 3.

Table 3

Results of the Wilcoxon Signed Ranks Test

	Scores (%)	
Participants	Pre-Intervention	Post-Intervention
Respondent 1	80	100
Respondent 2	30	100
Respondent 3	50	100
Respondent 4	60	100
Respondent 5	80	90
Respondent 6	60	90

Respondent 7	50	100
Respondent 8	80	100
Respondent 9	80	90
Respondent 10	10	60

Z= -2.814[b] (based on negative ranks). p = 0.05 (Asymp. Sig. 2-tailed). n= 10.

The result by the WSRT revealed a statistically significant variation in the post-intervention score (Z = -2.814, *p* = .005). The results indicate that the intervention of education and training had an effect on staff knowledge, as illustrated in the higher post-intervention score compared to the pre-intervention score (Figure 1). The result of WSRT is statistically significant and suggests the rejection of the null hypothesis, which states that there is no significant difference between the pre- and post-intervention mean score. On the other hand, the alternative hypothesis (Ha), which states that there is a significant difference between the pre- and post-intervention means scores, is accepted. Consequently, the result implies that the implementation of a mental health screening tool in comparison to current practices, can improve early identification and management of mental health conditions in the male juvenile population who is transitioning out of the juvenile system into a group home.

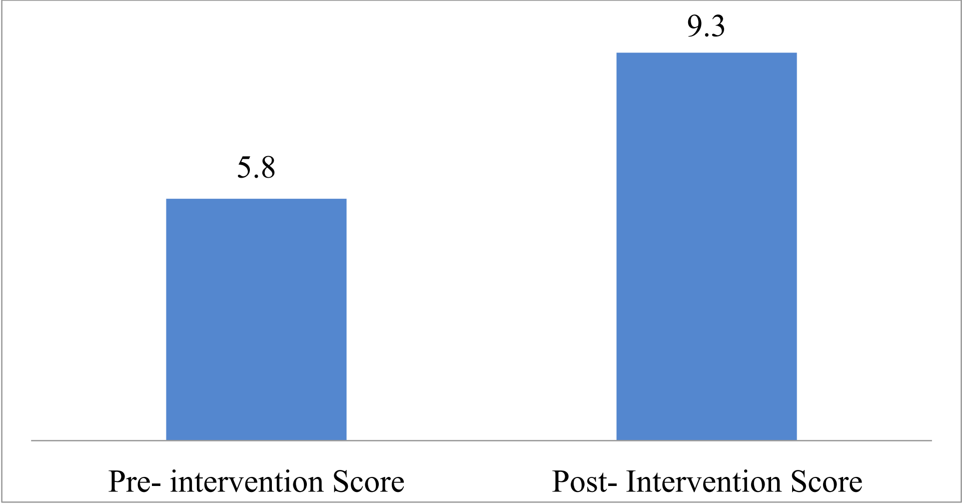

Figure 1. Graphical representation of the mean plot of pre- and post-intervention scores

Effect Size

Since there is a significant difference between the pre- and the post-intervention scores, the effect size (*r*) was estimated to verify the magnitude of the intervention. Using the Z scores from the Wilcoxon Signed Rank Test output, *r* was found to be 0.44. Based on Cohen (1988) criteria, this is a large effect. This implies that there was a large effect on the knowledge base of staff involved in managing the juvenile residents on the administration of the MAYSI-2 tool after the intervention of education and training.

The Retrospective Chart Review

Finally, a retrospective chart review was completed to evaluate compliance in the utilization of the MAYSI-2 after the project intervention. The results indicate 100% of the six charts reviewed (95% confidence interval: 52% to 100%) implemented the MAYSI-2, and 50% (95% confidence interval: 14% to 86%) required referral. This is significant because it identifies youth who would otherwise not have received a referral because they were not assessed prior to the education and training on the MAYSI-2 during the project intervention.

Summary

The DNP student successfully met the objectives of the project by developing a standardized method of screening for mental health including a reference toolkit, implementing a pre- and post-intervention questionnaire, and performing a retrospective chart review. Results from the project intervention in education and training of the MAYSI-2 illustrate an improvement in staff knowledge and skills on mental health screening, which is evident in the subsequent evaluation of the pre- and post-intervention questionnaire. The data collected from the pre- and post-intervention questionnaire, as well as, the retrospective chart review answered

the project question “In the male juvenile population who is transitioning out of the juvenile system into a group home, does the implementation of a mental health screening tool in comparison to current practices, improve early identification and management of mental health conditions?” The analysis indicates the significant impact of education and training of participants on the MAYSI-2. Furthermore, the analysis not only implies that the implementation of a mental health screening tool in comparison to current practices, can improve early identification and management of mental health conditions in the male juvenile population. This is supported in the findings from the retrospective chart review, which identifies youth at the project site that would not have received a referral prior to the DNP project because current practices at the project site did not include mental health screening.

Discussion

The results of data analysis are based on the findings from the project intervention. The project intervention consisted of a 60-minute PowerPoint presentation and review of the *MAYSI-2 Administration & Referral Protocol Manual*, which was created by the DNP lead and addresses the project objective in the development of a standardized method for mental health screening and toolkit (see Appendices H and C). Of the 10 staff participants ($N = 10$) the average pre- and post-intervention scores are 5.8 and 9.3 respectively (Figure 1). To confirm the significance as well as provide an answer to the project question “in the male juvenile population who is transitioning out of the juvenile system into a group home, does the implementation of a mental health screening tool in comparison to current practices, improve early identification and management of mental health conditions,” the Kolmogorov Smirnov’s test of normality was performed. Based on the Kolmogorov-Smirnov test for normality, the normality assumption was found valid for pre-intervention scores, which is an indication that the data set is well behaved. The post-intervention score has a p-value $<.05$, which suggests a rejection of the hypothesis that

the post-intervention score is normally distributed. Since the assumption was not met as indicated in the rejection of the hypothesis that the post-intervention score is normally distributed, the WSRT was done.

The result of the WSRT revealed a statistically significant variation in the post-intervention score ($Z = -2.814$, $p = .005$) implying that the implementation of a mental health screening tool in comparison to current practices, can improve early identification and management of mental health conditions in the male juvenile population who is transitioning out of the juvenile system into a group home. To further support the statistical significance between the pre- and post-intervention scores, Cohen's (1988) criteria based on the Z score from the WSRT output *r* was found to be 0.44, which is an indication of a large effect. This implies that there was a large effect on the knowledge of participants involved in managing the juvenile residents on the administration of the MAYSI-2 tool after the intervention of education and training, which addresses the project objective to improve staff knowledge on a mental health screening tool. One out of the ten participants required remediation and retesting as a result of their post-intervention score.

To meet the objective of evaluating compliance in the utilization of the MAYSI-2 after the project intervention, a retrospective chart review was completed. The results reveal 100% of the six charts reviewed (95% confidence interval: 52% to 100%) implemented the MAYSI-2, and 50% (95% confidence interval: 14% to 86%) required a referral as recommended in the *MAYSI-2 Administration & Referral Protocol Manual* and toolkit (see Appendix C). This is compelling evidence because youth at the project site were not receiving mental health screening prior to the project intervention of education and training on the MAYSI-2. As a result of the project intervention of education and training on the MAYSI-2, trained staff successfully identified 50% of youth at the project site requiring a mental health referral. The success of the DNP project is substantiated by the answer to the project question and obtaining the stated objectives.

The results of the project are in alignment with previous published literature that support use of screening and assessment tools in the identification of youth with mental health needs (Aalsma et al., 2015; Donaldson, 2018; Dölitzsch et al., 2017; Swank & Gagnon, 2016). For example, the MAYSI-2 was used by Donaldson (2018) in the setting of an Idaho juvenile detention center. Similar to the DNP project with the utilization of the *MAYSI-2 Administration & Referral Protocol Manual* and toolkit, Donaldson (2018) identifies youth entering the juvenile justice system that may benefit from mental and behavioral health services using the MAYSI-2. Donaldson (2018) also identifies school counselors in a unique position to address issues like trauma as an early link in mental and behavioral health problems in youth. The DNP project and previous published literature demonstrates the usefulness of the MAYSI-2 tool to identify mental and behavioral issues, not only in juveniles, but also the youth and adolescent population.

Significance

The National Center for Mental Health and Juvenile Justice (2014) reports mental health problems impacting a significant amount of youth in the juvenile justice system. In the current body of evidence involving the mental health needs of juveniles a common theme is the need for improved access to mental health care through screening and assessment (Aalsma et al., 2015; Dölitzsch et al., 2017; Swank & Gagnon, 2016). The findings from current literature are significant to the nursing profession because it identifies screening and assessment tools being proven methods to aid in the identification of youth with mental health needs. Current recommendations for youth in the juvenile justice system include the use of current, evidence-based practice and tools for mental health screening.

The findings from the DNP project are supported by current literature with the application of evidence-based practices through utilization of the MAYSI-2 tool to address the mental health needs of juveniles in a group home setting. Underwood and Washington (2016)

opined that improvement has taken place over the last decade in juvenile justice with new research, program, and resource development and has resulted in the implementation of new tools and knowledge in juvenile justice to improve the mental health needs of the youth. The DNP project therefore lends a voice to literature through the implementation of an evidence-based mental health screening in the juvenile population. The findings from the DNP project suggest that the implementation of a mental health screening tool can improve early identification and management of mental health conditions in the male juvenile population who is transitioning out of the juvenile system into a group home. The implementation of a standardized approach using an evidence-based tool to assess mental health problems in juveniles has the potential to improve their outcomes and decrease predisposition to future delinquency as they leave a controlled environment and transition back into society.

