EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN'S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT

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CHAPTER I: ABSTRACT

Objectives:
The objective of this study was to explore the differences in perception of mental illness between parents and adolescents and to determine the effect it has on adolescents receiving the proper level of treatment.

Variables:
The independent variables in this study were age, gender, race, level of treatment. The dependent variable in this study was the difference in perception of the need for treatment between parents and adolescents as measured by the POSIT survey in adolescents and the POSIP survey in parents. Participants were divided into groups for analysis based on whether or not they were currently receiving the proper level of treatment.

Methods:
Self-Report Surveys were administered by the researcher to both parents and adolescents individually. 210 families met inclusionary criteria and were invited to participate in the study. 146 subjects participated in the study, 73 adolescents and 73 parents. Of those, 41 pairs were included in the group currently receiving the proper level of treatment and 32 pairs were included in the group not currently receiving the proper level of treatment. Demographic information was collected on each adolescent and parent and were used for analysis.
**Results:**

Paired T-tests were conducted for each of the 5 scales measured on both the POSIT and POSIP surveys: Substance Use/Abuse, Mental Health, Aggressive Behavior/Delinquency, Family Relations, and Peer Relations. Differences in scores between adolescents and parents were statistically significant on the family relations (t = -3.73, p (2-tailed) = .00) and peer relations (t = 3.45, p (2-tailed) = .00) scales. There was no statistically significant difference between the treatment groups based on level of treatment. Age, gender, and race were not statistically significant predictors; however, gender had the greatest impact on the dependent variable. MANOVA analyses were conducted to determine if any of the independent variables had a statistically significant impact on family and peer relations scores. Although none of the independent variables were statistically significant, age had the greatest impact on family and peer relations scores.

**Clinical Implications:**

Exploring the differences in perception of problems between parents and adolescents can help clinicians to understand the gaps in perception and assess the need for further treatment to attempt to resolve differences in perception. Determining that there may be a difference in how adolescents and parents view family relations and peer relations could be key in improving mental health services for adolescents. Understanding the barriers that prevent parents from seeking treatment for their adolescent can assist researchers in developing interventions to improve adolescent and parent’s compliance with treatment.
CHAPTER II: BACKGROUND & SIGNIFICANCE

Background

Mental health, comprised of emotional and behavioral components, is the state of successful performance of mental functioning, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with adversity specific to the individual’s culture. From early childhood until late life, mental health is the facilitator of thinking and communication skills, learning, emotional growth, resilience and self-esteem.

Emotional and behavioral health refers to the thoughts, moods, feelings, actions, and reactions that support how individuals view themselves, evaluate their challenges and problems, and explore choices for handling stress and making decisions. Emotional and behavioral health is a part of an adolescent’s overall well-being. Reducing the burden of mental health problems starts with promoting optimal emotional and behavioral health in youth.

According to the World Health Organization (WHO) in 2002, mental health disorders are one of the leading causes of disability worldwide. Three of the ten leading causes of disability in people between the ages of 15 and 44 are mental disorders, and the other causes are often associated with mental disorders. Retrospective and prospective research studies have shown that most adulthood mental disorders begin in childhood and adolescence. This highlights the importance of understanding the extent of mental health disorders in adolescents, along with their risk factors and progression. Although the
prevalence is high, only about half of those with mental disorders in the US receive mental health treatment (Merikangas et al, 2009).

The Best Practices for Mental Health in Child Welfare Consensus Conference was held in October 2007. The goal of the conference was identified as developing best practice guidelines for addressing mental health in child welfare by focusing on screening and assessment, psychosocial interventions, psychopharmacologic treatment, parent engagement, and youth empowerment. The conference acknowledged that there is a major gap between the need and receipt of services for children despite the recognized importance of mental health concerns among adolescents. A major problem is that many children in need of mental health services are not being identified and offered help. This is associated with the ways that the current system identifies and refers children for mental health treatment (Hunter Romanelli et al, 2009). One of the objectives of Healthy People 2020 is to increase the proportion of children with mental health problems who receive treatment. 68.9% of children with mental health problems received treatment in 2008. The Healthy People 2020 target is to increase the percentage of children with mental health problems that receive treatment to 75.8%.

The vital role of the family is recognized in almost every psychological theory of child development. Previous research has suggested that parents have a greater impact on adolescent health behaviors than previously thought. Although peer influence is the major reason youth initiate negative behaviors, studies have found that concern about parent disapproval is the primary reason that
adolescents choose not to engage in negative behaviors (Kumpfer, 2003). According to the literature, these protective family factors are even stronger predictors for minority adolescents and females (Center for Substance Abuse Prevention, 1998).

Relationships between parents and their children change considerably over the life span. In the early years, parents nurture, support, and guide their children’s development. As young people move through adolescence into adulthood, the nature of this relationship typically changes, moving from a dependent relationship between parents and children to a more equal mutually supportive relationship. This move to a more equal relationship may be difficult for some parents and young people to achieve. Given the changes that may occur in parent-child relationships during adolescence and the tensions that may arise, the perspectives of parents have rarely been sought. Thus, little is known about parents’ perceptions of their relationships with their adolescents, and parents’ conceptions of their parenting role at this time (Vassallo et al, 2009).

**Purpose**

The purpose of the study is to examine the differences in perception of mental health issues between adolescents and parents and to determine if it has an effect on adolescents receiving the proper level of treatment. This study utilizes the POSIT survey for adolescents and the POSIP survey for parents as a measure of perception based on the variance in scores. Both surveys measure 5 content areas: Substance Use/Abuse, Mental Health, Aggressive Behavior/Delinquency, Family Relations, and Peer Relations.
**Study Definitions**

**Mental Illness**

According to the Mayo Clinic, mental illness refers to a wide range of mental health disorders that affect your mood, thinking, and behavior. Examples of mental illness in children include depression, anxiety disorders, aggressive behavior or defiance, hyperactivity, impulsivity, or substance use. Many people have mental health concerns from time to time, but a mental health concern becomes a mental illness when ongoing signs and symptoms cause frequent stress and affect your ability to function. A mental illness can make you miserable and can cause problems in your daily life, such as at school, work, or in relationships. In most cases, mental illness symptoms can be managed with a combination of medications and psychotherapy.

**Mental Health Treatment**

For individuals to qualify for mental health treatment, they must be diagnosed with a mental health disorder that is in need of treatment. Diagnosis of disorders is based on symptoms meeting the criteria as outlined in the Diagnostic and Statistical Manual of the American Psychological Association, 5th edition, (DSM-V). Criteria is based on the frequency and duration of mental health symptoms, and the effect those symptoms are having on daily functioning.

**Proper Level of Treatment**

According to the U.S. Department of Health and Human Services, adherence or compliance refers to the extent to which a consumer follows a treatment plan.
Proper level of treatment will be defined in accordance with procedures followed at the study site. Proper level of treatment will be defined in this study as adolescents who have had an evaluation by the psychiatrist at least once in the prior 3 month period, and have had at least one therapy session in the prior 3 month period. The U. S. Department of Health and Human Services Agency for Healthcare Research and Quality recommends that children in mental health services “be seen at least every 3 months during continuation of treatment.”

**Perception**

This study examines barriers to treatment that may occur due to perceptions about mental health problems. Perception is defined as a parent’s inability to identify children’s need for mental health services, denial of the severity of a mental health problem, or a belief that the problem can be handled without treatment. Perceptions about mental health services, such as a lack of trust in or negative experience with mental health providers, lack of children’s desire to receive help, or a stigma related to receiving help may also affect the willingness to seek treatment (Owens et al, 2002).

**Study Site**

The study site was Middle Flint Behavioral HealthCare, a community mental health center in Southwest Georgia, located at 415 N Jackson St. in Americus, Georgia. The outpatient clinic serves approximately 2,000 individuals ages 3 and up.
**Substance Use/Abuse**

The World Health Organization (WHO) defines substance abuse as “persistent or sporadic excessive drug use inconsistent with or unrelated to acceptable medical practice” and/or use of a substance for a purpose not consistent with legal or medical guidelines, as in the non-medical use of prescription medications.

**Mental Health**

The World Health Organization (WHO) defines mental health as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

**Aggressive Behavior/ Delinquency**

Aggressive behavior is reactionary and impulsive behavior that often results in breaking household rules or the law. Aggressive behavior is violent and unpredictable. Aggression can be a problem for children with both normal development and those with psychosocial disturbances. The U. S. Department of Justice defines a “juvenile” as a person who has not attained his/her 18th birthday and “juvenile delinquency” as that violation of a law of the U. S. committed by a person prior to his/her 18th birthday which would have been a crime if committed by an adult.
**Family Relations**

The complexity of defining what or who constitutes a family and family relationships is well known. Many myths related to families and the best way in which people expect them to operate exist around adolescents and their relationships with parents. One of the key factors in positive development during adolescence is family connectedness. Relationships are one of the fundamental underpinnings to resilience, particularly those with primary caregivers and those characterized by warmth and support combined with appropriate control or discipline (Robinson, 2009).

**Peer Relations**

Evidence suggests that peers play an essential role in the socialization of interpersonal competence and that skills acquired in this manner affect the individual’s long-term adjustment. Results from prior studies show that poor peer relations during childhood are consistently implicated in the etiology of later-life social problems such as delinquency and psychopathology. Children with secure parent-child relationships, as compared with those with insecure attachments, have been found to be more engaging, affectively positive, and cooperative in their dealings with peers (Ladd, 1999).
CHAPTER III: LITERATURE REVIEW &
THEORETICAL FRAMEWORK

Research examining youths’ understanding of their mental health issues is lacking. Youth are reported to have limited ability in identifying mental health issues in individuals. Furthermore, they most often recommended that the distressed individuals should seek help from family and friends, indicating that youths perceive parents and friends as the people to approach in a time of need, as opposed to professionals. However, caregivers’ ability to identify mental health problems in their children and youth varies, depending on the nature and severity of the problem (Cloutier et al, 2010).

Major depression is a common and increasingly prevalent disorder among adolescents. Consequences of untreated depression in youth include poor school performance, social withdrawal, family conflict, and increased risk of suicide. Children with mental illness also have increased use of medical care services. However, most depressed adolescents do not receive mental health treatment. Depressed youth may be more likely to be overlooked by parents, teachers, and health care providers, as their symptoms tend to be more concealed and less disruptive to others. Previous studies have been conducted to examine the effectiveness of routine screening of mental health needs in medical settings, such as the emergency department (Pailler et al, 2009).

Stigma associated with mental illnesses is a common barrier to parents seeking treatment for their children. Stigma has been conceptualized as a complex social phenomenon that includes elements of labeling, stereotyping, exclusion, loss of
status, and discrimination. A qualitative study was conducted to gain a better understanding of how stigma can influence parents who are seeking mental health care for their child. The results of the study showed that 77% of parents reported a stigmatizing experience related to their child’s behavior issues (DosReis et al, 2010).

Sayal conducted a review of the literature in 2006 to examine parental perception of problems. The review found that although 20% of parents perceive that their child has an emotional or behavioral problem, only 4-6% of parents report these to be worse than other children’s problems and only 16% believe that their child’s problem is severe enough to need treatment. Symptom severity, level of impairment, presence of an externalizing disorder in the child, and mental health problems in the parent, are strong predictors of parental perception of problems (Sayal, 2006).

There are also studies that have suggested that greater involvement of children and adolescents in their medical decisions may have a positive effect on treatment. Children are often not actively involved in their medical treatment decisions. In a study conducted on children and parents’ reports of asthma education received from physicians, parents reported physician discussion of significantly more topics, on average, than children. The disparity between parents’ and children’s report of receiving asthma education from physicians reflect previous research on physician/parent/patient communication. Previous research has suggested that children are largely disregarded in verbal interactions in medical consultation. One study found that only 10% of verbal
interactions included children (Tates et al, 2001). Based on data from this sample, children may perceive themselves as more included than previous research would suggest. Studies have noted that in many cases children assume self-management at an early age. The results of this study suggest that physicians may be missing a valuable opportunity to assertively include children in the medical consultation (Orrell-Valente et al, 2011). In another study on the differences between children and parents’ reports of asthma symptoms, children’s reports of symptoms were not correlated significantly with almost all of parent reported factors. The study concluded that clinicians and researchers evaluating asthma morbidity in children should elicit children’s reports of symptoms (Lara et al, 1998).

**Effect of Gender**

Studies have further examined the effect of gender on differences in parent/child perception. In a study conducted on children’s and parents’ perceptions of the determinants of children’s fruit and vegetable intake, differences were found between children’s and parents’ reports. Parents reported more positively on the availability and access of fruits at home than did their children, but children reported more positively on the availability of specific vegetables than their parents. Girls and their parents reported more positively on the availability of specific fruits and rated vegetable intake greater than did boys and their parents. Parents of boys reported more encouragement and demand than parents of girls, while boys and girls reported similar encouragement and demands to eat fruit from their parents. (Kristjansdottir et al, 2009).
Studies examining the differences in perception between children and parents are limited, particularly in dealing with mental health issues. There are several studies of relevance that have explored the differences in parent/child perceptions with other medical issues. A study conducted on the differences in parent/child perceptions in the quality of life in children and adolescents with Cystic Fibrosis found a significant difference between child and parent perceptions. Children and adolescents in the study perceived the burden of treatment on their daily life was less than did their parents. The study also found a significant interaction between child/parent report and gender. Parents of males perceived less problems than did the males and parents of females perceived more problems than did the females (Hegarty et al, 2008).

One study addressed whether parents of young men had differing perceptions of their role than parents of young women, and provided differing levels and types of support. On the whole, this did not appear to be the case, although more parents of young women believed their daughters relied on them for emotional support than parents of young men. There are several possible explanations for this trend. As most of the parents surveyed were mothers, it is possible that these findings reflect closer relationships between mothers and daughters than between mothers and sons at this age. However, the lack of research on parent-child relationships at this age makes it difficult to test this explanation. It is possible that young women discuss and seek help more freely than young men (Vassallo et al, 2009).
**Effect of Race**

Mothers of varied racial backgrounds identify early adolescence as the developmental period that is most difficult and troublesome for them (Simpson, 2001). Parents want to help youth adjust to new challenges but often feel unprepared because they can no longer rely on their own experiences of growing up as a credible basis for giving advice (Apster, 2006).

A study on the predictors of engagement in a parenting intervention designed to prevent child maltreatment found that the reasons that Caucasian and African-American parents chose to participate in the program differed from one another (Corso, 2010). Previous literature has found that the challenges of recruiting, engaging, and retaining participants in preventive interventions are substantial and may be greater for minorities than for European American populations (Coatsworth, 2006).

**Effect of Age**

In a study titled “Expectations Regarding Development During Adolescence: Parental and Adolescent Perceptions,” one of the aims of the study was to compare the age-related expectations of parents and adolescents concerning the timing of achievement in a number of developmental tasks. The study found age to be a significant predictor (Dekovic, Noom & Meesus, 1997).

A series of meta-analyses were conducted that summarized changes in parent-child conflict rate and affect as a function of adolescent age. The results found that conflict is larger in early adolescence than in mid-adolescence, larger in mid-
adolescence than in late adolescence, and larger in early adolescence than in late adolescence. Small decreases at each age period collectively produce a moderate decline in the rate of parent-child conflict from early adolescence to late adolescence (Laursen et al, 1998). Thus with conflict between parents and adolescents greater in younger adolescents, we may expect to find that differences in perceptions are greater between parents and younger adolescents than between parents and older adolescents.

**Issue of Compliance (Adherence) to Treatment**

Authors across all healthcare disciplines frequently consider the terms and phenomena of adherence and compliance as synonymous and use them interchangeably. Researchers agree that adherence is a complex, multifaceted challenging patient behavior. The practical reality of not following a recommended course of treatment, particularly for individuals with chronic illness, is a major cause of poor health outcomes and increased healthcare costs (Martin et al, 2005).

Adherence to therapies is a key component of psychology or mental health care. Estimates of non-adherence rates in mental health range between 24% and 90% with one in 4 patients experiencing psychosis when they fail to adhere to medication regimens (Nose et al 2003). Patient adherence reflects the extent to which a person’s actions or behavior coincides with advice or instruction from a healthcare provider intended to prevent, monitor, or improve a disorder (Bissonnette, 2008). An important theme in the mental health literature is the
relationship between patient non-adherence and feelings of embarrassment about having to take medication for a mental health related illness.

Few children with mental health disorders receive appropriate treatment. Since service use is a condition for effective intervention, epidemiological studies about factors that influence service use are of clinical and public health importance. Parental perception of the adolescent’s mental health condition as a problem is an important predictor of mental health service use. Given that parents seem to be the main force behind service use, predictors of parental perception of problems warrant further examination (Sayal et al, 2003).

Theoretical Framework and Conceptual Model

The Health Belief Model
The Health Belief Model is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals. It is a widely used theory that was designed to explain why people do not participate in programs to prevent or protect disease. The Health Belief Model is based on the understanding that a person will take a health-related action if that person feels that a negative health condition can be avoided, has a positive expectation that by taking a recommended action he/she will avoid a negative health condition, and believes that he/she can successfully take a recommended health action. The core components of the Health Belief Model include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy.
Perceived susceptibility is the subjective perception of the risk of developing a particular health condition. Perceived severity refers to feelings about the seriousness of the consequences of developing a specific health problem. Perceived benefits are beliefs about the effectiveness of various actions that might reduce susceptibility and severity. Perceived barriers are potential negative aspects of taking specific actions. Cues to action are bodily or environmental events that trigger action. A variety of other demographic, social, psychological, and structural variables, such as age, education level, gender, and socioeconomic status, may also impact an individual’s perceptions and their health-related behaviors.

There have been numerous studies conducted on the Health Belief Model. In studies that have examined sick-role behaviors such as compliance with medications, the perceived benefits component was the strongest predictor of engaging in health behaviors. The Health Belief Model displayed in Diagram 1 is a relevant theoretical model when addressing issues for at risk populations (Janz et al, 1984).
Few studies have examined the applicability of the Health Belief Model to pediatric populations. There were no studies found that explore adult and adolescent health beliefs regarding mental health issues. The only studies found examine the differences in health beliefs of adults and adolescents in respect to diabetes management. No studies to date have examined minority adolescents’
health beliefs concerning their diabetes and its relationship to adherence (Patino, et al, 2005).