As a result, from the DNP project, expectations are that evidence-based tools, such as the MAYSI-2, will not only influence juvenile justice law and policy but also result in better outcomes of the youth in the juvenile justice system by meeting their mental health needs (The National Center for Mental Health and Juvenile Justice, 2014). Nursing leadership in this DNP project supported the use of an evidence-based screening tool, the MAYSI-2, to identify mental health needs of juvenile residents at the project site. The development and utilization of the *MAYSI-2 Administration & Referral Protocol Manual* (see Appendix C) at the project site provides a standardized approach to respond to identified mental health needs in juvenile residents. As demonstrated in the analysis of results, the DNP project has great significance for nursing in the juvenile population by identifying mental health needs through screening and improving access to mental healthcare.

The DNP project is in alignment with current recommendations to improve the mental health needs of the youth including up-to-date mental health screening and assessment tools, implementation of protocols for use within the juvenile justice system utilizing evidence-based intervention and treatment (National Center for Mental Health and Juvenile Justice, 2014). In comparison to current literature, the findings of this project support the use of evidence-based practices with utilization of the MAYSI-2 to address the mental health needs of juveniles. Nursing leadership in the DNP project provide an increase in support of the MAYSI-2 to identify mental health needs of juvenile residents at the project site. In addition, the implementation of a standardized approach with the *MAYSI-2 Administration & Referral Protocol Manual* (see Appendix C) to address mental health problems in juvenile residents helps to provide resources for those juveniles with identified mental health needs. This project has great significance for nursing in the juvenile population by identifying mental health needs and improving access to mental health resources.

Limitations

Limitations in project design include QI methodology. The QI approach targets interventions to improve the culture at the project site with a focus on juvenile mental health needs. Consequences in QI design are limited opportunity to learn whether the intervention worked as expected and a potential for biased and misleading results (Reed & Card, 2016). The limitations to this project include small sample size, time constraint, and a threat to the internal validity with the pre- and post- design of testing in data collection. Recruitment of the participants was limited to one project site; therefore, not allowing for more participants from multiple facilities working with juveniles. Limitation to time was also a factor since the project intervention had to be completed within four weeks. Recruitment of participants was affected by

time and contributed to how many staff members participated in the DNP project. Limitations in data collection methods include the threat to internal validity consisting of the pre-and post-design of testing. This is due to the effect of taking the same test at a different time. When one takes the same test at a different time, it has the potential to impact the outcomes of the second test (Institute of Medicine, 2015). Limitations to data analysis include a small sample size. A higher confidence level requires a larger sample size, which provides greater power to detect differences (Pallant, 2013). A large sample size would also increase the number of participants involved in managing the juvenile residents in the administration of the MAYSI-2, which could potentially result in improved outcomes of juvenile residents through the utilization of the MAYSI-2.

Dissemination

The paper will be submitted to the *Journal of Juvenile Justice* and *Journal of Child and Adolescent Mental Health*. A PowerPoint presentation will be disseminated to student colleagues and professors. Through a collaborative effort with stakeholders at the project site, the results will be presented to the executive director and administrator for further dissemination. A manuscript of the project will be created to highlight the project's plan, objectives, analysis of results, and discussion. A poster presentation will also be created and displayed at the project site and at the school district to support evidence-based recommendations for mental health screening. This will increase awareness and knowledge in mental health screening in the juvenile population. The DNP student will also request to present the project results at the local school district to increase mental health screening in the adolescent population. The outcome of the DNP project regarding project sustainability include the current implementation of the MAYSI-2 screening tool at the project site as the new standard in practice. The utilization of the *MAYSI-2*

Administration & Referral Protocol Manual including the toolkit (see Appendix C), created by the DNP student, is the new standard in practice for mental health screening at the project site.

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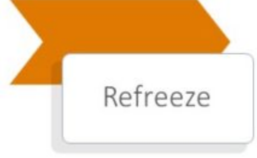
Appendix A

Kurt Lewin's Change-As-Three-Steps Model

Kurt Lewin's *Change-As-Three-Steps* (CATS) Model

A Rule of Three Model for Change Leadership: Unfreeze, Change, and Refreeze



Rule 1

Convincing those that are affected by the change (stakeholders) that the change is really necessary.

Rule 2

Getting the affected stakeholders who have accepted the need for change to implement it with you.

Rule 3

Taking actions to reinforce and support the change so that the change becomes a permanent way of doing business.

Appendix B

Permission Letter

December 17, 2018

Touro University of Nevada
Department of Nursing
874 American Pacific Drive
Henderson, NV 89014

RE: DNP project

To Whom it May Concern,

Catherine Smally, Touro University DNP student, has permission to complete her DNP project at Mary's Help Residential Group Home. There is no affiliation agreement required at our site.

Sincerely,
Roy Smally, MFT Associate
Executive Director

Mary's Help
P.O. Box 4485
Vallejo, CA 94590
Phone: 707-649-8011
Fax: 707-649-0442

Appendix C

MAYSI-2 Administration & Referral Protocol Manual

MAYSI-2 Administration & Referral Protocol Manual

Mary's Help, Inc.

July 2019

PREAMBLE: MENTAL HEALTH SCREENING WITHIN JUVENILE JUSTICE

INFORMATION SHARING

Information sharing should occur through an active exchange of information to benefit assessments, case planning, and service delivery. Sharing the results from the MAYSI-2 should be done to facilitate appropriate and improved coordination of services for the youth.

RATIONALE FOR MENTAL HEALTH SCREENING OF YOUTHS IN THE JUDICIAL SYSTEM

There is a significant amount of youth in in the US juvenile justice system, which can be illustrated in the 2.1 million youth under the age of 18 who are arrested in a single year (Youth.gov, n.d.). Current statistics show that overall rates of youth delinquency have decreased compared to previous years; however there are still 1.7 million juvenile delinquency cases annually in the US. This is significant because a high percentage, 65 to 70%, of juveniles in the justice system have a mental health problem that is diagnosable (Youth.gov, n.d.). Furthermore, severe mental disorders are close to 27 percent, indicating that more than one quarter of all youth in the juvenile justice system are in significant need of mental health treatment (National Center for Juvenile Justice, n.d.). In regards to residential group homes after detention center placement and transition back into the community, males are more commonly placed than females. In 2015 males accounted for approximately 85% of all juveniles in residential placement (U.S. Department of Justice, 2017). Numerous studies have identified regardless of gender and race, high prevalence rates for mental health and substance use disorders in juvenile population (McCoy et al., 2014).

As the numbers of youth with mental health needs in the juvenile justice system increase and mental health and probation resources decrease, limited mental health resources for probation youth must be allocated more effectively. The first step towards ensuring that youth in the juvenile justice system with mental health needs are accurately identified, assessed, and appropriately treated is routine mental health screening at the earliest point of contact with the system. One of the most important first steps to respond to the mental health treatment needs of youth in the juvenile justice system is to systematically identify the mental health needs of youth as they become involved with the juvenile justice system. Mental health screening is now routinely preformed within many juvenile justice agencies and programs throughout the country. This is important progress in the overall effort to better identify and respond to youth with mental health treatment needs.

MENTAL HEALTH SCREENING AND MENTAL HEALTH ASSESSMENT [1]

"Mental Health Screening is a relatively brief process carried out by non-clinical staff using a standardized mental health screening tool. Some tools offer structured questions that youth answer about their current or recent thoughts, feelings, or behaviors. Others ask staff to make ratings based on past records or caretakers' reports of youths' behavior. In any case, mental health screening is a triage process that is employed with every youth during an initial probation intake interview, within a few hours after intake in pretrial detention or upon entrance into juvenile justice placement.

The purpose of mental health screening is to identify youth whose mental or emotional conditions suggest that they might have a mental disorder, might have suicide potential, or might present a risk of harm to others in the immediate future. The term "screened in" is used to refer to youth who are identified by the screening method as needing further attention.

When youth are "screened in" for possible mental and emotional problems, it does not necessarily mean that they have mental disorders or that they are suicidal or likely to harm others. It indicates the need for a follow-up response by staff. Often this involves obtaining further evaluation.

Mental Health Assessment is a follow-up for youth whose screening scores suggest that they might have mental and emotional problems. Assessments are performed by clinicians, and the offer more comprehensive, individualized evaluation of youth providing descriptions and recommendations that will be useful for longer-range treatment and dispositional planning. The assessment process may include psychological testing, clinical interviewing, and obtaining past records from other agencies for review by the clinical assessor."

DESCRIPTION OF THE MASSACHUSETTS YOUTH SCREENING INSTRUMENT: VERSION 2 (MAYSI-2)

The MAYSI-2 was developed by Dr. Thomas Grisso and Dr. Richard Barnum at the University of Massachusetts Medical School in the 1990s with the assistance from the William T. Grant Foundation and was made available in 2000 after sufficient research was completed to

[1] Selected passages come from Skowyra, K.R., & Cocozza, J.J. (n.d.) *Mental health screening within juvenile justice: The next frontier.* Chapter 1: Introduction, and Chapter 2: Procedures and Policies. Delmar, NY: National Center for Mental Health and Juvenile Justice. http://www.ncmhjj.com/pdfs/MH_Screening.pdf

establish initial reliability and validity. The purpose of the screening tool is to identify youth between 12 to 17 years old who may have symptoms, feelings, or behaviors that require immediate attention or need for further assessment to make a diagnosis (Colins et al., 2014). Designed as a low-cost, easily administered tool, it screens for multiple issues and can be administered in ten to fifteen minutes and scoring around three minutes. Current research in the US validates the use of the MAYSI-2's reliability and validity, as well as, effectiveness in American juvenile detention facilities (Colins et al., 2014; Donaldson, 2018; McCoy, Vaughn, Maynard, & Salas, 2014). Studies examining the internal consistency of the MAYSI-2 showed alpha coefficients across individual scales ranging from 0.48 to 0.90 with most over 0.70 (Grisso et al., 2012; McCoy et al, 2014). This tool is significant because it is typically used in juvenile justice settings to identify mental health and substance use problems in youth.

It is divided into seven scales composed of 52 questions that are designed to detect alcohol/drug use, angry-irritable behavior, depression-anxiety, somatic complaints, suicide ideation, thought disturbance, and traumatic experience. Youths answer YES or NO concerning whether each item has been true for them "within the past few months." MAYSI-2 requires a 5th-grade reading level, and is designed to be self-administered either in paper. The MAYSI-2 is available in both English and Spanish as well as in software form.

CAUTION AND WARNING CUT-OFF SCORES IN THE MAYSI-2

The MAYSI-2 consists of seven scales for boys, each composed of multiple Yes/No questions. The MAYSI-2 has two "cut-off" scores for six of the seven scales. Through extensive research CAUTION scores were set for the six scales. A CAUTION score indicates that the youth has scored at a level that can be said to have "possible clinical significance." The WARNING score was set to identify approximately the top 10% of youth with the very highest scores. Both the CAUTION and WARNING scores serve to guide response to a youth, and it is these scores that your referral protocol will address.

MAYSI-2 SCALES[2]

ALCOHOL/DRUG USE

The AD scale is intended to identify youths who are using alcohol or drugs to a significant degree, and who are therefore at risk of substance dependence and/or abuse. The scale has

[2] Description from Grisso, T. & Barnum, R. (2006). Massachusetts Youth Screening Instrument Version 2: User's manual and technical report. Sarasota, FL: Professional Resource Press, pp.12-18.

eight items. Five of the items are concerned with various negative consequences of substance use disorders, and the remaining three address characteristics of substance use that are thought to represent factors for abuse.

ANGRY-IRRITABLE

The AI scale is intended to assess explicit feelings of preoccupying anger and vengefulness, as well as a general tendency toward irritability, frustration, and tension related to anger. The scale has 9 items. Four explicitly concern angry mood and thoughts, three others are concerned with irritability and risk of impulsive reactions, and the last two items pertain to behavioral expression of anger.

DEPRESSED-ANXIOUS

The DA scale is intended to elicit symptoms of mixed depression and anxiety. The scale has nine items. Five items inquire about manifestations of anxiety and inner turmoil, and four items are concerned with depressed mood.

SOMATIC COMPLAINTS

The SC scale includes six items that ask about various bodily aches and pains that may affect the youth, along with specific bodily expressions of anxiety. An elevated score on this scale could occur for a variety of reasons. For example, somatic complaints tend to co-occur with depression and anxiety, and sometimes they can be associated with trauma history and with thought disorder as well. On the other hand, aches, pains, and other somatic complaints may be symptoms of physical illness, and such complaints should not be overlooked as symptoms in their own right.

SUICIDE IDEATION

The SI scale has five items. Three of them specifically address thoughts and intentions about self-harm and two involve depressive symptoms that may present an increased risk for suicide. One of the items is shared with the DA scale.

THOUGHT DISTURBANCE (BOYS ONLY)

The TD scale is intended to indicate the possibility of serious mental disorder involving problems with reality orientation. The scale has five items, four of which refer explicitly to altered perceptions in reality that are frequently associated with psychotic disorders. The remaining item refers to a condition of derealization ("things don't seem real") that is a more general abnormality of perception and consciousness. It is sometimes an early indication of a

psychotic state, but it may simply arise in anxiety or dissociative states as well. In the study with which the MAYSI-2 was developed, the various ways that we used to identify which items came together as scales did not identify a "thought disturbance" scale for girls using MAYSI-2 items. Thus the TD scale should not be applied to girls.

TRAUMATIC EXPERIENCES

The TE scale is intended to identify whether a youth has had greater exposure to traumatic events compared to other youths. Unlike other MAYSI-2 items, the TE items ask for responses regarding events or feelings over the youth's entire lifetime rather than just the "past few months." There are separate TE scales for boys and girls.

MAYSI-2 ADMINISTRATION PROTOCOLS

I. MISSION/PURPOSE

By adopting the use of the MAYSI-2 it is the intent that all youth, ages 12-17, receiving services through Mary's Help, Inc. will be administered the MAYSI-2.

II. POINTS OF CONTACT

There will be three types of initial contacts for administering the MAYSI-2 at Mary's Help, Inc. These are:

1. Youth entering the organization through referral from County Juvenile Court. These youth will be administered the MAYSI-2 at the initial intake [or within 4 hours of entering program].
2. Youth entering the organization through referral from Department of Social Services. These youth will be administered the MAYSI-2 at the initial intake [or within 4 hours of entering program].
3. Youth on formal probation through County Juvenile Probation.

The MAYSI-2 may be re-administered at any time during the course of the youth's probation, including pre-sentence investigation, under certain circumstances while at Mary's Help, Inc. In most cases, this would take place (1) after a traumatic event in the youth's life or (2) when the youth reports an emotional disturbance.

III. INITIAL CONTACT

Screeners shall inform youth of the following:

1. By law, the results of the MASYI-2 will not be shared with the Court, unless screening is ordered by the Court. The purpose of the MAYSI-2 is solely to determine and meet the needs of the youth.
2. Limits on confidentiality are explained in the event that the youth indicates an intention to harm themselves or others. State the following: "The only exception to the confidentiality of your responses is if you disclose that you are the victim or have committed an offense involving child abuse or neglect, which must be reported to law enforcement and/or the Department of Human Services."
3. Instructions on how to complete the survey are explained. State the following: "These are some questions about things that sometimes happen to people. For each question, please answer "yes" or "no" to whether that question has been **true for you in the past three months or since [name holiday 3 months ago]** unless otherwise indicated. Please answer these questions as well as you can."
4. Youth should choose the best answer for each question based on your experiences in the past few months rather than leaving questions blank.

IV. ADMINISTERING THE MAYSI-2

Administered via Paper & Pencil

Taking the survey

1. The youth should be placed in a room or area without distractions, preferably at the Mary's Help, Inc. office.
2. Staff gives the youth the MAYSI-2 Questionnaire appropriate for their gender and provides instructions.
3. Staff ensures youth can read the items with minimum help by asking the youth to read the first few items aloud.
   a. If youth cannot do it, staff member lets youth know s/he will help by reading the items from their own copy.
   b. Staff reads each item, including the item number and youth places answer by the correct item. Staff should not watch how the youth answers each item in order to ease the level of potential discomfort.
4. When survey is completed, check to confirm all questions have been answered. If not, encourage youth to complete missing items.
   a. If youth is having trouble deciding whether item is true or not for him/her, prompt youth to answer "yes" if it has "probably been true" or if it is "a little true."
5. Use the *MAYSI-2 Scoring Key* to hand score the Questionnaire.

   a. Align the arrow on the left side of the *Scoring Key* with the arrow on the right side of page 1 of the Questionnaire.
      i. Circle the numbers on the *Scoring Key* that the youth marked "Yes" and place an X on each item on the *Scoring Key* for which the youth did not provide an answer.
      ii. Two scales are gender-specific:
         1. *Thought Disturbance* scale is for BOYS ONLY.
         2. *Traumatic Experiences* scale has a separate *Scoring Key* for boys and girls.
   b. Repeat above procedure with page two of the MAYSI-2 Questionnaire, aligning the right side of the *Scoring Key* with the arrow on page two of the Questionnaire.
6. Use the *MAYSI-2 Scoring Profile* to record the information from the Scoring Key.
   a. First identify the scales, if any, for which the number of X's indicate an invalid score:
      i. For scales with eight to nine items, more than two unanswered items invalidates the scale.
      ii. For scale with five to six items, more than one unanswered item invalidates the scale.
   b. Transfer from the Scoring Key to the Score Profile the number of items circled for a given scale (if it is valid, see "a" above).
      i. Remember, two scales are gender-specific:
         1. *Thought Disturbance* scale is for BOYS ONLY so only boys will have a score for TD.
         2. *Traumatic Experiences* scale has separate Scoring Keys for boys and girls. Be sure you used the appropriate key before entering the score.
7. **Under no circumstances should the staff change any of the youth's answers on the MAYSI-2.** If second screening questions reveal the youth misunderstood a question, this information can be written in response to the second screening question to thereby "correct" or clarify the initial answer.

MAYSI-2 REFERRAL PROTOCOLS

I. POST SCREENING

1. **If youth scores at or above the "CAUTION" level on the "Suicide Ideation" scale**
   a. Ask second screening questions of the youth.
   b. If determined that youth is in imminent danger to himself, call police and transport to Adventist Health Behavioral Health Center
      525 Oregon Street Vallejo, CA 94590.
      OR nearest emergency room

c. If it is determined that the youth is not in imminent danger to himself:
    i. Complete a Safety Plan with the youth and his family/legal guardian/foster parent
    ii. Advise staff that Youth needs to be Monitored
    iii. Conduct Collateral Interviews with family members and/or past service providers.
    AND, depending on the information collected, may need to do one or more of the following:
        1. Follow procedures in Section VI, Information Sharing
        2. Determine if youth is currently receiving mental health care. Contact and confirm with provider that services are current and inform provider that youth is at Mary's Help, Inc. and a mental health screen has been conducted.
        3. Seek a Clinical Consultation from a mental health professional from on site mental health provider if one is not available may go off site.
        4. Arrange a comprehensive Mental Health Evaluation from community-based service provider from mental health agency provider or from a private provider.
            a. Determine if youth has health insurance (public or private)
            b. If private insurance, either
                i. Call the insurance company to help the family navigate the insurance & physician referral system
                OR
                ii. Call the family care physician to get a referral for a mental health evaluation or mental health services.