A study by Bond, Aiken, & Somerville (1992) investigated the relations of age, disease duration, and health beliefs to self-reported diabetic regimen adherence in adolescents with Insulin-Dependent Diabetes Mellitus. The study found that increasing age was associated with a decrease in adherence to exercise, injection regularity, and eating and glucose testing frequency. Increasing age also was associated with an increase in perceived threat. Little is known about adolescents’ cognitive conceptions of health and illness or their connections to health-related behaviors (Chassin, et al, 1982). Forty four percent of adolescents report worrying about personal health (Radius, et al, 1980).

Overall, there does not appear to be a theoretical basis for thinking that adolescents with Insulin-Dependent Diabetes Mellitus will differ fundamentally from adults with Insulin-Dependent Diabetes Mellitus in the way their decisions about compliance with a medical regimen are governed by their social and personal concerns in interaction with their cognitive beliefs about health and illness (Ingersoll, et al, 1986). Thus, there is no basis for believing that adolescents will differ from adults in regard to their beliefs about mental health issues.
CHAPTER IV: HYPOTHESIS & RESEARCH QUESTIONS

The purpose of the study was to determine whether there is a difference in perception of mental health issues between parents and adolescents. The main research hypothesis of the study is that there is a significant difference in perception between parents and adolescents. The null hypothesis is that there is no difference in perception between parents and adolescents. The alternate hypothesis is that the difference in perception between parents and adolescents may affect their likeliness to receive the proper level of treatment. The study addresses the following research questions and hypotheses:

**Research Question 1:** Is there a significant difference in perception between adolescents and parents?

**Hypothesis 1:** There is a significant difference in perception between adolescents and parents.

**Research Question 1a:** Is there a significant difference between scores on the substance use/abuse scale?

**Hypothesis 1a:** There is a significant difference between scores on the substance use/abuse scale.

**Research Question 1 b:** Is there a significant difference between scores on the mental health scale?

**Hypothesis 1b:** There is a significant difference between scores on the mental health scale.
Research Question 1 c: Is there a significant difference between scores on the aggressive behavior/delinquency scale?

Hypothesis 1 c: There is a significant difference between scores on the aggressive behavior/delinquency scale.

Research Question 1 d: Is there a significant difference between scores on the family relations scale?

Hypothesis 1 d: There is a significant difference between scores on the family relations scale.

Research Question 1 e: Is there a significant difference between scores on the peer relations scale?

Hypothesis 1 e: There is a significant difference between scores on the peer relations scale.

Research Question 2: Does the difference in perception affect adolescents receiving the proper level of treatment?

Hypothesis 2: The difference in perception does affect adolescents receiving the proper level of treatment.

Research Question 2 a: Is there a significant difference between groups on the substance use/abuse scale?

Hypothesis 2 a: There is a significant difference between groups on the substance use/abuse scale.
**Research Question 2 b:** Is there a significant difference between groups on the mental health scale?

**Hypothesis 2 b:** There is a significant difference between groups on the mental health scale.

**Research Question 2 c:** Is there a significant difference between groups on the aggressive behavior/delinquency scale?

**Hypothesis 2 c:** There is a significant difference between groups on the aggressive behavior/delinquency scale.

**Research Question 2 d:** Is there a significant difference between groups on the family relations scale?

**Hypothesis 2 d:** There is a significant difference between groups on the family relations scale.

**Hypothesis 2 e:** Is there a significant difference between groups on the peer relations scale?

**Hypothesis 2 e:** There is a significant difference between groups on the peer relations scale.

**Research Question 3:** Are age, race, and gender significant factors that influence differences in perception between adolescents and parents?

**Hypothesis 3:** Age, race, and gender are significant factors that influence differences in perception between adolescents and parents.
CHAPTER V: METHODS & MATERIALS

This chapter describes the design and research methodology that was implemented to describe mental health in adolescents, the effect of the difference in perception of mental health issues between parents and adolescents, and the effect that has on adolescents receiving the proper level of treatment. It also includes a description of the sample size and characteristics, the research settings, the procedures for sample recruitment, data collection, and human rights protection. Finally, this chapter describes the instruments used as well as the data analysis procedures.

Study Design

The purpose of this study was to explore the differences in perception of mental health issues between parents and adolescents and to determine what effect perception has on adolescents receiving the proper level of treatment. This research was designed as an analysis of behavior that used quantitative models for experimental analysis. The parameters in the models hopefully have theoretical meaning beyond being used to fit models to data.

The research design of this study was a cross-sectional between-participants study design that involved observation of a representative subset of a population at a specific point in time, and was a prospective study in that it looked for outcomes during the study period and related the outcomes to other protective factors.
**Sample Characteristics**

This study used a convenience and purposive sample of adolescents between the ages of 12 and 18 that were enrolled in child and adolescent services at the study site during the study period. The inclusion criteria for study participation were: 1) an adolescent between the ages of 12 and 18 enrolled in child and adolescent services at the mental health agency at the time of the study, and 2) enrolled in mental health services for at least the past 3 months consecutively. Subjects were excluded from the study if they had not lived with their current parent/guardian for at least 1 year consecutively.

**Sample Size**

The research questions required correlational and multiple regression analysis to explore the effects of the predictors (age, gender, race, and level of treatment) on perception. Using power calculation software, G*Power 3.1.3, it was determined that an ideal sample size of approximately 250 subjects, 125 adolescents and 125 parents, was needed in order to be able to detect a difference between the groups. According to Field (2005), there are many rules for calculating sample size for regression. One of the most common rules is 10 to 15 data points per predictor parameter model. Field (2005) also discussed Green’s rules for calculating the minimum acceptable sample size. The first rule is based on the regression model overall test. The minimum sample size is calculated as 50+8k (k = number of predictors). The second rule is based on an individual predictor test. The minimum sample size is 104+k (k = number of predictors). The sample size for this study, set at four predictors, could be 82 (50+32) or 108 (104+4). Green
recommends calculating the minimum sample size using both equations and then selecting the largest value. Thus, the minimum required sample size for this study was 108 subjects. The sample size for this study was 146 subjects, which exceeded minimum requirements.

**Setting/Study Site**

The study site is a community mental health center, which is a legislatively created public corporation established to provide mental health, addictive disease, and developmental disability services to individuals and families in an eight-county area. The study site is located in the Southwestern region of the State of Georgia and covers the following eight counties: Crisp, Dooly, Macon, Marion, Schley, Sumter, Taylor, and Webster. The study site offers the following services to children and adolescents: counseling, psychiatric and nursing services, pharmacy, prevention and early intervention, school-based services, and specialized groups. According to the 2010 Census, the population of the region served by the study site was 105,535. The racial make-up of the region was: 52.27% White, 44.55% Black, 3.05% Hispanic, and 0.13% Other Races. The average annual household income of the region was $31,369.

**Human Subjects Protection**

Every effort was made by the researcher to ensure the protection of research participants. The researcher submitted a research proposal to the Biomedical Institutional Review Board (IRB) of Tulane University (Appendix E). Tulane University was considered the sponsoring university for this research as this study was necessary for partial fulfillment of the requirements for the Doctor of
Science degree in the Department of Health Systems Management at the Tulane School of Public Health and Tropical Medicine. The researcher also received permission from the study site. The primary roles of the IRB and study site consent were to ensure human subjects’ protection. The review processes approved the researcher’s request to conduct research (Appendix C, D, & L).

**Patient/Subject Selection**

Participants in the study were chosen from the study site, a community mental health agency in Southwest Georgia. There were 398 children and adolescents enrolled in child and adolescent mental health services at the facility at the time of the study. 210 adolescents between the ages of 12 and 18 enrolled in child and adolescent services, and their parent/guardian, were invited to participate in the study.

Administrative data was used to identify adolescents between the ages of 12 and 18 that were currently enrolled in child and adolescent mental health services and that had been enrolled in services for the prior 3 month period.

Surveys were administered over a 3 month period from March 23, 2013 to June 15, 2013. Participants were notified of the study through a letter mailed to their home (Appendix N). Participants were instructed to call the office to schedule appointments to complete the study. Surveys were administered at the local mental health office. Parents and adolescents were put in a room together for the researcher to obtain consent. Informed consent was obtained from every participant directly before administering the survey. Parents and adolescents age 18 received a written informed consent, read the informed consent, were given
the opportunity to ask questions, and were required to sign the informed consent prior to the administration of the survey (Appendix G). All youth ages 12 to 17 participating in the survey were given a written assent form, read the assent form, were given the opportunity to ask questions, and were required to sign the assent form prior to the administration of the survey (Appendix F). All participants also read and signed a HIPAA Authorization form prior to the administration of the survey (Appendix H). The researcher was available to read the forms to any parent or adolescent if needed.

**Data Collection Procedure**

Parents and adolescents were placed in separate rooms to complete the surveys (Appendix I & K) and additional questionnaire (Appendix J & L). The researcher was available to answer any questions and/or to read the survey questions to participants if needed. Upon completion of the survey, each participant was given a $10 gift card as thanks for their participation. Participants were also given copies of the consent/assent and HIPAA authorization forms that they signed.

Surveys were administered after business hours, so the office was quiet and there were no interruptions. Participants were given an unlimited amount of time to complete the survey. The average duration of each subject’s participation in the study was approximately one hour: 15 minutes for the consent process, 30 minutes to complete the survey, and 15 minutes to complete the additional questionnaire. Once the survey and questionnaire were completed, the researcher checked for any missing data before the subjects left the study site.
Participants were divided into 2 groups for analysis: adolescents that received the proper level of treatment during the study period and adolescents that did not receive the proper level of treatment during the study period. Administrative data was used to determine participants that met criteria for each group.

**Pilot Testing**

The first day of surveys was considered a pilot test. The inclusion criteria, settings, and recruitment process of this subsample were identical to those of the principal study. 16 individuals participated- 8 parents and 8 adolescents. Procedures worked well and the surveys elicited appropriate information. No changes were made after the pilot test.

**Instruments**

The Problem Oriented Screening Instrument for Teenagers (POSIT) is a brief screening tool designed to identify problems and the potential need for mental health treatment in adolescents age 12 to 19. The POSIT questionnaire includes 139 questions over 10 functional areas: substance use/abuse, mental health, physical health, family relationships, peer relationships, educational status, vocational status, social skills, leisure and recreation, and aggressive behavior/delinquency. The Aggressive Behavior/Delinquency scale from the POSIT consists of 15 questions. This scale had a test-retest intra-class correlation of 0.90 and an internal consistency of 0.79 at the initial test and 0.85 at retest (Knight et al, 2001).
The questionnaire uses a yes/no response format and can be administered by pencil and paper or by computer. The survey is appropriate for adolescents with at least a 4th/5th grade reading level and takes approximately 20 to 25 minutes to complete. The POSIT was developed by the National Institutes of Health National Institute on Drug Abuse and has been proven to be reliable and valid (Appendix A: Table 6). The POSIT is available in both English and Spanish. In this study, no patient requested the Spanish version.

The POSIT is a cost-efficient, easy-to-use problem screening for use with troubled adolescents who may have one or more problems amenable to treatment or to a combination of preventive services. The POSIT can be administered by staff in schools, the juvenile and family court system, child welfare, medical, psychiatric, and alcohol and drug treatment programs as the first step toward determining those potentially problematic areas that require a more comprehensive diagnostic assessment. The POSIT is useful in a case management system in conjunction with a community network of clinical services. It can also be used as a descriptive measure in program evaluation.

The Problem Oriented Screening Instrument for Parents (POSIP) is the parental version of the POSIT. It was developed in 1991 by the National Institutes of Health National Institute on Drug Abuse to determine the differences in perception of problem areas between the parent/guardian and the adolescent and it can help determine a need for treatment. The POSIP questionnaire includes 76 questions over 5 functional areas: 17 items on Substance Abuse/Use, 22 items on Mental Health, 11 items on Family Relations, 10 items on Peer relations, and 16
items on Aggressive Behavior/Delinquency. The POSIP can be administered to one or both parents/guardians at the same time or after the POSIT has been administered to the adolescent. The POSIP questionnaire is written on a 5th grade reading level and takes approximately 15 to 20 minutes to complete. Differences in specific problem area scores indicate differences in perception of and/or reporting on those problem areas between the parent/guardian and adolescent.

A prior study was conducted using the POSIT screening tool to investigate the degree to which the POSIT screening of the family domain provides useful information regarding family functioning when used with clinic-referred youths with behavior problems. The data from the study supported the validity of the POSIT and its ability to classify families correctly in terms of their family functioning (Santisteban et al, 1999).

Survey responses for each question are coded into 5 categories: Substance Use/Abuse, Mental Health, Aggressive Behavior/Delinquency, Peer Relations, and Family Relations. After surveys are completed, clinicians will use scoring templates to code the responses for each question. A total score will be compiled for each category. Higher scores indicate a higher severity for each area which may indicate a greater need for treatment.

Individual questions in the POSIT and POSIP are divided into three types: general-purpose items, age-related items, and risk response (red-flag) items. Any positive score, whether a red-flag item or a scale total score, indicates that a potential problem exists and that further assessment in that area is recommended. Red-flag items are intended to identify problem areas in need of
further assessment when they alone are scored as positive. General items add one point to the risk score for each functional area. Age-related items contribute to the risk score only for respondents in a specified age range. Endorsement of red-flag items alone indicates the need for further assessment. The total number of general, age-related, and red flag items are summed for each functional area. Of the 139 questions, 11 contribute to the scoring of more than one scale. Scores that are above the cut-off for each functional area do not necessarily indicate the actual existence of a problem. Rather, they are intended to identify functional areas in need of further evaluation. A total global severity score can be created by summing responses to all 139 items. The current scoring system, based on the clinical judgment of expert clinicians and substance abuse researchers, is considered conservative with respect to the probability that a problem actually exists in a given functional area (McLaney et al, 1994).

The number of items in each POSIT scale is shown in Table 6. Individual questions in the POSIT are of three types: general-purpose items, age-related items, and red-flag items. Any positive score, whether a red-flag item or a scale total score, indicates that a potential problem exists and that further assessment in that area is recommended. Red-flag items are intended to identify problem areas in need of further assessment when they alone are scored as positive.

The psychometric properties of the POSIT have been previously measured in a number of adolescent populations. In general, these previous studies have measured internal consistency, test-retest reliability, and validity of the 10 scales. Internal consistency indicates that items within a scale are measuring the same
construct and that a higher total score is likely to indicate higher total risk. This is a particularly important measure for clinicians who may base treatment or referral decisions for their patients on scores that exceed a recommended cut-point (Knight et al, 2001).

While the POSIT includes questions over 10 functional areas, the POSIP questionnaire only includes questions over 5 functional areas: Substance Abuse/Use, Mental Health, Family Relations, Peer relations, and Aggressive Behavior/Delinquency. Only the answers to the questions over those 5 functional areas will be used for analysis.

The POSIT and POSIP have both been proven to be reliable and valid instruments for assessing mental health issues in adolescents. Identifying the differences in the perception of problems between parents and adolescents can assist clinicians in targeting youth risk groups. By analyzing different variables, researchers can attempt to determine if a specific age group, race, or gender is more likely to hide problems from their parents and therefore less likely to receive the proper level of treatment.

**Scoring**

Under the scoring procedure of the POSIT, youth endorsing one or more of the items for each scale are deemed at a significant risk and recommended for further diagnostic assessment (Latimer et al, 2004).
**Additional Questionnaire**

The Additional Questionnaire consisted of two parts. Part one consisted of demographic questions. The adolescent questionnaire asked about gender, age, education level, ethnicity, and race. The parent questionnaire asked about gender, age, marital status, education level, employment status, household income, ethnicity, and race. Part two asked questions regarding beliefs about mental health disorders and treatment. All questions were answered by filling in a bubble or writing the information in the space provided.

**Outcomes**

This study attempted to determine if differences in perception between adolescents and their parents has an effect on parents’ decision to seek treatment for their children. By dividing the participants in to two groups based on whether or not they are currently receiving the proper level of treatment, we can determine if parents who are similar in perception to their adolescents are more compliant with mental health treatment. Determining this relationship can lead to the development of interventions that can seek to improve compliance with mental health treatment for adolescents.

**Independent Variables**

By examining age, gender, and race of parents and adolescents, we can determine if either characteristic has a significant effect on adolescents receiving the proper level of mental health treatment. Prior studies of parents and adolescents have shown that gender of parent and adolescent has a significant effect on the
difference in perception. Prior studies have also shown that the race of parents has a significant effect on their participation in treatment. It is expected that both gender and race will be significant predictors.

**Statistical Analysis**

The differences in scores between parents and adolescents were compared for each group using a paired t-test. Multiple regression models were used to relate differences in perception between parents and adolescents in the two groups, adjusting for age, race, and gender. Descriptive statistics were derived for analysis.

Statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS), Version 21.0. Alpha and power levels were set at the traditional values for social science research (0.05; 0.8) with the goal of maintaining good statistical power and statistical significance.
CHAPTER VI: SPECIFIC FINDINGS & RESULTS

This chapter presents the results of the statistical data analysis. The demographics of the study population are detailed. The statistical analysis is presented according to the research questions.

Demographics

Adolescents

Of the adolescents participating in the survey, 52.05% (n = 38) were male and 47.95% (n = 35) were female. The racial background was 61.64% (n = 45) African American/Black, 34.25% (n = 23) Caucasian/White, and 4.11% (n = 3) Multiracial/Mixed. Additionally, 1.37% (n = 1) identified themselves as Hispanic and 98.63% (n = 72) identified themselves as not Hispanic. The age breakdown was as follows: 13.70% (n = 10) were age 12, 19.17% (n = 14) were age 13, 15.07% (n = 11) were age 14, 23.29% (n = 17) were age 15, 9.59% (n = 7) were age 16, 9.59% (n = 7) were age 17, and 9.59% (n = 7) were age 18. The grade levels were as follows: 0 participants had a 4th grade education or less, 1.37% (n = 1) in 5th grade, 16.43% (n = 12) in 6th grade, 17.81% (n = 13) in 7th grade, 17.81% (n = 13) in 8th grade, 12.33% (n = 9) in 9th grade, 15.07% (n = 11) in 10th grade, 10.96% (n = 8) in 11th grade, 5.48% (n = 4) in 12th grade, 1.37% (n = 1) was a high school graduate, and 1.37% (n = 1) was not in school (Appendix A: Table 16 & 17).