2. **"CAUTION" on the "Alcohol/Drug Use"(AD) scale**
    a. Ask MAYSI-2 AD scale second screening questions of the youth. These questions are available in the full MAYSI-2 manual appendix.
    b. Complete the substance abuse questions on the Brief Screener for Alcohol, Tobacco, and other Drugs (BSTAD).
    c. If assessments determine youth has a substance use disorders problem, referral for services will be based on level of need and other corresponding issues, which may include prevention, intervention, or treatment services.
3. **The Traumatic Experiences** section will not create a 2nd screening questions, so screener needs to pay close attention to MAYSI -2 summary score sheet and if youth scores a 4 or 5, they should be referred for a further assessment.
4. **"WARNING" on any other scale**
    a. Ask MAYSI-2 second screening questions of youth.

b. Set service response plan according to section MAYSI-2 Post-Scoring Recommended Services

II. INFORMATION SHARING

1. Sharing the results of the MAYSI-2 with other providers, including mental health providers, is subject to regulations. Results can be shared based on any of these protocols:
   a. Safe City's departmental procedures for sharing health records;
   b. The rules set forth in state statute and departmental regulations; or
   c. A release of information that is deemed legally representative by Safe City.
2. Sharing the results of the MAYSI-2 with family members/legal guardians is subject to (1) the rules set forth in state statute and (2) Safe City's departmental procedures for sharing health records. The results can be shared under one of two ways:
   a. The results of the MAYSI-2 are not specifically referenced but rather incorporated into the full assessment conducted at Safe City. OR
   b. A Release of Information Authorization as meets departmental procedures is completed and signed by the youth stating s/he agrees to have the MAYSI-2 results released.

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Appendix A: MAYSI-2 Reference Toolkit

MAYSI-2 Scale	Alcohol-Drug Use	Angry-Irritable	Depressed-Anxious	Somatic Complaints	Suicide Ideation	Thought Disturbance	Traumatic Experiences
Description of Scale **Measurement Components**	Frequent use of alcohol/drugs Risk of substance abuse or psychological reaction to lack of access to substances	Experiences frustration, lasting anger, moodiness Risk of angry reaction, fighting, aggressive behavior	Experiences depressed and anxious feelings Risk of impairments in motivation, need for treatment	Experiences bodily discomforts associated with distress Risk of psychological distress not otherwise evident	Thoughts and intentions to harm oneself Risk of suicide attempts or gestures	(Boys Only) Unusual beliefs and perceptions Risk of thought disorder	Lifetime exposure to traumatic events (e.g., abuse, rape, observed violence). Questions refer youth to "ever in the past," not "past few months." Risk of trauma- related instability in emotion/perception
Questions on Scale	10. Have you done anything you wish you hadn't, when you were drunk or high? 19. Have your parents or friends thought you drink too much? 23. Have you gotten in trouble when you've been high or have been drinking? 24. If yes [to #23], has the trouble been fighting? 33. Have you used alcohol or drugs to help you feel better? 37. Have you been drunk or high at school? 40. Have you used alcohol and drugs at the same time? 45. Have you been so drunk or high that you couldn't remember what happened?	2. Have you lost your temper easily, or had a "short fuse"? 6. Have you been easily upset? 7. Have you thought a lot about getting back at someone you have been angry at? 8. Have you been really jumpy or hyper? 13. Have you had too many bad moods? 35. Have you felt angry a lot? 39. Have you gotten frustrated easily? 42. When you have been mad, have you stayed mad for a long time? 44. Have you hurt or broken something on purpose, just because you were mad?	3. Have nervous or worried feelings kept you from doing things you want to do? 14. Have you had nightmares that are bad enough to make you afraid to go to sleep? 17. Have you felt lonely too much of the time? 21. Has it seemed like some part of your body always hurts you? 34. Have you felt that you don't have fun with your friends anymore? 35. Have you felt angry a lot? 41. Has it been hard for you to feel close to people outside your family? 47. Have you given up hope for your life? 51. Have you had a lot of bad thoughts or dreams about a bad or scary event that happened to you?	When you have felt nervous or anxious... 27. ...have you felt shaky? 28. ...has your heart beat very fast? 29. ...have you felt short of breath? 30. ...have your hands felt clammy? 31. ...has your stomach been upset? 43. Have you had bad headaches?	11. Have you wished you were dead? 16. Have you felt like life was not worth living? 18. Have you felt like hurting yourself? 22. Have you felt like killing yourself? 47. Have you given up hope for your life?	9. Have you seen things other people say are not really there? 20. Have you heard voices other people can't hear? 25. Have other people been able to control your brain or your thoughts? 26. Have you had a bad feeling that things don't seem real, like you're in a dream? 32. Have you been able to make other people do things just by thinking about it?	Boys 46. Have people talked about you when you're not there? 48. Have you EVER IN YOUR WHOLE LIFE had something very bad or terrifying happen to you? 49. Have you ever been badly hurt, or been in danger of getting badly hurt or killed? 51. Have you had a lot of bad thoughts or dreams about a bad or scary event that happened to you? 52. Have you ever seen someone severely injured or killed (in person—not in movies or on TV)?

MAYSI-2 Reference Toolkit

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Steps:

1. Before Administration	2. During Administration	3. After Administration
• Introduce test by saying: "This test asks questions about things that sometimes happen to people. Please be honest and answer these questions as best as you can with a yes or no response." • Provide legal warnings by saying: "Your responses to this test will be kept confidential and cannot be used against you in any other hearing in juvenile or criminal court. Do you have any questions or concerns?" • Provide confidentiality warnings by saying: "The only exception to the confidentiality of your responses is if you disclose that you are the victim or have committed an offense involving child abuse or neglect, which must be reported to law enforcement and/or the Department of Human Services."	• Monitor and supervise the room where the adolescent is completing the instrument. If administered in a group setting, ensure a quiet setting, free of distractions, and privacy. • Be available to answer questions and provide direction as necessary for the adolescent to successfully complete the questionnaire. • When administering the manual version (paper and pencil version) of the MAYSI-2, provide direction by pointing to the right side of the MAYSI and say to the adolescent, "circle Y for yes or N for no."	• Check to ensure all questions have been answered • If not, ask adolescent to complete any unanswered questions the best they can • Score the MAYSI-2 • Record the scores and perform recommended follow-up actions

4. MAYSI-2 Post-Scoring Recommended Resources

Secondary Screening (by Staff)	Primary Services (by Mental Health Professionals)
A. Monitoring of the Juvenile. Increased vigilance and attention by staff of the juvenile in order to conduct behavioral observations. Complete Follow-Up Questionnaire.	C. Clinical Consultation. Staff should seek expertise from clinical professionals/mental health professionals who can intervene to provide brief evaluations or emergency care. Staff should make executive director aware to help guide available resources.
B. Interviewing and Collateral Contacts. Executive director should have a focused discussion with the juvenile, or with the juvenile's family and/or past service providers. The focus should explore the juvenile's responses on relevant items of the MAYSI-2, as well as, obtain information that supports or contradicts their response on the MAYSI. Complete Follow-Up Questionnaire.	D. Evaluation Referral. Staff should arrange for a more comprehensive psychiatric or psychological evaluation to determine the nature and source of the youth's self-reported distress or disturbance. Staff should make executive director aware to help guide available resources.

Recommended Actions by Juvenile Justice Staff				
Suicide Ideation Scale only				
Warning		Both A and B + Either C or D		
Caution		Either A or B or both		
Angry-Irritable Scale only				
Warning		Greater attention/ vigilance by staff recommended fro this youth due to greater risk of aggression and impulsive acts		
Any Combination of Scales (Except Suicide Ideation Scale)				
Warning	Warning			Either C or D or Both
Warning	Caution			Both A+B
Warning				Either A or B or Both
Caution	Caution	Caution	Caution	Either C or D or Both
Caution	Caution	Caution		Either A or B or Both
Caution	Caution			Either A or B or Both

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Local Mental Health Professionals

1. Adventist Health Vallejo
   Counseling & Mental Health, Psychiatrists
   525 Oregon Street
   Vallejo, CA 94590
   (707)649-4040
2. Aldea Counseling Services, Solano County
   Counseling & Mental Health Service
   1546 1st Street
   Napa, CA 94559
3. Alternative Family Services- Vallejo
   Community Service/Non-Profit, Counseling & Mental Health
   160 Glen Cove Marina Road
   Vallejo, CA 94591
4. Fisher Andrew PhD
   Doctor, Counseling & Mental Health
   532 Oregon Street
   Vallejo, CA 94590
5. Anka Behavioral Health, Inc.
   251 Georgia Street
   Vallejo, CA 94590
   (707)558-8195
6. Children's Behavioral Health-Fairfield
   2101 Courage Drive
   Fairfield, CA 94533
   (707)784-4900
7. Children's Behavioral Health-Vacaville
   1119 E Monte Vista Avenue
   Vacaville, CA 95688
   (707)469-4540
8. Children's Behavioral Health-Vallejo
   335 Tuolumne Street
   Vallejo, CA 94590
   (707)553-5810
9. Healthy Partnerships, a division of Caminar
   Adolescent Outpatient Treatment
   1735 Enterprise Drive, Suite A
   Fairfield, CA 94533
   (707)355-4059
10. Whitney Wright, LMFT
    Counseling & Mental Health
    3478 Buskirk Avenue
    Pleasant Hill, CA

Appendix D

Pre- and Post-Intervention Questionnaire

1. Why is it important to identify potential mental disorders at intake? (Select all that apply)
a. Welfare of the youth
b. Safety of youth and others
c. Diagnose adolescent with mental disorder
d. A & B
Answer: D Knowledge, Importance of mental health screening
Rationale: To identify disorders that threaten the welfare of youth and require additional attention (Grisso et al., 2012). To identify conditions that may increase risk of aggression, calling for special efforts to prevent or reduce violence (Grisso et al., 2012).