Parents

Of the parents/guardians participating in the survey, 13.70% (n = 10) were male and 86.30% (n = 63) were female. The racial background was 67.12% (n = 49)
Black/African American and 32.88% (n = 24) White/Caucasian. Additionally, 1.37% (n = 1) identified themselves as Hispanic, 1.37% (n = 1) stated they were not sure, and 97.26% (n = 71) identified themselves as not Hispanic. The age breakdown was as follows: 0 under the age of 30, 8.22% (n = 6) between the ages of 31 and 35, 16.44% (n = 12) between the ages of 36 and 40, 16.44% (n = 12) between the ages of 41 and 45, 5.47% (n = 4) between the ages of 46 and 50, 15.07% (n = 11) between the ages of 51 and 55, 17.81% (n = 13) between the ages of 56 and 60, 12.33% (n = 9) age 60 and older, and 8.22% (n = 6) did not give a response. The grade levels were as follows: 1.37% (n = 1) with education 8th grade or less, 17.81% (n = 13) with 9 – 11 grade education, 4.11% (n = 3) with 12th grade education but no diploma, 35.62% a high school graduate or equivalent, 8.22% (n = 6) with some college but less than a year, 19.18% (n = 14) with 1 year of college, 2.74% (n = 2) with an Associate’s degree, 2.74% (n = 2) with a Bachelor’s degree, 2.74% (n = 2) with a Master’s degree, and 5.47% (n = 4) did not give a response. The marital status was as follows: 30.13% (n = 22) Married, 27.4% (n = 20) Divorced, 15.07% n = 11) Never Married, 15.07% (n = 11) Separated, 9.59% (n = 7) Widowed, and 2.74% (n = 2) did not give a response. Employment status was as follows: 6.85% (n = 5) Retired, 31.51% (n = 23) Disabled, 16.44% (n = 12) Out of Work and Looking for Work, 27.4% (n = 20) Employed, 5.47% (n = 4) Self-Employed, 6.85% (n = 5) Homemaker, 1.37% (n = 1) Student, and 4.11% (n = 3) did not give a response. Income status was as follows: 34.24% (n = 25) with income of less than $10,000, 31.51% (n = 23) with income between 10 and 19,000, 17.81% (n = 13) with income between 20 and 29,000, 6.85% (n = 5) with income between (n = 5) with income between 30 and 39,000, 2.74% (n = 2) with
income between 60 and 69,000, 1.37% (n = 1) with income between 70 and 79,000, and 1.37% (n = 1) with income between 80 and 89,000 (Appendix A: Table 18 & 19).

**Representativeness of the Sample**

The study population was representative of the total population of adolescents enrolled in services at the study site. Of the 398 adolescents enrolled in services, 57.04% (n = 227) are female and 42.96% (n = 171) are male, compared with the study population of 47.90% (n = 35) female and 52.10% (n = 38) male. Of the adolescents enrolled in services, 65.33% (n = 260) were African American/Black, 31.41% (n = 125) were Caucasian/White, 2.26% (n = 9) were Hispanic, 0.75% (n = 3) were Multiracial, and 0.25% (n = 1) were Asian. In the study population, 60.30% (n = 44) were African American/Black, 34.20% (n = 25) were Caucasian/White, 4.10% (n = 3) were Multiracial, and 1.40% (n = 1) were Hispanic.

The study population is not representative of the geographic region in which the study was conducted. The study population was 60.30% African American/Black, 34.20% Caucasian/White, 4.10% Multiracial, and 1.40% Hispanic whereas the population of the geographic region consists of 52.27% Caucasian/White, 44.55% African American/Black, 3.05% Hispanic, and 1.30% Other races. The African American/Black population is overrepresented in the study population and the Caucasian/White population is underrepresented. Additionally, the average annual household income of the parents in the study was $23,470 which is below the average annual household income of the region, which is $31,369.
**Results of Statistical Data Analysis**

**Research Question 1:** Is there a significant difference in perception between adolescents and their parents?

**Hypothesis 1:** There is a significant difference in perception between adolescents and their parents.

A paired samples t-test was conducted to evaluate the difference in adolescents’ total scores on the POSIT vs. parents’ total scores on the POSIP. There was not a statistically significant difference in scores (t=.60, p (2-tailed) = .55). The mean of the adolescents’ scores was 24.97, SD= 8.00. The mean of the parents’ scores was 24.30, SD= 7.66. The mean variation was within a 95% confidence interval ranging from -1.56 to 2.91. The eta squared statistic, 0.01, indicated no effect.

Hypothesis 1 for Research Question 1 was not supported.

There were 5 functional areas tested on both the POSIT and POSIP: Substance Use/Abuse, Mental Health, Juvenile Delinquency, Family Relations, and Peer Relations.

**Substance Use/Abuse**

**Research Question 1 a:** Is there a significant difference between scores on the substance use/abuse scale?

**Hypothesis 1 a:** There is a significant difference between scores on the substance use/abuse scale.
The POSIT/POSIP Substance Use/Abuse scale is comprised of 17 yes/no items designed to screen for problems associated with alcohol and drug use. Examples of POSIT items on the Substance Use/Abuse scale include “Do you get into trouble because you use drugs or alcohol at school?” or “Do you have trouble getting along with any of your friends because of your alcohol or drug use?” A raw scale score is obtained for respondents by summing the 17 items providing a scale range from 0 (no items endorsed) to 17 (all items endorsed) (Latimer et al 2004). A paired samples t-test was conducted to evaluate the difference in adolescents’ substance abuse scores on the POSIT vs. parents’ substance abuse scores on the POSIP. There was not a statistically significant difference in scores (t= 1.87, p (2-tailed) = .07). The mean of the adolescents’ scores was .84, SD= 1.53. The mean of the parents’ scores was .47, SD= 1.16. The mean variation was within a 95% confidence interval ranging from -.02 to .76. The eta squared statistic, 0.05, indicated a small effect. Hypothesis 1 a for Research Questions 1 a was not supported.

**Mental Health**

**Research Question 1 b:** Is there a significant difference between scores on the mental health scale?

**Hypothesis 1 b:** There is a significant difference between scores on the mental health scale.

The POSIT/POSIP Mental Health scale is comprised of 22 yes/no items designed to screen for mental health issues. Examples of POSIT items on the Mental Health scale include “Do you have so much energy you don’t know what to do
with it?” or “Do you often feel tired?” A raw scale score is obtained for respondents by summing the 22 items providing a scale range from 0 (no items endorsed) to 22 (all items endorsed).

A paired samples t-test was conducted to evaluate the difference in adolescents’ mental health scores on the POSIT vs. parents’ mental health scores on the POSIP. There was not a statistically significant difference in scores (t= .81, p (2-tailed) = .42). The mean of the adolescents’ scores was 9.74, SD= 4.80. The mean of the parents’ scores was 9.21, SD= 4.56. The mean variation was within a 95% confidence interval ranging from -.78 to 1.85. The eta squared statistic, 0.01, indicated no effect. Hypothesis 1 b for Research Question 1 b was not supported.

**Aggressive Behavior/ Delinquency**

**Research Question 1 c:** Is there a significant difference between scores on the aggressive behavior/delinquency scale?

**Hypothesis 1 c:** There is a significant difference between scores on the aggressive behavior/delinquency scale.

The POSIT/POSIP Aggressive Behavior/Delinquency scale is comprised of 16 yes/no items designed to screen for problems associated with aggressive behavior and delinquency. Examples of POSIT items on the Aggressive Behavior/Delinquency scale include “Do you threaten to hurt people?” or “Have you lied to anyone in the past week?” A raw scale score is obtained for respondents by summing the 16 items providing a scale range from 0 (no items endorsed) to 16 (all items endorsed).
A paired samples t-test was conducted to evaluate the difference in adolescents’ delinquency scores on the POSIT vs. parents’ delinquency scores on the POSIP. There was not a statistically significant difference in scores (t = -0.77, p (2-tailed) = .44). The mean of the adolescents’ scores was 5.18, SD= 2.75. The mean of the parents’ scores was 5.45, SD= 3.36. The mean variation was within a 95% confidence interval ranging from -0.98 to .44. The eta squared statistic, 0.01, indicated no effect. Hypothesis 1c for Research Question 1c was not supported.

**Family Relations**

**Research Question 1d:** Is there a significant difference between scores on the family relations scale?

**Hypothesis 1d:** There is a significant difference between scores on the family relations scale.

The POSIT/POSIP Family Relations scale is comprised of 11 yes/no items designed to screen for problems associated with family relations. Examples of POSIT items on the Family Relations include “Do your parents or guardians argue a lot?” or “Do your parents or guardians refuse to talk with you when they are mad at you?” A raw scale score is obtained for respondents by summing the 11 items providing a scale range from 0 (no items endorsed) to 11 (all items endorsed).

A paired samples t-test was conducted to evaluate the difference in adolescents’ family relations scores on the POSIT vs. parents’ family relations scores on the POSIP. There was a statistically significant difference in scores (t= -3.73, p (2-
tailed) = .00). The mean of the adolescents’ scores was 6.48, SD = 1.86. The mean of the parents’ scores was 7.41, SD = 1.61. The mean variation was within a 95% confidence interval ranging from -1.43 to .43. The eta squared statistic, 0.16, indicated a large effect. Hypothesis 1 d for Research Question 1 d was supported.

**Peer Relations**

**Research Question 1 e:** Is there a significant difference between scores on the peer relations scale?

**Hypothesis 1 e:** There is a significant difference between scores on the peer relations scale.

The POSIT/POSIP Peer Relations scale is comprised of 10 yes/no items designed to screen for problems associated with peer relations. Examples of POSIT items on the Peer Relations scale include “Do your friends get bored at parties when there is no alcohol served?” or “Are most of your friends older than you are?” A raw scale score is obtained for respondents by summing the 10 items providing a scale range from 0 (no items endorsed) to 10 (all items endorsed).

A paired samples t-test was conducted to evaluate the difference in adolescents’ peer relations scores on the POSIT vs. parents’ peer relations scores on the POSIP. There was a statistically significant difference in scores (t = 3.45, p (2-tailed) = .00). The mean of the adolescents’ scores was 3.18, SD = 1.66. The mean of the parents’ scores was 2.34, SD = 1.36. The mean variation was within a 95% confidence interval ranging from .35 to 1.32. The eta squared statistic, 0.14, indicated a large effect. Hypothesis 1 e for Research Question 1 e was supported.
Scores between adolescents and parents on the family relations scale and peer relations scale were significantly different.

**Table 1: Paired Samples Test comparing scores of Adolescents on the POSIT versus scores of Parents on the POSIP**

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference in Scores (Adolescent – Parent)</th>
<th>Mean Standard Deviation</th>
<th>95% Confidence Interval</th>
<th>T Statistics</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scores</td>
<td>.67 (24.97 – 24.30)</td>
<td>9.58</td>
<td>-1.56 to 2.91</td>
<td>.60</td>
<td>.55</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>.37 (.84 - .47)</td>
<td>1.69</td>
<td>-0.024 to .76</td>
<td>1.87</td>
<td>.07</td>
</tr>
<tr>
<td>Mental Health</td>
<td>.53 (9.74 – 9.21)</td>
<td>5.64</td>
<td>-.78 to 1.85</td>
<td>.81</td>
<td>.42</td>
</tr>
<tr>
<td>Aggressive Behavior/Delinquency</td>
<td>-.27 (5.18 – 5.45)</td>
<td>3.04</td>
<td>-.98 to .44</td>
<td>-.77</td>
<td>.44</td>
</tr>
<tr>
<td>Family Relations</td>
<td>-.93 (6.48 – 7.41)</td>
<td>2.14</td>
<td>-1.43 to -.43</td>
<td>-3.73</td>
<td>.00</td>
</tr>
<tr>
<td>Peer Relations</td>
<td>.84 (3.18 – 2.34)</td>
<td>2.07</td>
<td>.35 to 1.32</td>
<td>3.45</td>
<td>.00</td>
</tr>
</tbody>
</table>

**Level of Treatment**

**Research Question 2:** Does the difference in perception affect adolescents receiving the proper level of treatment?

**Hypothesis 2:** The difference in perception does affect adolescents receiving the proper level of treatment.

Participants were broken into 2 groups based on their level of treatment: a compliant group and a non-compliant group. A paired samples t-test was conducted to evaluate the difference in adolescents’ total scores on the POSIT vs. parents’ total scores on the POSIP for the compliant treatment group. There was not a statistically significant difference in scores (t= 1.15, p (2-tailed) = .26). The
mean of the adolescents’ scores was 26.21, SD= 6.95. The mean of the parents’ scores was 24.71, SD= 7.96. The mean variation was within a 95% confidence interval ranging from -1.13 to 4.13. The eta squared statistic, 0.03, indicated a small effect.

A paired samples t-test was conducted to evaluate the difference in adolescents’ total scores on the POSIT vs. parents’ total scores on the POSIP for the non-compliant treatment group. There was not a statistically significant difference in scores (t= -.23, p (2-tailed) = .82). The mean of the adolescents’ scores was 23.29, SD= 9.07. The mean of the parents’ scores was 23.74, SD= 7.33. The mean variation was within a 95% confidence interval ranging from -4.48 to 3.58. The eta squared statistic, 0.00, indicated no effect. Hypothesis 2 for Research Question 2 was not supported.

**Substance Use/Abuse**

**Research Question 2 a:** Is there a significant difference between groups on the substance use/abuse scale?

**Hypothesis 2 a:** There is a significant difference between groups on the substance use/abuse scale.

A paired samples t-test was conducted to evaluate the difference in adolescents’ substance abuse scores on the POSIT vs. parents’ substance abuse scores on the POSIP for the compliant treatment group. There was not a statistically significant difference in scores (t= 1.50, p (2-tailed) = .14). The mean of the adolescents’ scores was .81, SD= 1.60. The mean of the parents’ scores was .43, SD= .89. The
mean variation was within a 95% confidence interval ranging from -.13 to .90. The eta squared statistic, 0.05, indicated a small effect.

A paired samples t-test was conducted to evaluate the difference in adolescents’ substance abuse scores on the POSIT vs. parents’ substance abuse scores on the POSIP for the non-compliant treatment group. There was not a statistically significant difference in scores (t= 1.12, p (2-tailed) = .27). The mean of the adolescents’ scores was .87, SD= 1.46. The mean of the parents’ scores was .52, SD= 1.46. The mean variation was within a 95% confidence interval ranging from -.29 to 1.00. The eta squared statistic, 0.04, indicated a small effect. Hypothesis 2 a for Research Question 2 a was not supported.

**Mental Health**

**Research Question 2 b:** Is there a significant difference between groups on the mental health scale?

**Hypothesis 2 b:** There is a significant difference between groups on the mental health scale.

A paired samples t-test was conducted to evaluate the difference in adolescents’ mental health scores on the POSIT vs. parents’ mental health scores on the POSIP for the compliant treatment group. There was a statistically significant difference in scores (t= 2.21, p (2-tailed) = .03). The mean of the adolescents’ scores was 10.71, SD= 4.31. The mean of the parents’ scores was 9.12, SD= 4.57. The mean variation was within a 95% confidence interval ranging from .14 to 3.05. The eta squared statistic, 0.11, indicated a moderate effect.
A paired samples t-test was conducted to evaluate the difference in adolescents’ mental health scores on the POSIT vs. parents’ mental health scores on the POSIP for the non-compliant treatment group. There was not a statistically significant difference in scores (t= -0.77, p (2-tailed) = .45). The mean of the adolescents’ scores was 8.42, SD= 5.17. The mean of the parents’ scores was 9.32, SD= 4.61. The mean variation was within a 95% confidence interval ranging from -3.30 to 1.50. The eta squared statistic, 0.02, indicated a small effect. There was a statistically significant difference between adolescents and parents in the compliant group, but there was not a statistically significant difference in the non-compliant treatment group. Therefore, Hypothesis 2 b for Research Question 2 b was not supported.

**Aggressive Behavior/Delinquency**

**Research Question 2 c**: Is there a significant difference between groups on the aggressive behavior/delinquency scale?

**Hypothesis 2 c**: There is a significant difference between groups on the aggressive behavior/delinquency scale.

A paired samples t-test was conducted to evaluate the difference in adolescents’ delinquency scores on the POSIT vs. parents’ delinquency scores on the POSIP for the compliant treatment group. There was a statistically significant difference in scores (t= -0.52, p (2-tailed) = .61). The mean of the adolescents’ scores was 5.38, SD= 2.59. The mean of the parents’ scores was 5.62, SD= 3.48. The mean variation was within a 95% confidence interval ranging from -1.17 to .69. The eta squared statistic, 0.01, indicated no effect.
A paired samples t-test was conducted to evaluate the difference in adolescents’ delinquency scores on the POSIT vs. parents’ delinquency scores on the POSIP for the non-compliant treatment group. There was not a statistically significant difference in scores (t= -.57, p (2-tailed) = .57). The mean of the adolescents’ scores was 4.90, SD= 2.97. The mean of the parents’ scores was 5.23, SD= 3.23. The mean variation was within a 95% confidence interval ranging from -1.48 to .84. The eta squared statistic, 0.011, indicated a small effect. There was a statistically significant difference between adolescents and parents in the compliant group, but there was not a statistically significant difference in the non-compliant treatment group. Therefore, Hypothesis 2 c for Research Question 2 c was not supported.

*Family Relations*

**Research Question 2 d:** Is there a significant difference between groups on the family relations scale?

**Hypothesis 2 d:** There is a significant difference between groups on the family relations scale.

A paired samples t-test was conducted to evaluate the difference in adolescents’ family relations scores on the POSIT vs. parents’ family relations scores on the POSIP for the compliant treatment group. There was not a statistically significant difference in scores (t= -1.88, p (2-tailed) = .07). The mean of the adolescents’ scores was 6.88, SD= 1.63. The mean of the parents’ scores was 7.52, SD= 1.37. The mean variation was within a 95% confidence interval ranging from -1.33 to .05. The eta squared statistic, 0.079, indicated a moderate effect.
A paired samples t-test was conducted to evaluate the difference in adolescents’ family relations scores on the POSIT vs. parents’ family relations scores on the POSIP for the non-compliant treatment group. There was a statistically significant difference in scores (t= -3.70, p (2-tailed) = .00). The mean of the adolescents’ scores was 5.94, SD= 2.03. The mean of the parents’ scores was 7.26, SD= 1.90. The mean variation was within a 95% confidence interval ranging from -2.05 to -.59. The eta squared statistic, 0.31, indicated a large effect. There was not a statistically significant difference between adolescents and parents in the compliant group, but there was a statistically significant difference in the non-compliant treatment group. Therefore, Hypothesis 2 d for Research Question 2 d was supported.