2. Why is it important to use a standardized, evidence-based tool for mental health screening?
a. Assures uniformity across cases
b. Assures validity
c. Assures reliability
d. All the above
Answer: D Comprehension, Importance of mental health screening
Rationale: Mental health screening methods that have established evidence for their ability to provide reliable and valid information about youth. Quality screening tools should have the backing of research that establishes their measurement dependability (reliability) and whether they actually measure the symptoms or problems they claim to measure (validity) (National Center for Mental Health and Juvenile Justice, 2014).

3. The MAYSI-2 tool is used to assess:
a. Mental health needs in youth
b. Nutritional needs in youth
c. Education level of adults
d. Translation needs in youth
Answer: A Comprehension, Utilization of the MAYSI-2 tool
Rationale: The MAYSI-2 is a mental health screening instrument composed of 52 questions designed to assist juvenile justice facilities in early identification of youths 12 to 17 years old who may have special mental health needs (Grisso et al., 2012).

4. The MAYSI-2 tool can be used to identify psychiatric diagnoses.
a. True

b. False

Answer: B Knowledge, Identification of juveniles with mental health needs

Rationale: The MAYSI-2 is **not** intended to be a diagnostic tool, rather a tool to provide information that identifies youth who require mental health response like suicide precautions, further evaluation, and referral for consultation (Grisso et al., 2012).

5. Which of the following is one of the most widely used mental health screening tools developed in recent years?

a. MAYSI-2

b. CAFAS

c. GAIN-SS

d. SASSI-A2

Answer: A Knowledge, Utilization of the MAYSI-2 toolkit

Rationale: One of the most widely used mental health screening tools developed in recent years is the Massachusetts Youth Screening Instrument, second Version (MAYSI-2) (Grisso & Barnum, 2006), a 52 item self-report instrument that identifies potential mental health and substance use problems among youth. It has been adopted for use in facilities in 49 states and for statewide use in probation, detention, or juvenile corrections programs in 39 states (Grisso et al., 2012).

6. Use of validated mental health screening instruments, like the MAYSI-2, are required by state regulation?

a. True

b. False

Answer: B Analysis, Utilization of the MAYSI-2 tool

Rationale: Use of validated mental health screening instruments is **not** required by state regulation; an increasing number of California county probation departments are implementing mental health screening tools to systematically identify these youth (Healthy Returns Initiative, 2010).

7. When is it the most ideal time to administer the MAYSI-2 screening tool? (Select all that apply)

a. Within one to two hours of youth entering the group home

b. During initial intake of the juvenile

c. Three months after juvenile placement in group home

d. A & B

Answer: A & B Application, Utilization of the MAYSI-2 toolkit

Rationale: To ensure that any risk factors or red flags are immediately identified, validated mental health screening generally occurs when youth first enter detention, after the intake process and before they appear in court, or upon entrance to a juvenile placement such as

a juvenile facility or out-of-home care

8. Select the most appropriate environment to administer the MAYSI-2. (Select all that apply)
   a. Anyplace with no privacy, and presence of distractions
   b. Anyplace with some privacy and few distractions
   c. Location visible by staff
   d. Anyplace where youth can be alone

   Answer: B & C Application, Utilization of the MAYSI-2 toolkit

   Rationale: Privacy is needed so that youth is not concerned about others seeing answers. Visual and noise distractions can reduce many youths' attention to the task. Youth should be located in an area always visible by staff. Staff should be close-by in order to answer youth's question while taking the MAYSI-2.

9. How will you ensure privacy and confidentiality of MAYSI-2 screening results?
   a. Staff should not provide specific screening results to outside parties
   b. Screening results should be filed in youth's permanent or individual file.
   c. Mental health screening results should be used in any hearing on a youth's adjudication or disposition
   d. None of the above

   Answer: A Analysis, Utilization of the MAYSI-2 toolkit

   Rationale: Staff should not provide specific screening results (e.g., scores) to outside parties when they use these results to obtain clinical services outside the facility. Mental health screening results should not be filed in a youth's permanent or individual file (National Center for Mental Health and Juvenile Justice, 2014). They should be filed in a facility's "mental health screening file" Mental health screening results should **not** be used in any hearing on a youth's adjudication or disposition (National Center for Mental Health and Juvenile Justice, 2014).

10. Select the two cut-off scores associated with the MAYSI-2 tool that identifies mental health needs of youth.
    a. LOW score
    b. CAUTION score indicates that:
    c. WARNING score
    d. HIGH score
    e. A & D
    f. B & C

    Answer: B& C Application, Identification of mental health needs

    Rationale: CAUTION score identifies approximately the top 10% of youth with the very highest score on MAYSI-2 and WARNING score identifies scores that have possible clinical significance (Grisso et al., 2012).

Appendix E

Content Validity Index Table

Item	Expert 1	Expert 2	Expert 3	Mean
1	3	4	4	3.66
2	3	4	4	3.66
3	4	4	4	4.0
4	4	4	4	4.0
5	4	4	4	4.0
6	4	4	4	4.0
7	4	4	4	4.0
8	4	4	4	4.0
9	4	4	4	4.0
10	4	4	4	4.0

The mean total of all of the means was 3.93 indicating that all of the questions were highly relevant.

The calculation is as follows:

CVR = [(3-(3/2)) / (3/2)]

CVR = [(3-1.5) /1.5]

CVR = 1.5/1.5

Appendix F

Detailed Timeline

Month/Year	Event
November 2018	Proposal to project site; needs assessment
December 2018	Ongoing project development
January 2019	Project chair committee for final review
February 2019	Project Proposal
March 2019	Section1
April 2019	Section 1
May 2019	Section 2
June 2019	Section 3/ IRB application
July 2019	Project Plan
August 2019	Implementation and Project Analysis
September 2019	Discussion and Significance
October 2019	Limitations and Dissemination
November 2019	Dissemination Project/ Deliverable

Appendix G

Detailed Project Tasks

DNP Project I					
Task	Week 2	Week 4	Week 5	Week 8	Week 13
Project Topic	**x**				
Project Mentor		**x**			
Project Site		**x**			
Section 1 of DNP Project I Proposal			**x**		
Section 2 of DNP Project I Proposal				**x**	
Section 3 of DNP Project I Proposal					**x**
DNP Project II					
	Week 5	Week 8	Week 11	Week 14	
Section 1 DNP Project II Proposal	**x**				
Section 2 DNP Project II Proposal		**x**			

Section 3 DNP Project II Proposal			**x**		
TUN IRB Oversight Determination				**x**	
DNP Project III					
	Week 1-4	Week 7	Week 9	Week 11	Week 15
Implementation and Evaluation	**x**				
DNP Project III: Analysis		**x**			
DNP Project III: Discussion and Significance			**x**		
Final DNP Project Proposal				**x**	
Final Presentation					**x**

Appendix H

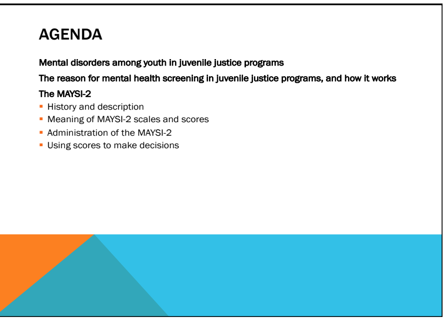
PowerPoint, Media Materials for Implementation

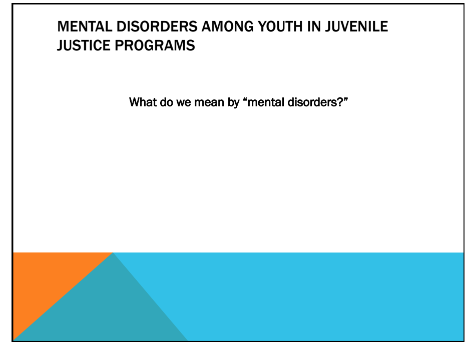
PURPOSE:

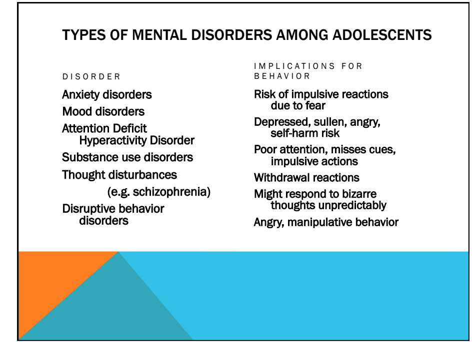
- To assist juvenile justice personnel to understand the use of the Massachusetts Youth Screening Instrument- 2nd Version (MAYSI-2)
- Developed for personnel who will administer the MAYSI-2 or use its results
- Useful for initial training of personnel and for orientation of new personnel across time

BACKGROUND

- There is a significant amount of youth in in the US juvenile justice system, which can be illustrated in the 2.1 million youth under the age of 18 who are arrested in a single year (Youth.gov, n.d.).
- Current statistics show that overall rates of youth delinquency have decreased compared to previous years; however there are still 1.7 million juvenile delinquency cases annually in the US.
- This is significant because a high percentage, 65 to 70%, of juveniles in the justice system have a mental health problem that requires treatment (National Conference of State Legislators, n.d.).
- In 2015 males accounted for approximately 85% of all juveniles in residential placement (U.S. Department of Justice, 2017).
- Numerous studies have identified regardless of gender and race, high prevalence rates for mental health and substance use disorders in juvenile population (McCoy et al., 2014).
- Cook et al. (2017) identifies the need for mental health treatment in adolescence to prevent poor outcomes due to the effects from exposure to trauma.