**Peer Relations**

**Research Question 2 e:** Is there a significant difference between groups on the peer relations scale?

**Hypothesis 2 e:** There is a significant difference between groups on the peer relations scale.

A paired samples t-test was conducted to evaluate the difference in adolescents’ peer relations scores on the POSIT vs. parents’ peer relations scores on the POSIP for the compliant treatment group. There was a statistically significant difference in scores (t= 3.89, p (2-tailed) = .00). The mean of the adolescents’ scores was 3.29, SD= 1.73. The mean of the parents’ scores was 2.21, SD= 1.05. The mean variation was within a 95% confidence interval ranging from .52 to 1.63. The eta squared statistic, 0.27, indicated a large effect.
A paired samples t-test was conducted to evaluate the difference in adolescents’ peer relations scores on the POSIT vs. parents’ peer relations scores on the POSIP for the non-compliant treatment group. There was not a statistically significant difference in scores ($t = .59$, $p$ (2-tailed) = .56). The mean of the adolescents’ scores was 3.03, $SD = 1.58$. The mean of the parents’ scores was 2.74, $SD = 1.93$. The mean variation was within a 95% confidence interval ranging from -.72 to 1.30. The eta squared statistic, 0.01, indicated a small effect. There was a statistically significant difference between adolescents and parents in the compliant group, but there was not a statistically significant difference in the non-compliant treatment group. Therefore, Hypothesis 2 e for Research Question 2 e was not supported.

Level of treatment was only statistically significant between adolescents and parents on the family relations scale.

Table 2: Paired Samples Test comparing scores of Adolescents on the POSIT versus scores of Parents on the POSIP for the Group receiving the Proper Level of Treatment

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference in Scores (Adolescent – Parent)</th>
<th>Mean</th>
<th>95% Confidence Interval</th>
<th>T Statistics</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scores</td>
<td>1.50 ($26.21 – 24.71$)</td>
<td>8.43</td>
<td>-1.13 to 4.13</td>
<td>1.15</td>
<td>.26</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>.38 (.81 - .43)</td>
<td>1.65</td>
<td>-.13 to .90</td>
<td>1.50</td>
<td>.14</td>
</tr>
<tr>
<td>Mental Health</td>
<td>1.59 (10.71 – 9.12)</td>
<td>4.67</td>
<td>.14 to 3.05</td>
<td>2.21</td>
<td>.03</td>
</tr>
<tr>
<td>Aggressive Behavior/ Delinquency</td>
<td>-.24 (5.38 – 5.62)</td>
<td>2.99</td>
<td>-1.17 to .69</td>
<td>-.52</td>
<td>.61</td>
</tr>
<tr>
<td>Family Relations</td>
<td>-.64 (6.88 – 7.52)</td>
<td>2.22</td>
<td>-1.33 to .05</td>
<td>-1.88</td>
<td>.07</td>
</tr>
<tr>
<td>Peer Relations</td>
<td>1.08 (3.29 – 2.21)</td>
<td>1.79</td>
<td>.52 to 1.63</td>
<td>3.89</td>
<td>.00</td>
</tr>
</tbody>
</table>
Table 3: Paired Samples Test comparing scores of Adolescents on the POSIT versus scores of Parents on the POSIP for the Group not receiving the Proper Level of Treatment

<table>
<thead>
<tr>
<th>Mean Difference in Scores (Adolescent – Parent)</th>
<th>Standard Deviation</th>
<th>95% Confidence Interval</th>
<th>T Statistics</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scores</td>
<td>-.45</td>
<td>10.99</td>
<td>-4.48 to 3.58</td>
<td>-.23</td>
</tr>
<tr>
<td>Substance Use/Abuse</td>
<td>-.35</td>
<td>1.76</td>
<td>-.29 to 1.00</td>
<td>1.12</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-.90</td>
<td>6.54</td>
<td>-3.30 to 1.50</td>
<td>-.77</td>
</tr>
<tr>
<td>Aggressive Behavior/Delinquency</td>
<td>-.33</td>
<td>3.16</td>
<td>-1.48 to .84</td>
<td>-.57</td>
</tr>
<tr>
<td>Family Relations</td>
<td>-1.32</td>
<td>1.99</td>
<td>-2.05 to -.59</td>
<td>-3.70</td>
</tr>
<tr>
<td>Peer Relations</td>
<td>.29</td>
<td>2.75</td>
<td>-.72 to 1.30</td>
<td>.59</td>
</tr>
</tbody>
</table>

**Predictors: Age, Gender, Race**

**Research Question 3:** Are age, race, and gender significant factors that influence the difference in perception between adolescents and their parents?

**Hypothesis 3:** Age, race, and gender are significant factors that influence the difference in perception between adolescents and their parents.

Multiple Regression analyses were conducted to determine the impact of the independent variables on the dependent variable. In the adolescent population, gender (Standardized Beta of .144) made the strongest unique contribution to explaining the dependent variable, when the variances explained by all other variables in the model were controlled (Appendix A: Table 15). The standardized Beta value for age (-.01) and race (.078) were lower, indicating that they made less of a contribution. However, none of the variables have Sig. value < .05,
therefore, none of the variables are making a significant unique contribution to the prediction of the DV. Gender (Part correlation coefficient = .13) explains 1.74% of the variance in the scores. Tolerance values were all >.10 and VIF < 10, therefore multicollinearity was not a problem.

In the parent population, gender (Standardized Beta of .14) made the strongest unique contribution to explaining the dependent variable, when the variances explained by all other variables in the model were controlled (Appendix A: Table 14). The standardized Beta value for age (-.02) and race (-.10) were lower, indicating that they made less of a contribution. However, none of the variables have Sig. value < .05, therefore, none of the variables are making a significant unique contribution to the prediction of the DV. Gender (Part correlation coefficient = .13) explains 1.96% of the variance in the scores. Tolerance values were all >.10 and VIF < 10, therefore multicollinearity was not a problem. Hypothesis 3 for Research Question 3 was not supported.

**Multivariate Analysis**

A multivariate analysis of variance (MANOVA) was conducted to determine if any of the independent variables had a significant impact on the family relations and peers relations scores. Family relations and peer relations scores were analyzed further since those are the subscale scores that were statistically significant between adolescents and parents. A MANOVA was run to determine if gender of adolescents had a significant impact on family and peer relations scores. A sig. value of .30 with a confidence interval -1.32 to .42 was observed for family relations scores, which is not statistically significant. A sig. value of .70 with a
confidence interval -0.93 to 0.63 was observed for peer relations scores, which is not statistically significant. 2.0% of the variance in family relations scores and 0.2% of the variance in peer relations scores in adolescents can be attributed to gender.

A MANOVA was run to determine if race of adolescents had a significant impact on family and peer relations scores. A sig. value of .10 with a confidence interval -4.20 to 3.48 was observed for family relations scores, which is not statistically significant. A sig. value of .46 with a confidence interval -1.15 to 5.91 was observed for peer relations scores, which is not statistically significant. 9.0% of the variance in family relations scores and 4.0% of the variance in peer relations scores in adolescents can be attributed to race.

A MANOVA was run to determine if age of adolescents had a significant impact on family and peer relations scores. A sig. value of .29 with a confidence interval -1.95 to 1.67 was observed for family relations scores, which is not statistically significant. A sig. value of .33 with a confidence interval -2.59 to 0.66 was observed for peer relations scores, which is not statistically significant. 10.2% of the variance in family relations scores and 9.7% of the variance in peer relations scores in adolescents can be attributed to age.

Although none of the independent variables had a statistically significant impact on family and peer relations scores in adolescents, age had the largest impact.
Table 4: Multivariate Analysis of variance to determine the effect of gender, race, and age on Family Relations and Peer Relations scores in Adolescents

<table>
<thead>
<tr>
<th></th>
<th>T Statistics</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Relations</td>
<td>-1.04</td>
<td>1.08</td>
<td>.30</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>-.39</td>
<td>.15</td>
<td>.70</td>
<td>.00</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Relations</td>
<td>-.20</td>
<td>2.20</td>
<td>.10</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>1.34</td>
<td>.87</td>
<td>.46</td>
<td>.04</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Relations</td>
<td>-.14</td>
<td>1.26</td>
<td>.29</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>-1.18</td>
<td>1.18</td>
<td>.33</td>
<td>.10</td>
</tr>
</tbody>
</table>

A MANOVA was run to determine if gender of parents had a significant impact on family and peer relations scores. A sig. value of .81 with a confidence interval -.97 to 1.24 was observed for family relations scores, which is not statistically significant. A sig. value of .64 with a confidence interval -1.12 to 0.70 was observed for peer relations scores, which is not statistically significant. 0% of the variance in family relations scores and 0% of the variance in peer relations scores in parents can be attributed to gender.
A MANOVA was run to determine if race of parents had a significant impact on family and peer relations scores. A sig. value of .23 with a confidence interval -1.28 to .32 was observed for family relations scores, which is not statistically significant. A sig. value of .82 with a confidence interval -0.59 to 0.74 was observed for peer relations scores, which is not statistically significant. 2.0% of the variance in family relations scores and 0% of the variance in peer relations scores in parents can be attributed to race.

A MANOVA was run to determine if age of parents had a significant impact on family and peer relations scores. A sig. value of .07 with a confidence interval -4.53 to 1.63 was observed for family relations scores, which is not statistically significant. A sig. value of .58 with a confidence interval -3.10 to 3.38 was observed for peer relations scores, which is not statistically significant. 5.4% of the variance in family relations scores and 3.9% of the variance in peer relations scores in parents can be attributed to age.

Although none of the independent variables had a statistically significant impact on family and peer relations scores in parents, age had the largest impact.
Table 5: Multivariate Analysis of variance to determine the effect of gender, race, and age on Family Relations and Peer Relations scores in Parents

<table>
<thead>
<tr>
<th></th>
<th>T Statistics</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Family Relations</td>
<td>.24</td>
<td>.06</td>
<td>.81</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>-.47</td>
<td>.22</td>
<td>.64</td>
<td>.00</td>
</tr>
<tr>
<td>Race</td>
<td>Family Relations</td>
<td>-1.21</td>
<td>1.46</td>
<td>.23</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>.22</td>
<td>.05</td>
<td>.82</td>
<td>.00</td>
</tr>
<tr>
<td>Age</td>
<td>Family Relations</td>
<td>-1.03</td>
<td>1.70</td>
<td>.07</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>Peer Relations</td>
<td>.06</td>
<td>.93</td>
<td>.58</td>
<td>.39</td>
</tr>
</tbody>
</table>

**Additional Questionnaire**

The additional questionnaire was given to each subject in order to collect demographic information, and to also gather information regarding their attitudes and behaviors surrounding mental health issues and treatment. When asked if they thought “a child/you could snap out of the disorder” 36.98% (n = 27) of adolescents and 34.25% (n = 25) of parents agreed with the statement. When asked if “a disorder is a sign of weakness”, 31.51% (n = 23) of adolescents agreed with the statement where only 15.07% (n = 11) of parents agreed with the
When asked if “a disorder is not a real medical illness”, 23.29% (n = 17) of adolescents stated that they agreed with the statement where only 13.7% (n = 10) of parents agreed with the statement. When asked if “children with a disorder are dangerous”, 20.55% of adolescents (n = 15) and 27.4% (n = 20) of parents agreed with the statement. When asked if “children with a disorder are unpredictable”, 27.40% (n = 20) of adolescents and 41.1% (n = 30) of parents agreed with the statement (Appendix A: Table 8).

When asked whether they would find each type of person helpful or harmful in treating them, the majority of adolescents and parents agreed that a family doctor, teacher, counselor, social worker, psychologist, psychiatrist, close family member, and close friend would be helpful. When asked about a telephone counseling service, only 31.36% (n = 28) of adolescents thought it would be helpful, although 54.79% (n = 40) of parents thought it would be helpful. When asked about dealing with problems alone, only 43.84% (n = 32) of adolescents thought it would be helpful, although 58.90% (n = 43) of parents thought it would be helpful. When asked how likely they would be to seek help from those type of people, 32.88% (n = 24) of adolescents stated that they would be very likely and 39.73% (n = 29) of adolescents stated that they would be somewhat likely where 80.82% (n = 59) of parents stated that they would be very likely (Appendix A: Table 9 & 10).

When asked to identify what would prevent them from seeking help, 52.05% of adolescents (n = 38) stated that they would be too embarrassed/shy to seek treatment. 36.99% (n = 27) of adolescents stated that they would be concerned
that the person might feel negative towards them, 28.77% (n = 21) of adolescents stated that they would be concerned that what the person might say is wrong, and 27.4% (n = 20) of adolescents stated that they would be thinking that nothing can help. Parents identified the greatest barriers to treatment as cost, with 32.8% (n = 24) of parents stating that would prevent them from seeking help. 16.44% (n = 12) of parents also identified having to travel too far as a barrier to seeking treatment for their child (Appendix A: Table 11).

When asked if they remember seeing or hearing a story about mental health problems, 50.68% (n = 37) of adolescents and 57.53% (n = 42) of parents identified TV as a source (Appendix A: Table 12).

When adolescents were asked who they are most comfortable talking to about their problems with, mother or father, 26.02% (n = 19) answered “neither” (Appendix A: Table 13).
CHAPTER VII: DISCUSSION

The purpose of this study was to discover the differences in perception between adolescents and parents regarding adolescents’ mental health issues. The study also attempted to determine if the difference in perception had an effect on adolescents receiving the proper level of treatment.

Is there a significant difference in perception between adolescents and parents?

There was not a statistically significant difference in perception between adolescents and parents on the substance use/abuse, mental health, and aggressive behavior/delinquency scales as measured by the POSIT survey in adolescents and POSIP survey in parents.

There was a statistically significant difference in scores between adolescents and parents on the family relations and peer relations scales of the surveys.

Family Relations

There was a statistically significant difference between parents and adolescents on the family relations scale of the POSIT and POSIP. Adolescents reported fewer family relations issues with mean score of 6.48 (SD of 1.86). Parents reported greater family relations issues with mean score of 7.41 (SD of 1.61). The social problem posed by family conflict to the physical and psychological health and well-being of children, parents, and underlying family relationships is a cause for concern. Interparental and parent-child conflict are linked with children’s behavioral, emotional, social, academic, and health problems (Cummings et al,
Prior studies have shown that parental report and adolescent perception of family support differ, and that adolescent perception may be more predictive of their behavior than parent report (Barr-Anderson et al., 2010).

The importance of the family for child and adolescent development has long been recognized. Higher quality and lower conflict relationships are associated with more positive outcomes for children, whereas lower quality and higher conflict relationships are linked to a host of negative outcomes. Children who witness and/or participate in family relationships marked by high conflict and low emotional support will likely display disruptions in their ability to regulate emotional and physiological responses to stressors (Lucas-Thompson et al., 2011).

Parents’ beliefs about the causes of their children’s problems may hinder mental health service use. A study conducted by Yeh et al. in 2005 concluded that parents who believed that their child’s problems were due to physical causes or trauma were 1.56 times more likely to use mental health services compared with those who believed the problems were due to other causes, such as personality, relationships with friends and family, or family issues. Providing mental health education to parents on the bio-psychosocial model of children’s mental health difficulties may help in addressing this particular barrier to service use (Gopalan et al., 2010).

Prior studies have shown that parents’ psychological symptoms appear to influence child development through adolescents’ perceptions of their parents’ behavior. Research has indicated that children and adolescents of parents with psychological problems are at an increased risk for the development of emotional
and behavioral problems due to genetic predispositions, maladaptive parental behavior, and parent-child conflict. Parental psychological symptoms might influence children by altering patterns of parent-child interaction or by increasing parent-child conflict, both of which have potentially negative effects on child development (Bosco et al, 2003).

**Peer Relations**

There was a statistically significant difference between parents and adolescents on the peer relations scale of the POSIT and POSIP. Adolescents reported greater peer relations problems with a mean score of 3.18 (SD of 1.66). Parents reported fewer peer relations problems with a mean score of 2.34 (SD of 1.36). Prior studies have shown that parents who believed that their children’s relationships with friends caused mental health problems were 25% less likely to use mental health services compared to parents who believed that their child’s mental health problems were caused by other issues, such as American culture, prejudice, economics, or spiritual issues (Gopalan et al, 2010).

The development of social competence in childhood has emerged as an important area of research because of its relevance to adjustment for children and adults. Children’s social competence has been linked to academic success, early psychosocial development, and later life outcomes. Early deficits in social competence have been linked to feelings of loneliness in childhood and higher rates of adult criminality. Many researchers and theorists have been interested in the ways in which parental behavior might be related to children’s peer relations. Various theorists have proposed that parents influence children’s peer
relationships through a variety of parental socialization strategies. Parents influence their children’s peer relationships through the quality of the parent-child interaction, by offering advice concerning ways of successfully negotiating peer relationship issues and by the provision of opportunities for social contact with peers (McDowell et al, 2009).

**Interaction of Family and Peer Relations**

Recent research has begun to explore the linkage between interparental relationships and children’s social competence. Parental relationships and children’s peer relationships are both characterized by intimacy and support, and children’s observation of parental interactions may influence the ways they learn to manage interpersonal dynamics and the strategies they use for interactions in their own relationships (Vairami et al, 2007). Other studies have shown that parents influence their children’s peer interactions indirectly, through the more general influence of parent-child relationship experiences on children’s social development and peer competence (Updegraff et al, 2001).

Investigating the effects of interparental conflict, especially on adolescents’ peer relationships, is particularly important since vulnerability is increased in this developmental period. Adolescents attempt to become independent and make the significant transformation from depending on their family to relying more on their peers. Thus, in the adolescents’ struggle to establish a clear sense of their values, beliefs, relationships and independence, interfamilial conflicts may act as stressors that further affect their psychosocial adjustment (Dunlop et al, 1995).
Among the most important human needs is the need to establish close, enduring emotional bonds with others in order to feel secure and explore the world with confidence. Consistent evidence suggests that parent-child attachment is related to friend attachment. The quality of the attachment relationship established between adolescents and their parents tends to influence the quality of peer attachment relationships that they form. Past studies have found that parent attachment and peer attachment are moderately interrelated (Gorrese et al, 2012).

**Impact of Age**

A major issue of concern is how children cope with parent conflict with respect to their age or developmental level. In general, children and adolescents’ coping strategies and emotional responses to parental hostility have been shown to change with age and differ qualitatively. In adolescence, peer attachment plays a unique role in serving as sources of emotional support. This may be especially important in early and middle adolescence when developmental changes regarding attachment determine the resulting transformation of the parent-child relationship (Gorrese et al, 2012).

**Does the difference in perception affect adolescents receiving the proper level of treatment?**

There was not a statistically significant difference in scores between the group of adolescents currently receiving the proper level of treatment and the group of adolescents not currently receiving the proper level of treatment. This is possibly
because those that were willing to participate in the study are more likely to be those that participate in treatment.

Another factor may be the definition used for “proper level of treatment”: Proper level of treatment was defined in this study as adolescents who had an evaluation by the psychiatrist at least once in the prior 3 month period, and had at least one therapy session per month, in the prior 3 month period. As stated in a study by McKay and Bannon in 2004 regarding adolescents’ mental health treatment, “estimates of average length of care can be as low as four sessions or rates of as few as 9% of their families remaining in care after a 3-month period.”

It is not uncommon for length of treatment to average 3 to 4 sessions in low-income communities. Studies from across the country have estimated that 40% to 60% of children receiving outpatient mental health treatment attend only a few sessions and drop out quickly (McKay, et al, 2002).

**Are age, race, and gender significant factors that influence the difference in perception between adolescents and their parents?**

Age, race, and gender were not statistically significant predictors. However, gender made the strongest unique contribution to explaining the dependent variable in both the adolescent and parent population.

In terms of child characteristics, findings regularly reveal that male children are more likely to use mental health services in comparison to female children (McKay et al, 2004). This was consistent with the adolescent study population which consisted of 52.05% (n = 38) male and 47.95% female (n = 35).
Prior research has shown that there are several reasons why gender might moderate changes in the parent-child relationship during adolescence. On average, girls undergo puberty earlier and are socially more advanced than boys. Alternatively, adolescence is associated with increased risk for mental health problems, although boys and girls tend to be at increased risk for different types of problems at different ages. Specifically, boys are at greater risk for a childhood onset of externalizing problems, where girls are at greater risk for an adolescent onset of internalizing problems. The well-documented association of externalizing problems with parenting behavior might lead to the expectation that boys might experience more conflictual relationships with their parents during childhood than girls (McGue et al, 2005).

**Beliefs about Mental Health Disorders**

“A child could snap out of the disorder.” 36.98% (n = 27) of adolescents and 34.25% (n = 25) of parents agreed with this statement.

“A disorder is a sign of weakness.” 31.51% (n = 23) of adolescents and 15.07% (n = 11) of parents agreed with this statement.

“A disorder is not a real medical illness.” 23.29% (n = 17) of adolescents and 13.70% (n = 10) of parents agreed with this statement.

“Children with a disorder are dangerous.” 20.55% (n = 15) of adolescents and 27.40% (n = 20) of parents agreed with this statement.

“Children with a disorder are unpredictable.” 27.40% (n = 20) of adolescents and 41.10% (n = 30) of parents agreed with this statement.
All of the above statements are common myths regarding mental health treatment. The mentally ill and their families are still the object of marked stigmatization. The perception of mental illness is often associated with fear of possible threat of patients with such illnesses. Fear, negative attitude, and lack of knowledge of mental illness can result in an insufficient focus on a patient’s mental health needs. Prior studies have found that myths and misconceptions about mental illness contribute to the stigma, which leads many people to be ashamed and prevents them from seeking help (Kishore et al, 2011).

**Barriers to Treatment**

Adolescents reported that they are less likely to seek help than parents. 52.05% (n = 38) of adolescents reported being “too embarrassed/shy to seek treatment” as a barrier to treatment. 36.99% (n = 27) of adolescents reported being “concerned that the person might feel negative towards them” as a barrier to treatment. 12.33% (n = 9) of parents report that their child refuses to go to treatment.

This is consistent with prior studies that found that specific barriers which hinder successful mental health service use engagement for adolescents included fears or labels of anticipating stigma from others. Adolescent development is characterized by a strong need to establish a sense of competence, social acceptance, and independence. As a result, adolescents may have greater difficulty coming to terms with the undesirable implications of having a mental health disorder. Adolescents often refuse services due to stigma about mental health disorders and fears that peers may be aware of their psychiatric problems (Gopalan et al, 2010).
Other barriers to treatment reported by adolescents include being “concerned that what the person might say is wrong” (28.77%, n = 21) and “thinking that nothing can help” (27.40%, n = 20). Other studies have found that barriers to engagement in mental health services for adolescents include unawareness about the need for mental health treatment, what services might be helpful, as well as details about the overall treatment process. Finally, the developmental goals of adolescents, which involve establishing independence from adults, may lead to an increasing tendency to avoid self-disclosure to adults in general, which may hinder the ability for adolescents to readily seek assistance from traditional mental health providers (Gopalan et al, 2010).

Parents report the main barriers to treatment as “cost” (32.80%, n = 24) and “having to travel too far” (16.44%, n = 12). Additionally, 4.11% (n =3) also reported “the time waiting for an appointment” as a barrier to treatment. Other studies have identified insufficient time, lack of transportation, and time spent on a waiting list as obstacles experienced by the family (McKay et al, 2004).

A study by Meredith et al published in Medical Care in 2009 also found little consistency between teens and their parents’ with regard to perceived barriers. The results showed that perceived stigma was a concern mentioned by teens. Specifically, they were not comfortable talking with anyone about their feelings. The main barriers for parents were cost, poor access, and resistance to obtaining care. The results are consistent with this study in that perception of barriers to mental health treatment varies between adolescents and parents. This suggests that clinicians should target communications about how to seek care both with
the teen and the parent, since they are concerned about different barriers, and
talking with just one will not cover the diverse issues that might get in the way of
the adolescent receiving treatment.

**Issues with Non-Response**

Non-response is a major concern for users of surveys because it threatens the
external validity of the findings and conclusions. In any survey, results can only
be drawn and generalized based on the response rate and surveys completed.
Non-response has been defined as “the degree to which a researcher does not
succeed in obtaining the cooperation of all potential respondents in the net
sample”. The main reasons for non-response are when researchers are unable to
contact respondents to invite them to participate, or when respondents decline to
participate in the study. A high rate of non-response can be a drawback if the
sample used is not representative of the larger population from which it was
drawn (Curtis et al, 2009). If there are systematic differences between the
respondent and non-respondent subsamples, the researcher’s conclusions may
not be generalizeable to the entire population under consideration. A common
procedure to test for the problem of non-response is to check for similarities
between respondents and non-respondents on known population characteristics.
The more similar non-respondents are to the respondents, the more confident
the researchers are in drawing conclusions from the sample used (Viswesvaran et
al, 1993).

Of the 210 adolescents and 210 parents that met inclusion criteria and were
invited to participate in the study (420 total), only 146 participated in the study
which is a 34.76% response rate. This may be due to a variety of reasons, such as not receiving the invitation letter due to a change of address, or not feeling like the survey was worth their time. This response rate is similar to that of other mental health studies using surveys. A study conducted by Simon et al. in 2009 surveying consumers regarding their satisfaction with mental health surveys resulted in a 33.8% response rate. The researchers found that although only a third of consumers responded to the survey, there was little evidence that non-response bias affected the comparison of the findings to the general population being studied. Another study conducted by Eisenberg et al. in January 2013 that surveyed mental health problems among college students resulted in a 44% participation rate. The response rate of this study correlates with that of other surveys regarding mental health.

A study conducted by Barr-Anderson et al. in 2010 on parental report versus child perception of familial support yielded a similar sample and similar conclusion to this study. The study population included 73 children in 4th through 6th grades and one parent or primary caregiver of each child. More than 80% of the parent/primary caregiver sample was female (similar to this study population in which 86.3% of the parent population was female) and the adolescent population used was 58% African American/Black (similar to this study in which 61.64% of the adolescent population was African American/Black). The Barr-Anderson et al. study concluded that there was a substantial level of discordance between parent and child perceptions and that children were more likely to report a supportive home environment than their parents. Their results are
similar to this study which found that parents reported more family relations problems than did adolescents.

Although this study did not reach the ideal sample size, comparisons between the study sample and the general population of adolescents and parents at the study site show that the sample is representative of the general population in regards to gender and race. Therefore, the results of this study are generalizable to the population at the study site. Even though participation was lower than desired, statistically significant results were still achieved. Therefore, the researcher was still able to achieve the intended objectives of the study.
CHAPTER VIII: CONCLUSION AND RECOMMENDATIONS

In this chapter, an interpretation of the findings for the results of the data analyses is provided. Limitations of the study which may have affected the study results is discussed. Additionally, innovations for future clinical practice and recommendations for future research are presented.

Ethical Considerations

All of the participants in the study were treated in accordance with the ethical guidelines of the American Psychological Association (APA) and the Tulane University Institutional Review Board (IRB). There were no identifiable risks for participating in the study. However, a couple of considerations were kept in mind. There is a possibility that parents and adolescents felt uncomfortable answering questions regarding their mental health issues and treatment with the researcher. There was the potential that participants felt the pressure to answer the questions more positively given that the survey was completed at the mental health office. Both of these considerations were taken into account during the research design. Every caution was taken to ensure that the parents and adolescents felt safe, comfortable, and had the freedom to withdraw from the study if desired.

Measurement Implications

An important developmental consideration for the assessment process is that many adolescents are developmentally delayed in their social and emotional functioning. These developmental delays may affect perception and willingness to
report experiences and resulting problems of substance abuse, juvenile
delinquency, etc. Admitting a personal problem to an adult counselor requires
insight. Various motivations, attitudes, and behaviors common to adolescents,
such as egotism, risk taking, and rebellion against traditional values, are unlikely
to promote personal insight into the seriousness of one’s mental health problems.

**Limitations of Survey Research**

Adolescents may have been motivated to give answers that presented themselves
in a favorable light or to have attempted to provide answers they felt would match
that of their parents. Parents may have been motivated to give answers that
downplayed their adolescent’s issues to present their children in a more positive
light. Every effort was taken to attempt to reduce bias by having the researcher
present who could answer any questions the adolescents or parents had and to
ensure the confidentiality of their responses.

Participants may not have been fully aware of their reasons for any given answer
because of lack of memory on the subject or boredom. Surveys with closed-ended
questions may have a lower validity rate than other question types. Survey
question answer options could lead to unclear data because certain answer
options may be interpreted differently by respondents. Respondents may have
answered “no” since the option “only once” was not available.


**Generalizeability and Validity**

The use of surveys assumes that self-report is valid. The extent to which individuals in clinical settings deny substance abuse involvement or exaggerate substance use behaviors has been the focus of attention for many researchers (Babor et al, 1987).

The sample was convenient and purposive, which could limit the validity of its external generalizeability. The results will only be generalizeable to adolescents age 12 to 18 enrolled in services at a community mental health center with similar racial background of the study population. Being the researcher, data collector, and analyzer could pose a threat to external validity. However, the goal of the researcher was to minimize the influence of such factors.

Historical and environmental events could be potential threats to internal validity for the study. Unrelated events may have occurred that affected the adolescents and parents, and therefore could have affected their responses to the survey questions. It was not possible to control for these unrelated events. They are random and do not affect the entire study population. Parents and adolescents may have been affected by environmental factors, such as distraction and the effect of being in a study, and these may have affected their responses.

**Limitations of the Study**

A limitation of the study was the population used. While the sample was ethnically diverse, this study was conducted using only one community health center’s population of adolescents and parents. The racial and socioeconomic
backgrounds may not be nationally representative of other community mental health centers.

The response rate of 34.76% is a limitation. The sample may have not been fully representative of the general population of adolescents and parents enrolled at the study site. Although administrative data determined that the study sample was representative of the general population, there could still be differences between survey responders and non-responders.

Parent perceptions of adolescents’ mental health issues are measured by only one parent’s perspective. Future studies could examine parental dyads which would provide perceptions of adolescent mental health issues from both parents.

The only comparable studies found utilized the POSIT and POSIP as measures of Substance Abuse. No other studies were found examining the other scales measured on both the POSIT and POSIP: Mental Health, Aggressive Behavior/Delinquency, Family Relations, and Peer Relations. Further research is needed to produce similar studies to which these results can be compared.

Self-reporting is always a given limitation due to the influence of social desirability and human memory which can affect the accuracy of the data. Adolescents and parents may have been hesitant to indicate mental health issues. Additionally, this study was based on perceptions, which may change over time. The research design examines relationships rather than cause and effect associations.
The mental health state of the parent is a limitation. Parent mental health problems may positively or negatively influence identification of children’s mental health problems. Parents with mental health problems may be more aware of psychosocial symptoms, or they may be less capable of recognizing their child’s needs. Parents who have used services may have fewer negative perceptions about mental health problems and services and may be able to negotiate the services system which can increase their child’s access to mental health care (Owens et al, 2002).

**Significance of the Study**

This study has the potential to make significant contributions to the literature on perceptions of adolescents and their parents. There is a lack of reliable information focusing on comparing perceptions between adolescents and parents. Most studies have examined either adolescent perceptions or parent perceptions, but there are limited or no studies examining the impact of both. There is particularly limited literature regarding perceptions related to adolescent mental health issues.

According to the Children’s Defense Fund, ensuring that all children, particularly the most vulnerable children with mental health problems, have access to healthcare can play an important role in their overall health and well-being. Children with mental health problems who have access to quality health care and comprehensive age-appropriate mental health assessments have improved health and development. Recognizing the importance of prevention, emphasizing early detection, and receiving proper treatment are important to managing mental
health problems. Intervening early avoids more complex and expensive problems later in life.

The results of this study are consistent with previous studies that have shown that minority populations are overrepresented in mental health services. This is particularly important as some researchers have noted that the mental health system may be especially unresponsive to the needs of ethnic minority children and adolescents. Other research has shown that minority adolescents who receive mental health care differ considerably from white clients on sociodemographic characteristics and diagnosis. Studies have also shown that African American children who receive mental health treatment tend to be male and poor, in comparison to Whites. The African American population has the highest proportion of males in treatment and highest proportion in poverty. Poverty status is associated with higher number of treatment episodes, dropping out, and shorter length of treatment (Bui et al, 1992). This is consistent with the population of this study which was overrepresented by African Americans, was a majority male population, and had an average annual household income that was below the regional average.

A study by Johnson & Wang in Pediatrics in 2008 found that income affected the factors that parents and adolescents included in assessing mental health status. Poor parents and adolescents both reported greater mental health issues than higher-income youth. Low-income parents’ ratings of their children’s health were influenced by mental health concerns which may be due to a societal tendency to attribute the health problems of the poor to mental health issues.
Clinical Significance

In light of current economic pressures of continually rising healthcare costs, questions of the clinical significance of health care treatments, practices, or programs used in real world settings are being asked with greater frequency. Statistical significance does not in itself provide concise information about a given intervention’s clinically meaningful effects (Ferguson, et al, 2002).

Assessment of outcomes is integral for guiding and refining professional practice. Clinical significance provides information concerning the variability of response to treatment within the sample and illustrates to the clinician the proportion of all outcomes that can be deemed to be successful (Newnham, et al, 2007).

The authors of the surveys define problem areas as those with scores greater than 1. Although only the areas of family relations and peer relations were deemed to be statistically significant, the total scores of the adolescents and parents and the mental health scores both had mean test scores greater than 1. Therefore, the total scores and mental health scores show a clinically significant difference which is important in treatment and should be further studied.

Communication between parents and adolescents may be a key factor influencing parents’ perceptions of their adolescents’ emotional and behavioral functioning. Parent-child discordance in ratings of adolescent mental health is highest among adolescents whose relationships with their parents are characterized by insecurity of attachment. Discordance may be a reflection of the quality of the parent-adolescent relationship. Thus, exploration of the association between parent-adolescent discordance and aspects of the adolescent relationship, such as
communication, are warranted. Investigation of these issues may further our understanding of why discordance occurs between parent and adolescent ratings. Understanding the meaning of and individual characteristics related to discordance may provide important information about child and adolescent psychopathology (Maurizi, et al, 2012).

**Clinical Implications**

Despite the availability of effective treatment, there are long delays from the onset of mental illness to treatment, approximately 8 to 10 years. Only half of youth living with mental illness receive treatment. For a child, this means the loss of childhood and critical developmental years. We need to protect and strengthen community mental health services for children and adolescents. Without treatment, the consequences are costly. Approximately 50% of students age 14 and older with mental health issues drop out of high school, which is the highest dropout rate of any disability group. Children in elementary school may miss as many as 22 days during a school year. Suspension and expulsion rates are three times higher than their peers. There are many proven treatments for children and youth that can reduce the unnecessary and costly consequences of untreated mental illness. Mental health treatment works and investment in services is a critical investment in the future of our children and youth (NIMH, 2001).

The results of this study suggest that educating adolescents and parents regarding mental health issues may be beneficial to the successfulness of treatment. The continued presence of a substantial portion of youth experiencing significant mental health issues calls for new models of child mental health
services that addresses these needs and specifically focuses on the issue of engagement of youth and their families in care (McKay et al, 2004).

Prior studies have reported that parents state that they want information on how to keep their teenagers healthy, but they often do not have access to the best and most scientifically grounded advice. Parents need to know what healthy adolescence is, how to assess whether their children are on healthy paths, how to facilitate their adolescents’ development, and how to get help when problems occur (Steinberg, 2001). Parents need basic information about the normative developmental changes of adolescence, so that they can better understand and respond to their children’s behavior. Parents need to be educated on the principles of effective parenting during the adolescent years, so that they can adapt to the changing needs and characteristics of their teenagers. Parents from different cultural and socioeconomic groups may incorporate this information into their family in different ways, but the need for this information is the same across ethnic and economic lines (Steinberg, 2001).

The results of this study also suggest that it may be helpful to utilize the studied questionnaires or similar questionnaires at the beginning of treatment in order to gain information regarding parent and adolescent perceptions. Clinicians who elicit adolescents’ perspectives on their own mental health symptoms to increase self-awareness may be more likely to increase adolescents’ motivations for treatment. Resolving potential conflicts between parents and adolescents by finding common treatment goals may have usefulness in increasing treatment retention (Gopalan et al, 2010).
**Recommendations for Further Study**

The results of this study indicate that further studies on adolescent and parent perceptions would have a positive impact on the available body of research.

Qualitative research with regards to adolescent and parent perceptions of mental health issues could be conducted to gain an understanding of how parents and adolescents communicate issues such as family relations and peer relations.

Another recommendation is the replication of this or similar studies utilizing different demographic groups. Further studies in other geographic regions would add to the body of research and give results that could be compared and contrasted with those found in this study. Similar studies could be conducted with specific age groups, such as middle school students or high school students, to determine if there are greater differences in perception at different stages of development.