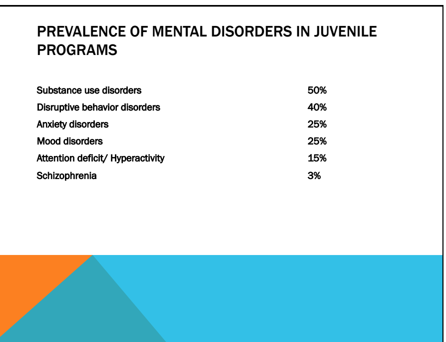






RESEARCH ON MENTAL HEALTH NEEDS OF YOUTH IN THE JUVENILE JUSTICE SYSTEM

The proportion of youth meeting criteria for mental disorders is:
- 2 in 3 youth (70%) for juvenile justice settings
- 2 in 10 youth (20%) in the general adolescent population


PREVALENCE OF MENTAL DISORDERS IN JUVENILE PROGRAMS

Substance use disorders	50%
Disruptive behavior disorders	40%
Anxiety disorders	25%
Mood disorders	25%
Attention deficit/ Hyperactivity	15%
Schizophrenia	3%

RESEARCH ON MENTAL HEALTH NEEDS

- 2 in 3 (70%) meet criteria for one or more psychiatric diagnoses (compared to 20% in general adolescent population)
- 2 in 3 (65%) meet criteria for one or more psychiatric diagnoses (compared to 20% in general adolescent population)

Many youth have more than one disorder

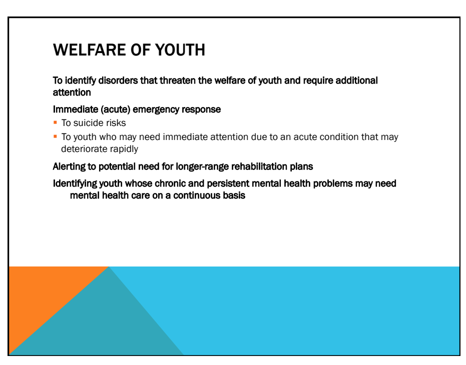
- Substance use disorders with other disorders
- Conduct disorder almost always co-occurs

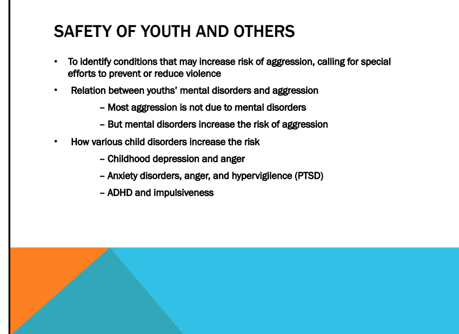
WHY DO SO MANY YOUTH ENTERING JUVENILE JUSTICE HAVE MENTAL DISORDERS?

- Mental disorders may increase the risk of delinquent behavior
- Changes in laws in the 1990s decrease discretion to divert youth from detention in response to their mental health problems
- Child mental health services in many communities are not providing sufficient care (resulting in more frequent use of detention to manage disturbed youth)

THE REASON FOR MENTAL HEALTH SCREENING IN JUVENILE JUSTICE PROGRAMS AND HOW IT WORKS

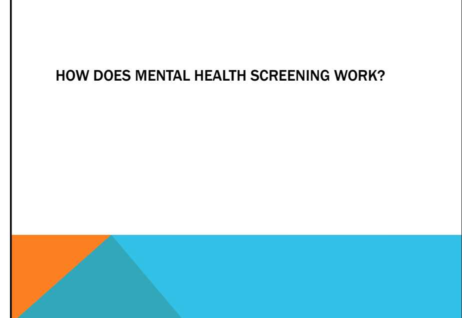
Why is it helpful to identify potential mental disorders at intake?





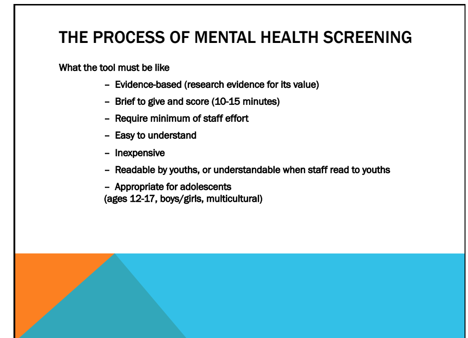
WHAT IS NEEDED TO IDENTIFY YOUTHS' MENTAL HEALTH NEEDS AT INTAKE?

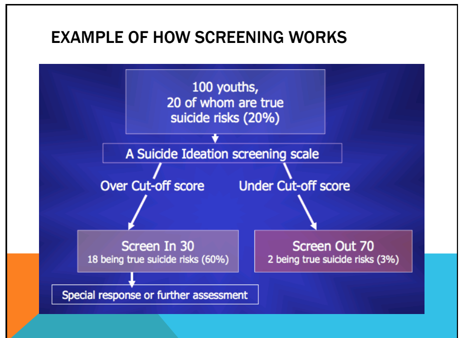
- Mental health screening at intake
  – To identify at intake who might have important mental health or substance use needs
  – Typically done by intake staff (not MH professionals)
- Follow-up Assessment if necessary
  - – For youths identified by screening ("screened in") as possibly having special needs, doing a more individualized assessment of their condition soon after screening
  - – May be:
    More specific questioning
    Use of other assessment instrument
    Special consultation by clinical MH professional
    Referral for emergency MH services (e.g., medication, inpatient care)

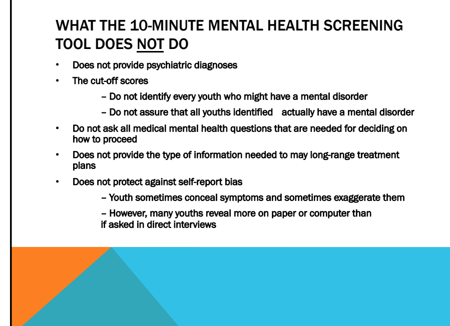


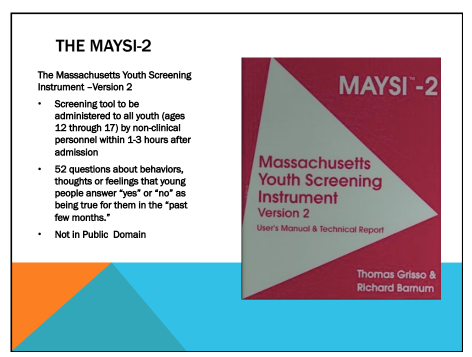
THE PROCESS OF MENTAL HEALTH SCREENING

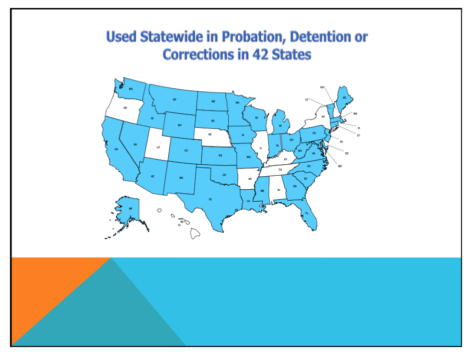
- Importance of using a "standardized" tool
  - – Assures uniformity across cases
  - – Assures validity
    (based on prior research and development of the tool)
  - – Allows for use of clear decision rules based on scores
  - – Provides data regarding an agency's needs for mental health services
- How the tool must be used
  - – with every youth
  - – soon after intake
  - – relying on youth's self-report of feelings and behaviors


THE PROCESS OF MENTAL HEALTH SCREENING
What the tool must be like
– Evidence-based (research evidence for its value)
– Brief to give and score (10-15 minutes)
– Require minimum of staff effort
– Easy to understand
– Inexpensive
– Readable by youths, or understandable when staff read to youths
– Appropriate for adolescents
(ages 12-17, boys/girls, multicultural)


EXAMPLE OF HOW SCREENING WORKS
100 youths,
20 of whom are true
suicide risks (20%)
A Suicide Ideation screening scale
Over Cut-off score
Under Cut-off score
Screen In 30
18 being true suicide risks (60%)
Screen Out 70
2 being true suicide risks (3%)
Special response or further assessment

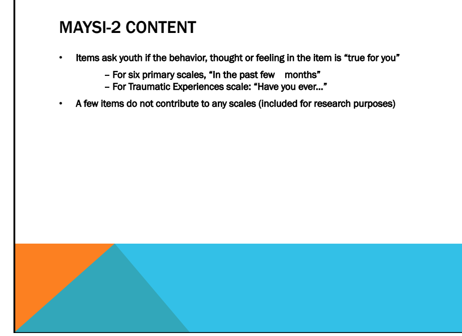

WHAT THE 10-MINUTE MENTAL HEALTH SCREENING
TOOL DOES NOT DO
• Does not provide psychiatric diagnoses
• The cut-off scores
– Do not identify every youth who might have a mental disorder
– Do not assure that all youths identified actually have a mental disorder
• Do not ask all medical mental health questions that are needed for deciding on how to proceed
• Does not provide the type of information needed to may long-range treatment plans
• Does not protect against self-report bias
– Youth sometimes conceal symptoms and sometimes exaggerate them
– However, many youths reveal more on paper or computer than if asked in direct interviews