Distinctions between families of different ethnicities and cultures are important areas to explore in future research. Research examining parental effects in multiple ethnic and cultural settings would enable counselors to add multiculturally sensitive interventions to mental health services (Dekovic & Meesus, 1997). Further studies are needed on mental health treatment in ethnic minority children and adolescents as knowledge of minority children with emotional or behavior problems are extremely limited (Bui et al, 1992).

Another recommendation would be a replication of this study or a similar study that surveyed both parents for comparison. Adolescents may have a closer
relationship with one parent or the other, thus their perceptions may be more similar to the parent in which they share a closer relationship. Parent-child interaction studies have shown consistent differences in fathers’ and mothers’ involvement with children that may affect perceptions. Fathers spend a greater portion of their time with children in leisure of play activities, where mothers are more engaged in caregiver and disciplinary activities. By engaging in peer-like behaviors, fathers may help to encourage the emerging autonomy of their adolescents, which fosters the adolescents’ feelings of competency (Bosco et al, 2003). Future research could examine the roles of both parents and if or when one parent is more influential than the other. This information would expand counselors’ understanding of the effects of parent-adolescent relationships which may lead to more specific treatment interventions (Cripps et al, 2009).

A final recommendation of further study involves post survey follow-ups with the surveyed population. Follow-up interviews would allow respondents to answer deeper questions and find more about the root of their responses.

**Summary**

The purpose of this study was to compare adolescent and parent perceptions of adolescents’ mental health issues and determine the effect that differences in perception has on adolescents receiving the proper level of treatment. Results showed that there were significant differences in perceptions between adolescents and parents in the areas of family relations and peer relations.

Adolescence is viewed as the most traumatic or challenging period of time within the parent-child relationship. Adolescence is the stage of life when people
experience continuous change mentally, physically, and psychologically. Parent involvement remains critical to the adolescent-parent relationship, because the level of involvement signals to youth their importance to parents. Parents are not the only important influence during adolescence. Adolescents expand their social realm by increasing the significance of the relationships they have with their peers (Cripps et al, 2009).

The implications of this study lie in the idea that if adolescents and parents view family and peer relations differently, therapists should address these issues at the beginning of therapy in order to build a relationship between adolescents and parents based on common ideas in hopes to improve treatment. If adolescents and parents do not know what they have in common and do not understand their differences, that may affect adolescents receiving proper treatment. Further studies should be conducted to determine if adolescents and parents complete surveys prior to treatment and therapists use the results to guide treatment, would that effect the success of adolescent’s treatment.
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<td>B</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Gender: F = Female; M = Male

Race: W = White; B = Black; M = Multiracial

Group: C= Compliant (Proper Level of Treatment);
N = Non-Compliant (Not receiving Proper Level of Treatment)
Blank = No Response
Table 8: Additional Questionnaire: Beliefs about Mental Health Disorders

In thinking about mental health disorders, please state whether you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Question</th>
<th>Adolescents</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agree</td>
<td>Disagree</td>
</tr>
<tr>
<td>A child could snap out of the disorder</td>
<td>36.98% (n = 27)</td>
<td>41.10% (n = 30)</td>
</tr>
<tr>
<td>A disorder is a sign of weakness</td>
<td>31.51% (n = 23)</td>
<td>56.16% (n = 41)</td>
</tr>
<tr>
<td>A disorder is not a real medical illness</td>
<td>23.29% (n = 17)</td>
<td>60.27% (n = 44)</td>
</tr>
<tr>
<td>Children with a disorder are dangerous</td>
<td>20.55% (n = 15)</td>
<td>47.95% (n = 35)</td>
</tr>
<tr>
<td>Children with a disorder are unpredictable</td>
<td>27.40% (n = 20)</td>
<td>36.98% (n = 27)</td>
</tr>
</tbody>
</table>
Table 9: Additional Questionnaire: Beliefs about Mental Health Treatment

In thinking about mental health disorders, please select whether you find each type of person listed below helpful or harmful in treating you?

<table>
<thead>
<tr>
<th>Question</th>
<th>Adolescents</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Helpful</td>
<td>Harmful</td>
</tr>
<tr>
<td>Family Doctor</td>
<td>86.30%</td>
<td>2.74%</td>
</tr>
<tr>
<td></td>
<td>(n = 63)</td>
<td>(n = 2)</td>
</tr>
<tr>
<td>Teacher</td>
<td>79.45%</td>
<td>6.85%</td>
</tr>
<tr>
<td></td>
<td>(n = 58)</td>
<td>(n = 5)</td>
</tr>
<tr>
<td>Counselor</td>
<td>78.08%</td>
<td>8.22%</td>
</tr>
<tr>
<td></td>
<td>(n = 57)</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>57.53%</td>
<td>12.33%</td>
</tr>
<tr>
<td></td>
<td>(n = 42)</td>
<td>(n = 9)</td>
</tr>
<tr>
<td>Telephone Counseling Service</td>
<td>38.36%</td>
<td>21.92%</td>
</tr>
<tr>
<td></td>
<td>(n = 28)</td>
<td>(n = 16)</td>
</tr>
<tr>
<td>Psychologist</td>
<td>68.50%</td>
<td>8.22%</td>
</tr>
<tr>
<td></td>
<td>(n = 50)</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>67.12%</td>
<td>8.22%</td>
</tr>
<tr>
<td></td>
<td>(n = 49)</td>
<td>(n = 6)</td>
</tr>
<tr>
<td>Close Family Member</td>
<td>75.34%</td>
<td>6.85%</td>
</tr>
<tr>
<td></td>
<td>(n = 55)</td>
<td>(n = 5)</td>
</tr>
<tr>
<td>Close Friend</td>
<td>80.82%</td>
<td>2.74%</td>
</tr>
<tr>
<td></td>
<td>(n = 59)</td>
<td>(n = 2)</td>
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<tr>
<td>Deal with Alone</td>
<td>43.84%</td>
<td>41.1%</td>
</tr>
<tr>
<td></td>
<td>(n = 32)</td>
<td>(n = 30)</td>
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</table>
Table 10: Additional Questionnaire: Willingness to seek Treatment

How likely are you to seek help from the types of people you chose in the previous question?

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<thead>
<tr>
<th></th>
<th>Adolescents</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very Likely</strong></td>
<td>32.88% (n = 24)</td>
<td>80.82% (n = 59)</td>
</tr>
<tr>
<td><strong>Somewhat Likely</strong></td>
<td>39.73% (n = 29)</td>
<td>15.07% (n = 11)</td>
</tr>
<tr>
<td><strong>Slightly Likely</strong></td>
<td>5.48% (n = 4)</td>
<td>1.37% (n = 1)</td>
</tr>
<tr>
<td><strong>Not Very Likely</strong></td>
<td>5.48% (n = 4)</td>
<td>0% (n = 0)</td>
</tr>
<tr>
<td><strong>Not at all Likely</strong></td>
<td>4.11% (n = 3)</td>
<td>2.74% (n = 2)</td>
</tr>
<tr>
<td><strong>Not Sure</strong></td>
<td>12.32% (n = 9)</td>
<td>0% (n = 0)</td>
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</tbody>
</table>
Table 11: Additional Questionnaire: Barriers to Treatment

In thinking about mental health disorders, please select any statement below that you think would prevent you from seeking help:

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<tr>
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<th>Adolescents</th>
<th>Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too embarrassed/shy</td>
<td>52.05%</td>
<td>5.48%</td>
</tr>
<tr>
<td>(n = 38)</td>
<td>(n = 4)</td>
<td></td>
</tr>
<tr>
<td>The cost</td>
<td>16.44%</td>
<td>32.88%</td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 24)</td>
<td></td>
</tr>
<tr>
<td>Concern that the person might feel negative towards you or your child</td>
<td>36.99%</td>
<td>8.22%</td>
</tr>
<tr>
<td>(n = 27)</td>
<td>(n = 6)</td>
<td></td>
</tr>
<tr>
<td>Concern that what the person might say is wrong</td>
<td>28.77%</td>
<td>4.11%</td>
</tr>
<tr>
<td>(n = 21)</td>
<td>(n = 3)</td>
<td></td>
</tr>
<tr>
<td>Concern about what other people might think of you/your child seeing the person</td>
<td>16.52%</td>
<td>12.33%</td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 9)</td>
<td></td>
</tr>
<tr>
<td>Too far to travel</td>
<td>6.85%</td>
<td>16.44%</td>
</tr>
<tr>
<td>(n = 5)</td>
<td>(n = 12)</td>
<td></td>
</tr>
<tr>
<td>Too hard to get an appointment</td>
<td>4.11%</td>
<td>5.48%</td>
</tr>
<tr>
<td>(n = 3)</td>
<td>(n = 4)</td>
<td></td>
</tr>
<tr>
<td>Concern about side effects</td>
<td>16.44%</td>
<td>13.7%</td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 10)</td>
<td></td>
</tr>
<tr>
<td>Not liking the type of treatment that is likely to be offered</td>
<td>16.44%</td>
<td>6.85%</td>
</tr>
<tr>
<td>(n = 12)</td>
<td>(n = 5)</td>
<td></td>
</tr>
<tr>
<td>Thinking that nothing can help</td>
<td>27.4%</td>
<td>4.11%</td>
</tr>
<tr>
<td>(n = 20)</td>
<td>(n = 3)</td>
<td></td>
</tr>
<tr>
<td>Having to wait for an appointment</td>
<td>13.7%</td>
<td>12.33%</td>
</tr>
<tr>
<td>(n = 10)</td>
<td>(n = 9)</td>
<td></td>
</tr>
<tr>
<td>Child refuses to go/Parent refuses to take me</td>
<td>4.11%</td>
<td>12.33%</td>
</tr>
<tr>
<td>(n = 3)</td>
<td>(n = 9)</td>
<td></td>
</tr>
<tr>
<td>My religion or culture does not believe in mental health disorders</td>
<td>2.74%</td>
<td>1.37%</td>
</tr>
<tr>
<td>(n = 2)</td>
<td>(n = 1)</td>
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</tr>
<tr>
<td>Don’t Know</td>
<td>27.4%</td>
<td>19.18%</td>
</tr>
<tr>
<td>(n = 20)</td>
<td>(n = 14)</td>
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Table 12: Additional Questionnaire: Influences on Mental Health Beliefs

Do you remember seeing or hearing a story about mental health problems in one of the following sources?

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<th>Source</th>
<th>Adolescents</th>
<th>Parents</th>
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<td>Newspaper</td>
<td>35.62%</td>
<td>27.4%</td>
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<tr>
<td></td>
<td>(n = 26)</td>
<td>(n = 20)</td>
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<tr>
<td>Magazine</td>
<td>21.92%</td>
<td>31.51%</td>
</tr>
<tr>
<td></td>
<td>(n = 16)</td>
<td>(n = 23)</td>
</tr>
<tr>
<td>Radio</td>
<td>10.96%</td>
<td>12.33%</td>
</tr>
<tr>
<td></td>
<td>(n = 8)</td>
<td>(n = 9)</td>
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<tr>
<td>TV</td>
<td>50.68%</td>
<td>57.53%</td>
</tr>
<tr>
<td></td>
<td>(n = 37)</td>
<td>(n = 42)</td>
</tr>
<tr>
<td>Internet</td>
<td>32.88%</td>
<td>30.14%</td>
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<td>(n = 24)</td>
<td>(n = 22)</td>
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<tr>
<td>Somewhere else</td>
<td>17.81%</td>
<td>20.55%</td>
</tr>
<tr>
<td></td>
<td>(n = 13)</td>
<td>(n = 15)</td>
</tr>
<tr>
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<td>21.92%</td>
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<td>(n = 16)</td>
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Table 13: Additional Questionnaire: Adolescent Views on Parent-Child Relationship

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<tr>
<td>Mother Only</td>
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<tr>
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<td>(n = 24)</td>
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<tr>
<td>Father Only</td>
<td>5.48%</td>
</tr>
<tr>
<td></td>
<td>(n = 4)</td>
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<tr>
<td>Both</td>
<td>35.62%</td>
</tr>
<tr>
<td></td>
<td>(n = 26)</td>
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<tr>
<td>Neither</td>
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<td>(n = 19)</td>
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Table 14: Mean Score of Adolescents and Parents for each Subscale

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Table 15: Paired Samples Test statistics for each Subscale and Group

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Table 16: Adolescent Demographic Statistics

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Table 17: Adolescent Descriptive Statistics

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Table 18: Parent Demographic Statistics

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<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 19: Parent Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>67</td>
<td>32</td>
<td>78</td>
<td>49.48</td>
<td>10.771</td>
</tr>
<tr>
<td>Income</td>
<td>73</td>
<td>10</td>
<td>89</td>
<td>23.47</td>
<td>17.017</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B: CHARTS

Chart 1: Distribution Plot of the Relationship between the predictors and the Dependent Variable for Adolescents
Chart 2: Distribution Plot of the Relationship between the predictors and the Dependent Variable for Parents

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Score
Chart 3: Scatterplot of the Relationship between the predictors and the Dependent Variable for Adolescents
Chart 4: Scatterplot of the Relationship between the predictors and the Dependent Variable for Parents
APPENDIX C: IRB APPROVAL LETTER

DATE: February 20, 2013

TO: Lesley Clack

FROM: Tulane University Biomedical IRB

STUDY TITLE: [417702-2] EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN’S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT

IRB REFERENCE #: 13-417702

Thank you for your recent Response/Follow-Up submission. The Tulane University Institutional Review Board has granted approval for the above-referenced protocol together with:

- Abstract/Summary - Research Proposal Abstract_LClack.docx (UPDATED: 01/21/2013)
- Child Assent - Assent-Form_LClack.docx (UPDATED: 01/23/2013)
- Cover Sheet - Cover-Sheet-Letter-LClack.docx (UPDATED: 01/22/2013)
- HIPAA Consent/Authorization - HIPAA-Authorization_LClack.docx (UPDATED: 01/22/2013)
01/21/2013)

• Letter - Invitation Letter (UPDATED: 01/21/2013)
• Letter - Letter of Cooperation (UPDATED: 01/21/2013)
• Other - Evacuation Card (UPDATED: 01/21/2013)
• Proposal - Approved Dissertation Proposal_LClack.docx (UPDATED: 01/23/2013)
• Protocol - Study Protocol_LClack.docx (UPDATED: 01/23/2013)
• Questionnaire/Survey - Demographics Survey (UPDATED: 01/21/2013)
• Questionnaire/Survey - Adolescent Survey (UPDATED: 01/21/2013)
• Questionnaire/Survey - Parent Survey (UPDATED: 01/21/2013)
• Tulane - Application for Human Subjects Research, Part 1 (UPDATED: 01/23/2013)
• Application Form - Revised Application Part 2 (UPDATED: 02/13/2013)
• Consent Form - Final Copy of Consent Form, without track changes (UPDATED: 02/18/2013)
• Consent Form - Revised Consent Form with Tracked Changes (UPDATED: 02/17/2013)
• Cover Sheet - Revised Cover Sheet (UPDATED: 02/17/2013)
• Protocol - Final Copy of Protocol, without track changes (UPDATED: 02/18/2013)
• Protocol - Revised Study Protocol with Tracked Changes

(UPDATED: 02/17/2013) Please note the expiration date of the protocol above.

Please Note:

(1) The Tulane University Biomedical IRB provided an expedited initial review on 01/25/2013 and deferred approval for minor modification and a revision to the informed consent process and form. The Tulane University Investigator provided the IRB with an appropriate response, revised application part 2, and revised informed consent form as requested.

(2) The criteria for IRB approval of research in accordance with 45 CFR 46.111(a)(1-7). The Tulane University Biomedical IRB conducted an expedited review on 02/19/2013 of the deferred response and information provided by the Investigator for this no greater than minimal risk research study, and the IRB grants approval for the period of 02/19/2013 - 01/24/2014 in accordance with 45 CFR 46.110, research category 7.

(3) The IRB has granted approval for a total of 420 study participants (210 children/adolescents and 210 parents/guardians) to be enrolled. Children may enroll in research involving no greater than minimal risk in accordance with 45 CFR 46.404, and the requirements for permission by parents or guardians and for assent by children is in accordance with §46.408.
This Response/Follow-Up has been approved for Expedited Review.

All research must be conducted according to the protocol that was approved by the IRB. Any proposed changes to the research must be submitted to the IRB for review and approved prior to implementation, unless a change is necessary to avoid immediate harm to subjects.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of their signed consent form.

Any Unanticipated Problems involving Risk to Subjects or Others, Deviations from the approved research, Non-Compliance, and Complaints must be reported to the IRB in accordance with Tulane HRPP policies and procedures. If this study includes ongoing oversight by a Data Safety Monitoring Board (DSMB) or other such committee, reports generated by the DSMB or oversight committee must be submitted to the IRB.

Continuations must be submitted in accordance with Tulane HRPP policies and procedures. The Continuing Review Form must be received by the IRB with enough time to allow for review and approval prior to the Expiration Date above. Please consult the IRB website and access the Submission Deadlines. Failure to submit the Continuing Review Form in a timely manner may result in the termination of IRB approval. When all study activities and data analysis have been completed, please notify the IRB within 30 days by submitting a Study Closure Form.

If you have any questions regarding this approval, please contact the IRB office at (504) 988-2665 or irbmain@tulane.edu.

Sincerely,

Tulane University Human Research Protections Office
DATE: December 16, 2013

TO: Lesley Clack

FROM: Tulane University Biomedical IRB

STUDY TITLE: [417702-4] EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN’S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT

IRB REFERENCE #: 13-417702

SUBMISSION TYPE: Continuing Review/Progress Report

ACTION: APPROVED

EFFECTIVE DATE: December 14, 2013

EXPIRATION DATE: December 13, 2014

REVIEW TYPE: Expedited Review

PROJECT RISK LEVEL: Minimal Risk

Thank you for submitting the Continuing Review/Progress Report for the above referenced study. The Tulane IRB approved your submission including:
Please Note:

6. The investigator is reminded that during the informed consent process with prospective subjects, the investigator must use the IRB approved consent form and with the HRPO/IRB provided date of approval and expiration (included in the footer) and provided to the investigator along with the IRB approval letter. Please note, not following this requirement is considered a matter of non-compliance with the Tulane University HRPP. Please refer to Tulane HRPP Policy, Section 5.7.2 Informed Consent-- Document Stamp Date "If the Informed Consent is to be documented, then the PI will receive, along with the approval letter, one copy of the IRB-approved consent form for the study that will have been stamped with the IRB approval date and expiration date. The PI is to make copies of the informed consent document that bears the IRB-approval stamp and use those copies for consenting study Participants."

7. The criteria for IRB approval of research in accordance with 45 CFR 46.111(a)(1-7). The Tulane University Biomedical IRB conducted an expedited continuing review and approval 12/14/2013 - 12/13/2014 for this no greater than minimal risk research study in accordance with 45 CFR 46.110, research category 7 and 8(3).

If you have any questions, please contact the HRPO at (504) 988-2665 or irbmain@tulane.edu.

Sincerely,

Tulane University Human Research Protections Office 1440 Canal St, Suite 1705, TW-36
New Orleans, LA 70112
APPENDIX E: STUDY PROTOCOL

Tulane University Human Research Protection Program
Study Protocol

EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN’S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT

1. Study aim, background, and design

The aim of this research study is to study the differences in how parents and their children view mental health problems and to determine if that has an impact on the child receiving the amount of mental health services they need. The study will also look at whether the age, race, or gender of the parent and child makes a difference on how they view mental health problems. The purpose of the study is to administer surveys to both parents and children that ask a variety of questions about mental health issues. The results of the surveys will be used to compute statistics that will be used to show whether or not there is a difference between the views of the children and parents.

Background for this study: Mental Health Disorders are one of the leading causes of disability worldwide. 3 out of 10 of the leading causes of disability in people between the ages of 15 and 44 are mental disorders. Studies have shown that most adulthood mental disorders begin in childhood and adolescence.

This study is a Cross-sectional, prospective study design. The study will consist of parents and adolescents completing surveys, separately, face-to-face with a trained clinician. Convenience and purposive sampling will be used for the study.

2. Subject Population

To participate in the study, participants must meet the following inclusion criteria: be an adolescent between the ages of 12 and 18 currently enrolled in child and adolescent services at the mental health agency, and have been enrolled in services for at least 90 days consecutively. Subjects will be excluded from the study if they have not been living with their parent/guardian for at least 1 year consecutively, because this could affect perception of mental health issues. One parent or legal guardian will be surveyed for each adolescent in the study. Those families in which both the parent/guardian and the youth complete the survey and demographic
information will be included in the study results. Demographic information such as age, gender, and ethnicity will be collected for each family and will be used for analysis.

There are 210 adolescents between the ages of 12 and 18 enrolled in child and adolescent services that will be used for the study. Each adolescent will be required to have one parent/guardian participate in the study. 210 parents will participate, for a total of 420 study participants. Informed consent forms will be signed by all parents and adolescents age 18, assent forms will be signed by all adolescents age 12 to 17 participating in the study.

All children between the ages of 12 and 18 currently enrolled in mental health services at the study site will be invited to participate in the study. All participants will receive a letter that simply invites them to participate in the study and lists the information of the principal investigator for them to contact if they are interested in participating. Advertisements or flyers will not be used.

3. Procedure

- Invitation letter will be sent to each subject eligible to participate in the study
- Letter will instruct those interested in participating in the study to contact the principal investigator to set up a time to complete the study
- The study will be conducted at the community mental health clinic
- The study will be conducted in the evening, outside normal business hours
- Participants will complete a consent form/assent form and HIPAA form prior to beginning the study- approximately 15 minutes
- Participants will complete the survey individually in a room with a trained clinician- 30 minutes
- Participants will complete a demographic information form- 15 minutes
- Total time commitment for each participant is approximately 1 hour

4. Risks

This study presents no more than minimal risk to study participants. There is a possibility that parents and adolescents may feel uncomfortable answering questions regarding their mental health issues and treatment with the researcher. There is also the potential that participants may feel the pressure to answer the questions more positively given that the survey will be completed at the mental health office. Both of these considerations will be taken into account during the research design. Every caution will be taken to ensure that the parents and adolescents feel safe, comfortable, and have the freedom to withdraw from the study if desired.
Adolescents may be motivated to give answers that present themselves in a favorable light or to attempt to provide answers they feel would match that of their parents. Parents may be motivated to give answers that downplay their adolescent’s issues to present their children in a more positive light. Every effort will be taken to attempt to reduce bias by having a clinician present who can answer any questions the adolescents or parents have and ensure the confidentiality of their responses.

Adolescents and parents will complete the survey individually in separate rooms so that there is no possibility for coercion or undue influence. The study will be conducted in the evening outside normal business hours to minimize inconvenience.

The following procedures will be used to protect the confidentiality of data. The researcher will keep all study records locked in a secure location. Research records will be labeled with the subject participants’ mental health identification number. A master key that links names and codes will be maintained in a separate and secure location. All electronic files containing identifiable information will be password protected. Any computer hosting such files will also have password protection to prevent access by unauthorized users. Only the principal investigator will have access to the passwords.

5. **Benefits**

There are no known direct benefits of this study, but we may learn something that may help children with getting help for their mental health problems.

6. **Remuneration**

The subjects will each be given a $10 gift card for completing the survey. If a subject does not fully complete the survey, they will not be compensated.

7. **Costs**

There will be no cost associated with participation in the study. Participants will be informed that they must provide their own transportation to the study site.

8. **Alternatives**

Subjects do not have to participate in this study. Participation is voluntary. Subjects may withdraw at any time.
9. Consent process and documentation

Informed consent will be obtained from every parent directly before administering the survey. Parents will receive a written informed consent, will be read the informed consent, given the opportunity to ask questions, and will be required to sign the informed consent prior to the administration of the survey. All youth ages 12 to 17 participating in the survey will be required to sign an assent form and youth age 18 will be required to sign an informed consent form directly before the survey is administered.

10. Qualifications of the investigators

The principal investigator has the following qualifications relevant to this study:
- Is a Licensed Professional Counselor in the State of Georgia
- Is a National Board Certified Counselor
- Has worked at the study site and has been a child & adolescent therapist for 8 years
- Has been the Director of the study site for 1 ½ years

The faculty advisor has the following qualifications:
- Associate Professor in the Department of Global Health Systems and Development
- PhD in Pharmacy, Economics and Policy
- Previous research on mental health issues

11. References

REFERENCES


APPENDIX F: ASSENT FORM

Tulane University Human Research Protection Office
IRB Assent Form for Participation in a Research Study
*Differences in Perception between Parents and Adolescents*

**Student Researcher:** Lesley Clack

**Study Title:** Differences in Perception of Children’s Mental Health Issues between Parents and Adolescents and its Effect on Adolescents Receiving the Proper Level of Treatment

**Who are we and why are we meeting with you?**

We want to tell you about a research study we are doing. A research study is a way to learn information about something. We would like to find out more about what types of problems you have that you feel may need mental health treatment. You are being asked to join the study because you are currently enrolled in mental health services.

**What will happen to me in this study?**

The research will take you about an hour of your time. First, you will meet with the researcher for about an hour to complete a survey. The survey will take place at the mental health office. During this survey, you will be asked a series of questions. These questions are designed to allow you to share your experiences as a person who receives mental health services. Also, you will be asked to fill out a demographic sheet that will include questions about you such as your age and grade level and which will ask you questions about how you feel about your mental health services.

**Can anything bad happen to me?**

The survey may be a little long and may be boring, but you will not be harmed in any way during this study.

**Can anything good happen to me?**

We do not know if you will be helped by being in this study. We may learn something that will help you or other children with getting help for their mental health problems some day.
**Will anyone know I am in the study?**

You will be identified during the study by your mental health identification number to so that your privacy is protected. Your name will not be used to identify you. Your responses in the demographic sheets will be strictly confidential. I may publish a summary of everybody’s responses or present a summary at a scientific meeting, but your identity and your responses would be totally confidential.

**What happens if I get hurt?**

Your parents have been informed of what to do if you are harmed in any way by this study.

**Will I be given anything to take part in this study?**

You will receive a $10 gift card for fully completing the surveys and demographic information in this research study. You will not receive anything if you do not fully complete both the survey and the demographic information.

**Who can I talk to about the study?**

You can ask us questions at any time. You can ask now. You can ask later. You can talk to me or you can talk to someone else at any time during the study.

If you have any questions about the study or any problems with the study you can call the Principal Investigator, Lesley Clack, at (229) 931-4749.

If you have any questions about the study but want to talk to someone who is not part of the study, you can call the Tulane University Human Research Protection Office (HRPO) at (504) 988-2665.

**What if I do not want to do this?**

You don’t have to be in this study if you do not want to. No one will get angry or upset if you don’t want to be in this study. Just tell us. And remember, you can change your mind later if you decide you don’t want to be in this study anymore.

**Signature**

If you understand this study and you are willing to participate, please sign below:

_______________________________________________________

Subject Name
Subject Signature                        Date

I am unable to read but this consent document has been read and explained to me by

___________________ (name of reader). I volunteer to participate in this research.

___________________________________________ ____________
Subject                                       Date

_______________________________________________________
Witness                    Date

Signature of Investigators or Responsible Individual:

“To the best of my ability, I have explained and discussed the full contents of the study, including all of the information contained in this consent form. All questions of the research subjects and those of his/her parent(s) or legal guardian have been accurately answered.”

_______________________________________________________
Investigator/Person Obtaining Consent Name

_______________________________________________________
Signature                   Date
APPENDIX G: CONSENT FORM

Tulane University Human Research Protection Office
Biomedical IRB Consent Form for Participation in a Research Study

_Differences in Perception Between Parents and Adolescents_

**Student Researcher:** Lesley Clack

**Study Title:** Differences in Perception of Children’s Mental Health Issues between Parents and Adolescents and Its Effect on Adolescents Receiving the Proper Level of Treatment

**Performance Site:** Middle Flint Behavioral HealthCare

415 N Jackson St Americus, GA

**Introduction**

You are invited to participate in a research study to help determine the differences in how adolescents and parents view mental health issues. You are being asked to participate because your child is currently receiving mental health services.

No research activity is to be conducted until you have had an opportunity to review this consent form, ask any questions you may have, and sign this document.

This consent form will give you the information you will need to understand why this study is being done and why you are being invited to participate. It will also describe what you will need to do to participate and any known risks, inconveniences or discomforts that you may have while participating. We encourage you to take some time to think this over and to discuss it with your family, friends and doctor. We also encourage you to ask questions now and at any time. If you decide to participate, you will be asked to sign this form and it will be a record of your agreement to participate. You will be given a copy of this form.

There are 210 adolescents who are eligible to participate in the study. Each adolescent participating in the study will be required to have one parent/guardian participate in the study, which will be 210 parents/guardians. A total of 420 individuals will be invited to participate in the study. After completion of the survey, participants will not be contacted further regarding this study.
Disclosure of Potential Conflict of Interest

The investigators in this study are also healthcare providers. They are interested in the knowledge to be gained from this study and in your well-being. You are under no obligation to participate in any research study offered to you.

Why is this study being done?

The purpose of this research study is to investigate the views of both parents and adolescents on the need for mental health services and how the difference in those views affects the treatment that adolescents receive.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, then you and your child will be asked to participate in a survey. The surveys will be administered individually to you and your child in separate rooms. The survey will take approximately one hour of your time. The survey will be administered at the mental health office. During this survey you will be asked a series of questions. These questions are designed to allow you to share your experiences as a parent of a child who receives mental health services. Additionally, you will be asked to fill out a demographic sheet that will include demographic information and questions about your child’s mental health services.

Some research requires that the full purpose of the study not be explained before you participate. We will give you a full explanation at the end of the study.

What are the risks or inconveniences of the study?

We believe there are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the study.

What are the benefits of the study?

You may not directly benefit from this research; however, we hope that your participation in the study may help us to better understand the views of parents and adolescents on mental health issues and how that affects the treatment those adolescents receive.

Will I receive payment for participation?

You will receive a $10 gift card upon full completion of the survey and demographics sheet as gratitude for your participation in the study. You will not
receive compensation if you do not fully complete both the survey and the demographic sheet.

**Are there costs to participate?**

There are no costs to you to participate in this study. You will be required to provide transportation for yourself and your child to the study site.

**How will my personal information be protected?**

The following procedures will be used to protect the confidentiality of your data. The researchers will keep all study records (including any codes to your data) locked in a secure location. Research records will be labeled with a unique code. A master key that links names and codes will be maintained in a separate and secure location. All electronic files (e.g., database, spreadsheet, etc.) containing identifiable information will be password protected. Any computer hosting such files will also have password protection to prevent access by unauthorized users. Only the members of the research staff will have access to the passwords. Data that will be shared with others will be coded as described above to help protect your identity. At the conclusion of this study, the researchers may publish their findings. Information will be presented in summary format and you will not be identified in any publications or presentations.

You should also know that the Tulane University Human Research Protection Office, Biomedical Institutional Review Board (IRB) and/or the Office of Research Compliance may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

**Can I stop being in the study and what are my rights?**

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate.

**Who do I contact if I have questions about the study?**

Take as much time as you like before you make a decision to participate in this study. We will be happy to answer any question you have about this study. If you have further questions about this study, want to voice concerns or complaints about the research or if you have a research-related problem, you may contact the student researcher, Lesley Clack, at (229)931-4749. If you would like to discuss your rights
as a research participant, discuss problems, concerns, and questions; obtain information; or offer input with an informed individual who is unaffiliated with the specific research, you may contact the Tulane University Human Research Protection Office at 504-988-2665 or email at irbmain@tulane.edu.

**Documentation of Consent:**

I have read this form and decided that I will participate in the research project described above. Its general purposes, the particulars of involvement and possible risks and inconveniences have been explained to my satisfaction. I understand that I can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

_____________________________________________________

Subject                                         Date

_____________________________________________________

Parent/Legally Authorized Representative (if applicable)      Date

______________________________________________________

Person Obtaining Consent                                       Date

I am unable to read but this consent document has been read and explained to me by___________________ (name of reader). I volunteer to participate in this research.

_______________________________________________________

Subject                                         Date

____________________________________________________

Witness                  Date

_______________________________________________________

Person Obtaining Consent                                       Date
APPENDIX H: HIPAA AUTHORIZATION FORM

Tulane University Human Research Protection Office

Biomedical IRB HIPAA Authorization Form

Differences in Perception Between Parents and Adolescents

Authorization to Use and Release Protected Health Information for Research

I. What is the purpose of this form?

Federal privacy laws protect the use and release of your identifiable health information, which is called protected health information. Under these laws, your protected health information cannot be used or disclosed to the research team for this research study unless you give your permission. You don’t have to sign this form. However, if you decide to participate in this research study, you must sign this form as well as the consent form. This form will describe the ways that the researchers, the research staff and the research sponsor will use your protected health information for the research study.

II. What protected health information will be used and released?

If you give your permission and sign this form, you are allowing Middle Flint Behavioral HealthCare to use and release of certain kinds of health information about you for the purposes of this research study: Differences in Perception of Children’s Mental Health Issues between Parents and Adolescents and its Effect on Adolescents Receiving the Proper Level of Treatment

The information that will be used and released for this research study includes all information about you that will be collected during the research study for research purposes and the health information about you in medical records that is related to the research study. For this study, this information is: name, gender, age, education level, race, marital status, and the length of time your child has been in mental health treatment.

III. Who will use my protected health information and to whom will it be released?

Your protected health information may be released to the following:
1. The research team so they can conduct the research described in the consent form
2. Other people who are required by law to review the quality and safety of the research study including:
   a) The Tulane University Institutional Review Board
   b) The Office for Human Research Protections
   c) The research sponsor and or its representatives

Once your protected health information is released outside of Tulane, the information may not be protected by federal privacy laws.

IV. Does my permission expire
This permission does not have an expiration date.

V. Can I cancel my permission?
You can cancel your permission at any time. If you want to cancel your permission, please write to:

Lesley Clack
Middle Flint Behavioral HealthCare
415 N Jackson St
Americus, GA 31709

If you cancel your permission, you may no longer be in the research study. If you cancel your permission, information that was collected and released before your cancellation may continue to be used and released as needed to maintain the reliability of the research.

VI. Signature
If you agree to the use and release of your protected health information, please sign below. You will be given a signed copy of this form.

________________________________ ______________
Signature of Research Participant  Date

________________________________
Print Name of Research Participant

________________________________        ______________
Witness      Date
APPENDIX I: ADOLESCENT SURVEY

PROBLEM ORIENTED SCREENING INSTRUMENT
FOR TEENAGERS

(POSIT)

Developed by the
National Institute on Drug Abuse

National Institutes of Health
Problem Oriented Screening Instrument for Teenagers (POSIT)

The POSIT, available in English and Spanish language versions, is a brief screening tool, using a yes/no response format, designed to identify problem and the potential need for service in 10 functional areas, including substance use/abuse, mental and physical health, family and peer relations, vocation, and special education.

Target Population
Adolescents 12 through 19 years of age

Administrative Issues
139 items, 10 "scales" or problem areas
Pencil and paper, computer, or audiotape self-administered; interview Time required: 20-25 minutes
Administered by any office personnel. No qualifications necessary.
No training required for administration
A test administrator available to answer questions increases the response validity

Scoring
Time required: 2 minutes using POSIT scoring template
Scored by test administrator or other office personnel
Computerized scoring with interpretation available
Risk-Adjusted scores sheet available

Psychometrics
Reliability studies done:
- Test-retest
- Internal consistency

Measures of validity derived:
- Content
- Criterion (predictive, concurrent)
Problem Oriented Screening Instrument for Teenagers (POSIT)

Clinical Utility
The POSIT is a cost-efficient, easy-to-use problem screen for use with troubled adolescents who may have one or more problems amenable to treatment or to a combination of preventive services. The POSIT can be administered by staff in schools, the juvenile and family court system, and medical, psychiatric, alcohol and drug treatment programs as the first step toward determining those potentially problematic areas that require a more comprehensive, thus-expensive, diagnostic assessment. The POSIT is useful in a case management system in conjunction with a community network of clinical services; it can also be used as a descriptive measure in program evaluation.

Research Applicability
The POSIT can be used to collect baseline data to comprehensively describe adolescent subject populations. The POSIT-Follow up Questionnaire can be used as a change measure.