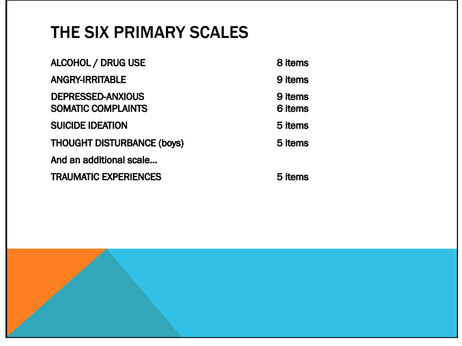

THE MAYSI-2
The Massachusetts Youth Screening Instrument –Version 2
• Screening tool to be administered to all youth (ages 12 through 17) by non-clinical personnel within 1-3 hours after admission
• 52 questions about behaviors, thoughts or feelings that young people answer "yes" or "no" as being true for them in the "past few months."
• Not in Public Domain
MAYSI-2
Massachusetts
Youth Screening
Instrument
Version 2
User's Manual & Technical Report
Thomas Grisso &
Richard Barnum

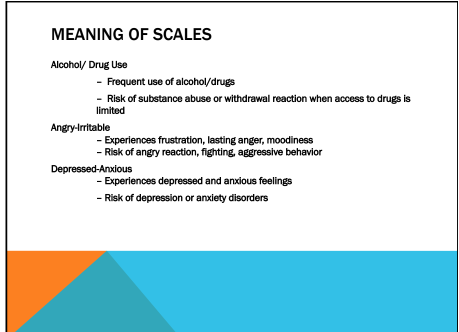


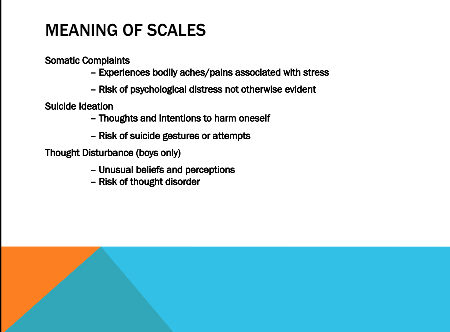
QUALITY OF THE MAYSI-2

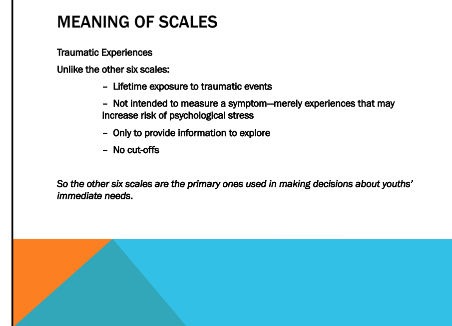
- Meets the format requirements for MH screening
  - Standardized, brief, easy, inexpensive, staff-friendly
- Research indicates that MAYSI-2 scales measure the symptoms that they are intended to measure
- As with all brief mental health screening tools,
  - does not offer accurate prediction of psychiatric diagnosis
  - does not provide sufficient information for long-range treatment (disposition) planning

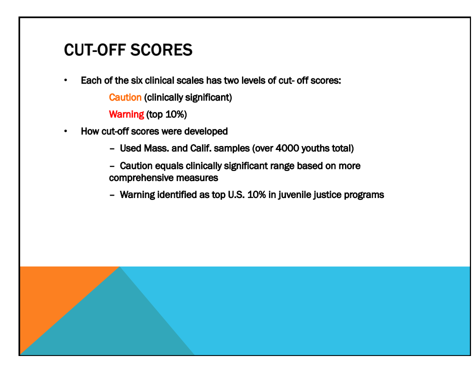


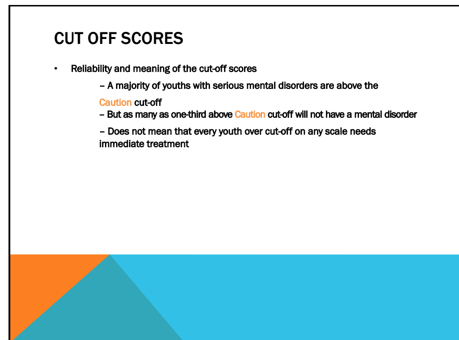


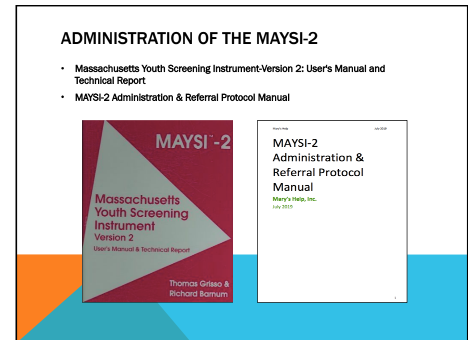

MEANING OF SCALES
Alcohol/ Drug Use
– Frequent use of alcohol/drugs
– Risk of substance abuse or withdrawal reaction when access to drugs is limited
Angry-Irritable
– Experiences frustration, lasting anger, moodiness
– Risk of angry reaction, fighting, aggressive behavior
Depressed-Anxious
– Experiences depressed and anxious feelings
– Risk of depression or anxiety disorders

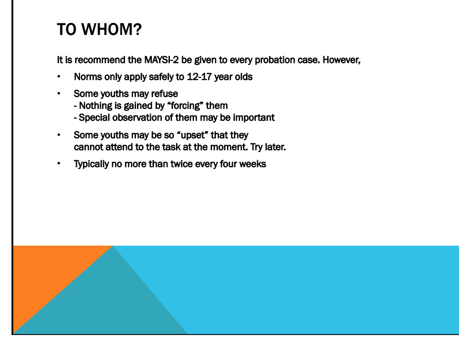

MEANING OF SCALES
Somatic Complaints
– Experiences bodily aches/pains associated with stress
– Risk of psychological distress not otherwise evident
Suicide Ideation
– Thoughts and intentions to harm oneself
– Risk of suicide gestures or attempts
Thought Disturbance (boys only)
– Unusual beliefs and perceptions
– Risk of thought disorder

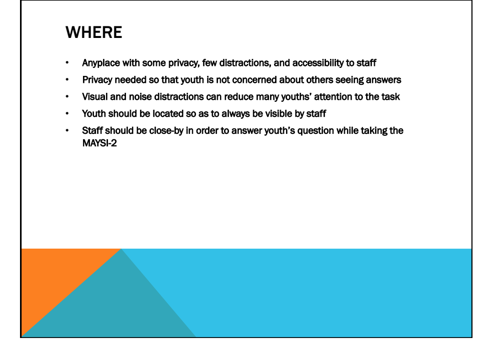

MEANING OF SCALES
Traumatic Experiences
Unlike the other six scales:
– Lifetime exposure to traumatic events
– Not intended to measure a symptom—merely experiences that may increase risk of psychological stress
– Only to provide information to explore
– No cut-offs
So the other six scales are the primary ones used in making decisions about youths' immediate needs.

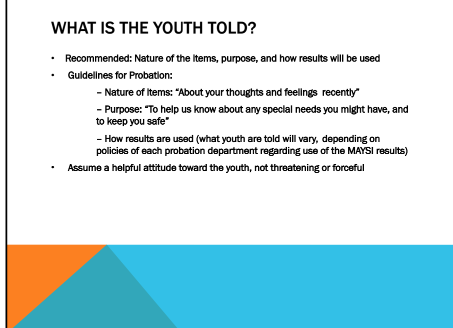

CUT-OFF SCORES
Each of the six clinical scales has two levels of cut- off scores:
Caution (clinically significant)
Warning (top 10%)
How cut-off scores were developed
– Used Mass. and Calif. samples (over 4000 youths total)
– Caution equals clinically significant range based on more comprehensive measures
– Warning identified as top U.S. 10% in juvenile justice programs

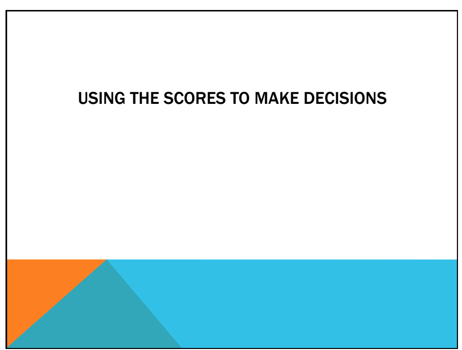

CUT OFF SCORES
• Reliability and meaning of the cut-off scores
– A majority of youths with serious mental disorders are above the Caution cut-off
– But as many as one-third above Caution cut-off will not have a mental disorder
– Does not mean that every youth over cut-off on any scale needs immediate treatment


ADMINISTRATION OF THE MAYSI-2
• Massachusetts Youth Screening Instrument-Version 2: User's Manual and Technical Report
• MAYSI-2 Administration & Referral Protocol Manual
MAYSI-2
Massachusetts Youth Screening Instrument Version 2
User's Manual & Technical Report
Thomas Grisso & Richard Barnum
MAYSI-2 Administration & Referral Protocol Manual


TO WHOM?
It is recommend the MAYSI-2 be given to every probation case. However,
• Norms only apply safely to 12-17 year olds
• Some youths may refuse
- Nothing is gained by "forcing" them
- Special observation of them may be important
• Some youths may be so "upset" that they cannot attend to the task at the moment. Try later.
• Typically no more than twice every four weeks

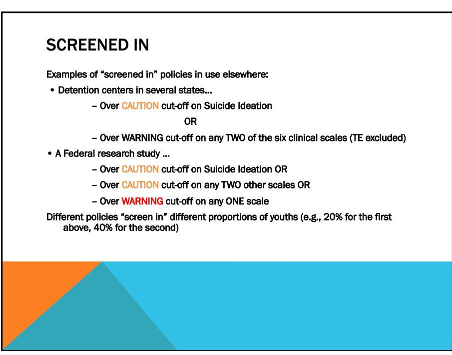

WHERE
• Anyplace with some privacy, few distractions, and accessibility to staff
• Privacy needed so that youth is not concerned about others seeing answers
• Visual and noise distractions can reduce many youths' attention to the task
• Youth should be located so as to always be visible by staff
• Staff should be close-by in order to answer youth's question while taking the MAYSI-2





DEFINING "SCREENED IN"

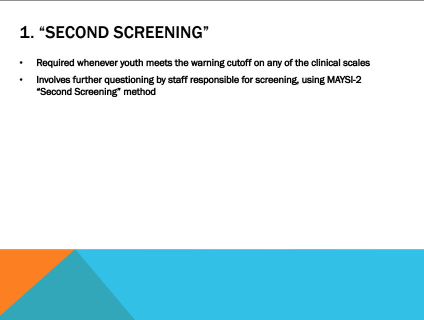
- MAYSI-2 scores are used to determine whether a youth is:
  - Screened out—needs no further follow-up
  - Screened in—requires a staff follow-up response
- "Screened in" means the youth's scores are above the Caution or Warning cut-offs on certain scales
- Which scales and cut-offs define "screened in"?
  - Not defined by the MAYSI-2 manual
  - Determined as a matter of policy by your administrators (and therefore may be different between jurisdictions across the U.S.)



SCREENED-IN YOUTHS REQUIRE A STAFF "FOLLOW-UP RESPONSE"

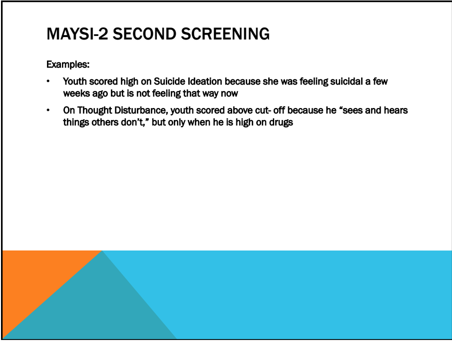
- The sole reason for mental health screening is to respond in some way to youths who are "screened in" for possible needs
- Types of follow-up responses
    1. "Second screening"
    2. Obtain emergency clinical assessment
    3. Schedule for a non-emergency comprehensive assessment
    4. Referral to mental health diversion options

Note: Which of these responses is relevant for you will be determined by administrative policies



MAYSI-2 SECOND SCREENING

- 2006 MAYSI-2 Manual includes "Second Screening" forms for each MAYSI-2 scale
- Forms guide you in asking a few more questions when youth scores above cut-off on a scale
- Purpose is to determine whether youth's score above cut-off might not require immediate response (examples, next slide)



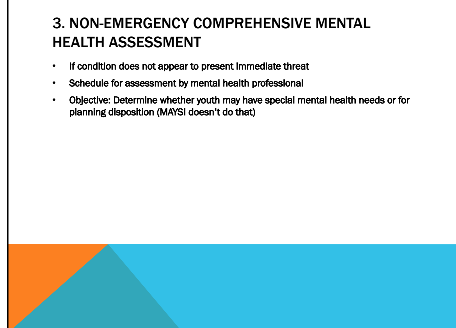
MAYSI-2 SECOND SCREENING

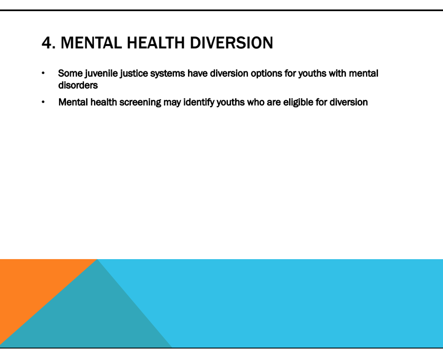
Procedure:

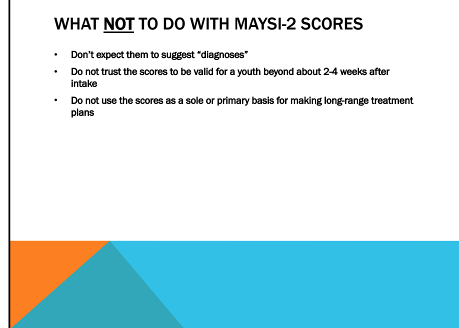
- Staff screener tells youth s/he would like to "ask a few questions," because "you answered a number of questions indicating that you felt [depressed, like harming yourself, etc.]"
- See the questions on the relevant scale's second screening form…ask, and record youth's responses

2. OBTAIN EMERGENCY CLINICAL ASSESSMENT

- Schedule "ASAP" interview with mental health professional qualified to make individual assessment
- Types of assessments
  - MH social worker or psychologist
  - On-call psychiatric or psychological consultant
  - By arrangement with local child community mental health services
- May result in referral for emergency mental health services (e.g., medication, inpatient care)

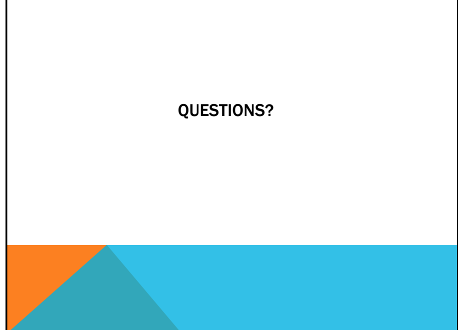






DO NOT SHARE MAYSI-2 SCORES

- Recommended
  Actual mental health screening scores should not be shared outside of the juvenile probation
- Reasons
  - Brief MH screening scores are not valid for making disposition plans
  - If others need to be told that the youth has a serious mental health need, this can be done without providing actual scores



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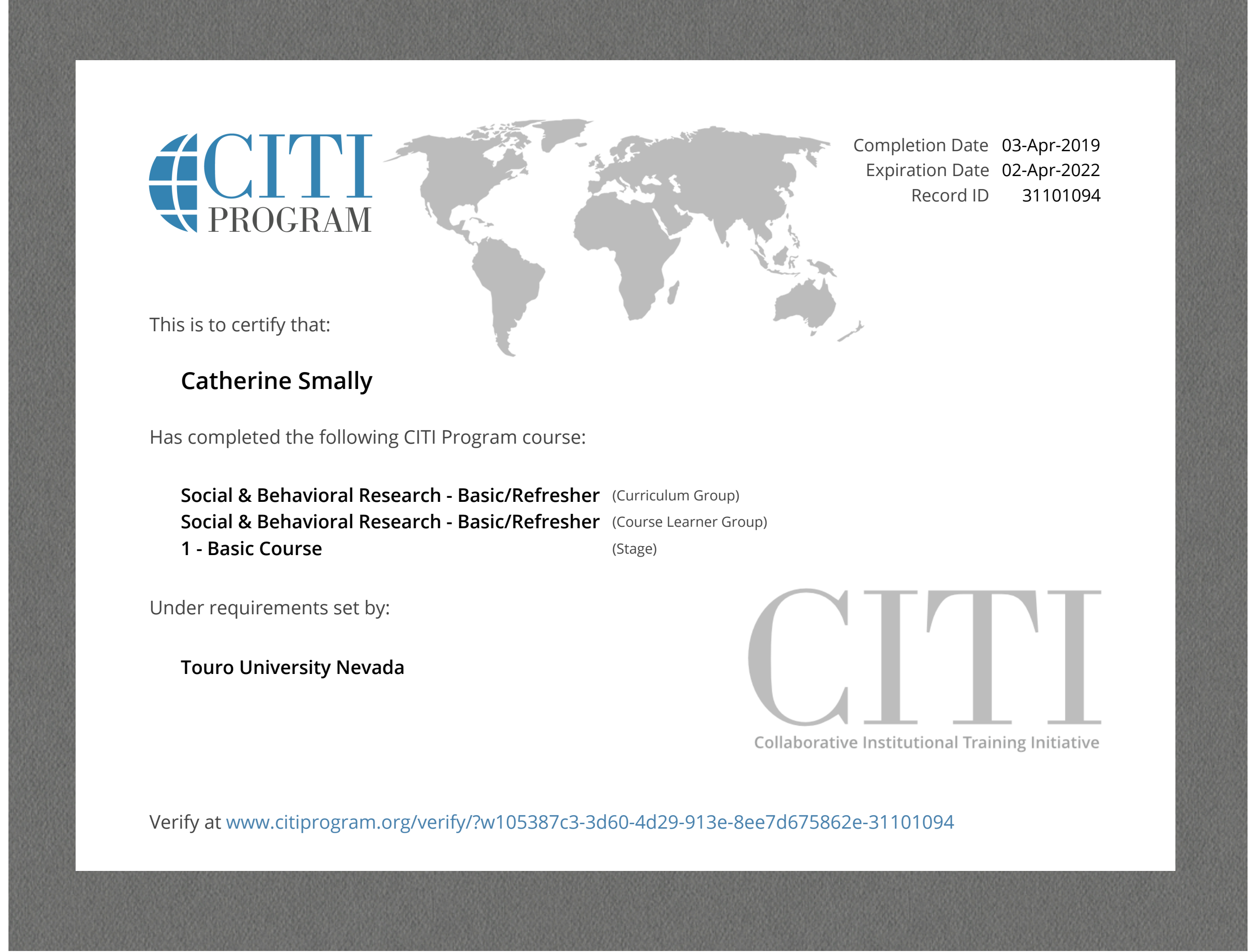
Appendix I

CITI Certificate



CITI PROGRAM

Completion Date 03-Apr-2019
Expiration Date 02-Apr-2022
Record ID 31101094

This is to certify that:

Catherine Smally

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)
Social & Behavioral Research - Basic/Refresher (Course Learner Group)
1 - Basic Course (Stage)

Under requirements set by:

Touro University Nevada

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w105387c3-3d60-4d29-913e-8ee7d675862e-31101094