Copyright, Cost, and Source Issues
No copyright or cost

To receive the POSIT and related scoring template, request a copy of the Adolescent Assessment Referral System Manual, DHHS Publication No. (ADM) 91-1735, from:

National Clearinghouse for Alcohol and Drug Information
P.O. Box 2345
Rockville, MD 20847-2345
1-900-729-6686

or

Elizabeth Rahdert, Ph.D.
er34g@nih.gov
(301) 443-0107

Elizabeth Rahdert, Ph.D.
Treatment Research Branch
Division of Clinical and
Services Research

NIDA
NATIONAL INSTITUTE ON DRUG ABUSE
6001 Executive Boulevard
ROOM 423C MSC 9563
Bethesda, MD 20892-9563
Tel: 301-443-0107

National Institutes of Health
Fax: 301-443-8674
e-mail: Elizabeth_Rahdert@nih.gov
<table>
<thead>
<tr>
<th></th>
<th>6. Do you have so much energy you don't know what to do with it?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7. Do you brag?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>8. Do you get into trouble because you use drugs or alcohol at school?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>9. Do your friends get-bored at parties when there is no alcohol served?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>5. Is it hard for you to ask for help from others?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>8. Has there been adult supervision at the parties you have gone to recently?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>9. Do your parents or guardians argue a lot?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>8. Do you usually think about how your actions will affect others?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>9. Have you recently either lost or gained more than 10 pounds?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>10. Have you ever been intimate with someone who shot up drugs?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>11. Do you often feel tired?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>12. Have you had trouble with stomach pain or nausea?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>13. Do you get easily frightened?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>14. Have any of your best friends dated regularly during the past year?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>15. Have you dated regularly in the past year?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>16. Do you have a skill, craft, trade or work experience?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>17. Are most of your friends older than you are?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>18. Do you have less energy than you think you should?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>19. Do you get frustrated easily?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>20. Do you threaten to hurt people?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>21. Do you feel alone most of the time?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>22. Do you sleep either too much or too little?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>23. Do you swear or use dirty language?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>24. Are you a good listener?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>25. Do your parents or guardians approve of your friends?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>26. Have you lied to anyone in the past week?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>27. Do your parents or guardians refuse to talk with you when they are mad at you?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>28. Do you rush into things without thinking about what could happen?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>29. Did you have a paying job last summer?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>30. Is your free time spent just hanging out with friends?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>31. Have you accidentally hurt yourself or someone else while high on alcohol or drugs?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
32. Have you had any accidents or injuries that still bother you?  
   Yes  No

33. Are you a good speller?  
   Yes  No

34. Do you have friends who damage or destroy things on purpose?  
   Yes  No

35. Have the whites of your eyes ever turned yellow?  
   Yes  No

36. Do your parents or guardians usually know where you are and what you are doing?  
   Yes  No

37. Do you miss out on activities because you spend too much money on drugs or alcohol?  
   Yes  No

38. Do people pick on you because of the way you look?  
   Yes  No

39. Do you know how to get a job if you want one?  
   Yes  No

40. Do your parents or guardians and you do lots of things together?  
   Yes  No

41. Do you get A's and B's in some classes and fail others?  
   Yes  No

42. Do you feel nervous most of the time?  
   Yes  No

43. Have you stolen things?  
   Yes  No

44. Have you ever been told you are hyperactive?  
   Yes  No

45. Do you ever feel you are addicted to alcohol or drugs?  
   Yes  No

46. Are you a good reader?  
   Yes  No

47. Do you have a hobby you are really interested in?  
   Yes  No

48. Do you plan to get a diploma (or already have one)?  
   Yes  No

49. Have you been frequently absent or late for work?  
   Yes  No

50. Do you feel people are against you?  
   Yes  No

51. Do you participate in team sports which have regular practices?  
   Yes  No

52. Have you ever read a book cover to cover for your own enjoyment?  
   Yes  No

53. Do you have chores that you must regularly do at home?  
   Yes  No

54. Do your friends bring drugs to parties?  
   Yes  No

55. Do you get into fights a lot?  
   Yes  No

56. Do you have a hot temper?  
   Yes  No

57. Do your parents or guardians pay attention when you talk to them?  
   Yes  No

58. Have you started using more and more drugs or alcohol to get the effect you want?  
   Yes  No

59. Do your parents or guardians have rules about what you can and cannot do?  
   Yes  No

60. Do people tell you that you are careless?  
   Yes  No

61. Are you stubborn?  
   Yes  No
62. Do any of your best friends go out on school nights without permission from their parents or guardians?  
   Yes  No

63. Have you ever had or do you now have a job?  
   Yes  No

64. Do you have trouble getting your mind off things?  
   Yes  No

65. Have you ever threatened anyone with a weapon?  
   Yes  No

66. Do you have a way to get to a job?  
   Yes  No

67. Do you ever leave a party because there is no alcohol or drugs?  
   Yes  No

68. Do your parents or guardians know what you really think or feel?  
   Yes  No

69. Do you often act on the spur of the moment?  
   Yes  No

70. Do you usually exercise for a half hour or more at least once a week?  
   Yes  No

71. Do you have a constant desire for alcohol or drugs?  
   Yes  No

72. Is it easy to learn new things?  
   Yes  No

73. Do you have trouble with your breathing or with coughing?  
   Yes  No

74. Do people your own age like and respect you?  
   Yes  No

75. Does your mind wander a lot?  
   Yes  No

76. Do you hear things no one else around you hears?  
   Yes  No

77. Do you have trouble concentrating?  
   Yes  No

78. Do you have a valid driver's license?  
   Yes  No

79. Have you ever had a paying job that lasted at least one month?  
   Yes  No

80. Do you and your parents or guardians have frequent arguments which involve yelling and screaming?  
   Yes  No

81. Have you had a car accident while high on alcohol or drugs?  
   Yes  No

82. Do you forget things you did while drinking or using drugs?  
   Yes  No

83. During the past month have you driven a car while you were drunk or high?  
   Yes  No

84. Are you louder than other kids?  
   Yes  No

85. Are most of your friends younger than you are?  
   Yes  No

86. Have you ever intentionally damaged someone else's property?  
   Yes  No

87. Have you ever stopped working at a job because you just didn't care?  
   Yes  No

88. Do your parents or guardians like talking with you and being with you?  
   Yes  No

89. Have you ever spent the night away from home when your parents didn't know where you were?  
   Yes  No
90. Have any of your best friends participated in team sports which require regular practices?  
   Yes  No
91. Are you suspicious of other people?  
   Yes  No
92. Are you already too busy with school and other adult supervised activities to be interested in a job?  
   Yes  No
93. Have you cut school at least 5 days in the past year?  
   Yes  No
94. Are you usually pleased with how well you do in activities with your friends?  
   Yes  No
95. Does alcohol or drug use cause your moods to change quickly like from happy to sad or vice versa?  
   Yes  No
96. Do you feel sad most of the time?  
   Yes  No
97. Do you miss school or arrive late for school because of your alcohol or drug use?  
   Yes  No
98. Is it important to you now to get or keep a satisfactory job?  
   Yes  No
99. Do your family or friends ever tell you that you should cut down on your drinking or drug use?  
   Yes  No
100. Do you have serious arguments with friends or family members because of your drinking or drug use?  
    Yes  No
101. Do you tease others a lot?  
    Yes  No
102. Do you have trouble sleeping?  
    Yes  No
103. Do you have trouble with written work?  
    Yes  No
104. Does your alcohol or drug use ever make you do something you would not normally do like breaking rules, missing curfew, or breaking the law?  
    Yes  No
105. Do you feel you lose control and get into fights?  
    Yes  No
106. Have you ever been fired from a job?  
    Yes  No
107. During the past month, have you skipped school?  
    Yes  No
108. Do you have trouble getting along with any of your friends because of your alcohol or drug use?  
    Yes  No
109. Do you have a hard time following directions?  
    Yes  No
110. Are you good at talking your way out of trouble?  
    Yes  No
111. Do you have friends who have hit or threatened to hit someone without any real reason?  
    Yes  No
112. Do you ever feel you can't control your alcohol or drug use?  
    Yes  No
113. Do you have a good memory?  
    Yes  No
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>114. Do your parents or guardians have a pretty good idea of your interests?</td>
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<td>115. Do your parents or guardians usually agree about how to handle you?</td>
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<td>116. Do you have a hard time planning and organizing?</td>
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<td>117. Do you have trouble with math?</td>
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<tr>
<td>118. Do your friends cut school a lot?</td>
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<td>119. Do you worry a lot?</td>
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<tr>
<td>120. Do you find it difficult to complete class projects or work tasks?</td>
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<tr>
<td>121. Does school sometimes make you feel stupid?</td>
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<tr>
<td>122. Are you able to make friends easily in a new group?</td>
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<td>123. Do you often feel like you want to cry?</td>
<td></td>
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<tr>
<td>124. Are you afraid to be around people?</td>
<td></td>
<td></td>
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<tr>
<td>125. Do you have friends who have stolen things?</td>
<td></td>
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<tr>
<td>126. Do you want to be a member of any organized group, team, or club?</td>
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<tr>
<td>127. Does one of your parents or guardians have a steady job?</td>
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<td>128. Do you think it's a bad idea to trust other people?</td>
<td></td>
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<tr>
<td>129. Do you enjoy doing things with people your own age?</td>
<td></td>
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</tr>
<tr>
<td>130. Do you feel you study longer than your classmates and still get poorer grades?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>131. Have you ever failed a grade in school?</td>
<td></td>
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<tr>
<td>132. Do you go out for fun on school nights without your parents’ permission?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>133. Is school hard for you?</td>
<td></td>
<td></td>
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<tr>
<td>134. Do you have an idea about the type of job or career that you want to have?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>135. On a typical day, do you watch more than two hours of TV?</td>
<td></td>
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<tr>
<td>136. Are you restless and can’t sit still?</td>
<td></td>
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<tr>
<td>137. Do you have trouble finding the right words to express what you are thinking?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>138. Do you scream a lot?</td>
<td></td>
<td></td>
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<tr>
<td>139. Have you ever had sexual intercourse without using a condom?</td>
<td></td>
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</tbody>
</table>
POSIT QUESTIONNAIRE SCORING TEMPLATE

NAME: DATE:

15. I 45. A 75. F 105. C 135. I
22. B 52. F 82. A 112. A
30. I 60. F 90. I 120. G
APPENDIX J:
Additional Questionnaire- Adolescent

A. Gender
Are you a:
○ Boy
○ Girl

B. Age
How old are you? ____________

C. Education
What is your current grade level in school?
○ 4th grade or less
○ 5th grade
○ 6th grade
○ 7th grade
○ 8th grade
○ 9th grade
○ 10th grade
○ 11th grade
○ 12th grade
○ Not in school
○ High School Graduate

D. Ethnicity
Please specify your ethnicity.
○ Hispanic or Latino
○ Not Hispanic or Latino

E. Race
Please specify your race.
○ American Indian or Alaska Native
○ Asian
○ Black or African American
○ Multiracial
○ Native Hawaiian or Other Pacific Islander
○ White
○ Other ___________________________

F. In thinking about mental health disorders, please state whether you agree or disagree with the following statements:
A person could snap out of the disorder ○ Agree ○ Disagree ○ Neutral
A disorder is a sign of weakness ○ Agree ○ Disagree ○ Neutral
A disorder is not a real medical illness ○ Agree ○ Disagree ○ Neutral
People with a disorder are dangerous ○ Agree ○ Disagree ○ Neutral
People with a disorder are unpredictable ○ Agree ○ Disagree ○ Neutral
G. In thinking about mental health disorders, please select whether you find each type of person listed below helpful or harmful in treating you?

<table>
<thead>
<tr>
<th>Person</th>
<th>Helpful</th>
<th>Harmful</th>
<th>Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Doctor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Counselor</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Social Worker</td>
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<td></td>
<td></td>
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<tr>
<td>Telephone counseling service</td>
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<td></td>
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<tr>
<td>Psychologist</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatrist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close family member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close friend</td>
<td></td>
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<td></td>
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<tr>
<td>Deal with alone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</tr>
</tbody>
</table>

H. How likely are you to seek help from the types of people you chose in the previous question?

- Very Likely
- Somewhat Likely
- Slightly Likely
- Not Very Likely
- Not at all Likely
- Not sure

I. In thinking about mental health disorders, please select any statement below that you think would prevent you from seeking help:

- Too embarrassed/shy
- The cost
- Concern that the person might feel negative towards you
- Concern that what the person might say is wrong
- Concern about what other people might think of you seeing the person
- Too far to travel
- Too hard to get an appointment
- Concern about side effects
- Not liking the type of treatment that is likely to be offered
- Thinking that nothing can help
- Having to wait for an appointment
- My parent refuses to take me
- My religion or culture does not believe in mental health disorders
- Other _________________________________________
- Don’t know

J. Do you remember seeing or hearing a story about mental health problems in one of the following sources:

- The newspaper
- A magazine
- Radio
- TV
- The internet
- Somewhere else
- Don’t know
K. Who are you most comfortable talking to about your problems?
- Mother Only
- Father Only
- Both Parents
- Neither
APPENDIX K: PARENT SURVEY

PROBLEM ORIENTED SCREENING INSTRUMENT FOR PARENTS POSIP

INSTRUCTIONS TO THE PARENT or GUARDIAN

The purpose of these questions is to help us choose the best ways to help your child. So, please try to answer the questions honestly. Please answer all of the questions. If a question does not fit your child exactly, pick the answer that is mostly true. Many of the questions ask for your own opinion regarding your child's level of involvement with alcohol or other drugs. Please respond to the best of your knowledge.

GUIDELINES FOR THE POSIP ADMINISTRATOR

The POSIP questionnaire items were derived from POSIT questionnaire items in the following problem areas:

(A) Substance Use/Abuse- 17 items; (C) Mental Health- 22 items; (D) Family Relations- 11 items; (E) Peer Relations -10 items; and (J) Aggressive Behavior/Delinquency -16 items.

To administer the POSIP questionnaire:

The POSIP can be administered to one or both parents/guardians at the same time or after the POSIT has been administered to the adolescent.

To score the POSIP questionnaire:

Use the same system to score the POSIT and POSIP questionnaires. Differences in specific problem area scores indicate differences in perception of and/or reporting on those problem areas between the parent/guardian and adolescent or between two parents/guardians who are filling out the POSIP questionnaire.

To obtain more information on the POSIP questionnaire, contact Elizabeth Rahdert, Ph.D.

Division of Clinical and Services Research
Room 4229, MSC 9563
National Institute on Drug Abuse
National Institutes of Health
6001 Executive Boulevard
Bethesda, Maryland 20892-9563

Tel.: 301/443-0107; Fax: 301/443-8674; E-mail: Elizabeth-Rahdert@nih.gov
1. Does your child have so much energy that he/she doesn’t know what to do with it?  
Yes  
No
2. Does your child brag?  
Yes  
No
3. Does your child get into trouble because he/she uses drugs or alcohol at school?  
Yes  
No
4. Would your child's friends get bored at parties when there is no alcohol served?  
Yes  
No
5. Do you and your spouse argue a lot?  
Yes  
No
6. Does your child seem tired often?  
Yes  
No
7. Does your child seem to be easily frightened?  
Yes  
No
8. Does your child get frustrated easily?  
Yes  
No
9. Has your child ever threatened to hurt people?  
Yes  
No
10. Would you describe your child as a loner?  
Yes  
No
11. Does your child swear or use dirty language?  
Yes  
No
12. Do you approve of your child's friends?  
Yes  
No
13. Do you think your child has lied to anyone in the past week?  
Yes  
No
14. Do you refuse to talk with your child when you are mad at him/her?  
Yes  
No
15. Does your child rush into things without thinking about what could happen?  
Yes  
No
16. Has your child accidentally hurt him/herself or someone else while high on alcohol or drugs?  
Yes  
No
17. To your knowledge does your child have friends who damage or destroy things on purpose?  
Yes  
No
18. Do you usually know where your child is and what he/she is doing?  
Yes  
No
19. Do you think your child misses out on activities because he/she spends too much money on drugs or alcohol?  
Yes  
No
20. Do you and your child do lots of things together?  
Yes  
No
21. Does your child appear to be nervous most of the time?  
Yes  
No
22. To your knowledge has your child ever stolen things?  
Yes  
No
23. Have you ever been told that your child is hyperactive?  
Yes  
No
24. Do you ever feel that your child is addicted to alcohol or drugs?  
Yes  
No
25. Does your child act as if others are against him/her?  
Yes  
No
26. Do you think your child's friends bring alcohol or other drugs to parties?  
Yes  
No
27. Does your child get into fights a lot?  
Yes  
No
28. Does your child have a hot temper?  
Yes  
No
29. Do you pay attention when your child talks with you?  
Yes  
No
30. Does your child seem to need more and more drugs or alcohol to get the effect
31. Do you have rules about what your child can and cannot do?  Yes  No
32. Is your child stubborn?  Yes  No
33. Does your child have trouble getting his/her mind off things?  Yes  No
34. To your knowledge has your child ever threatened anyone with a weapon?  Yes  No
35. Would your child ever leave a party because there is no alcohol or drugs?  Yes  No
36. Do you know how your child really thinks or feels?  Yes  No
37. Does your child often act on the spur of the moment?  Yes  No
38. Do you think your child has a constant desire for alcohol or drugs?  Yes  No
39. Does your child hear things no one else around him/her hears?  Yes  No
40. Does your child have trouble concentrating?  Yes  No
41. Do you and your child have frequent arguments which involve yelling and screaming?  Yes  No
42. Has your child had a car accident while high on alcohol or drugs?  Yes  No
43. Does your child seem to forget things he did while drinking or using drugs?  Yes  No
44. To your knowledge has your child driven a car while drunk or high during the past month?  Yes  No
45. Is your child louder than other kids?  Yes  No
46. Are most of your child's friends younger than he/she is?  Yes  No
47. To your knowledge has your child ever intentionally damaged someone else's property?  Yes  No
48. Does your child like talking with you and being with you?  Yes  No
49. Has your child ever spent the night away from home when you didn't know where he/she was?  Yes  No
50. Is your child suspicious of other people?  Yes  No
51. Has your child cut school at least 5 days in the past year?  Yes  No
52. Have you ever noticed a mood swing in your child which you could attribute to alcohol or drug use?  Yes  No
53. Does your child seem sad most of the time?  Yes  No
54. Has your child ever missed school or arrived late for school because of his/her alcohol or drug use?  Yes  No
55. Do your child's family or friends ever tell him/her that he/she should cut down on his/her drinking or drug use?  Yes  No
56. Does your child have serious arguments with friends or family members because of his/her drinking or drug use?  Yes  No
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tbody>
<tr>
<td>58</td>
<td>Does your child have trouble sleeping?</td>
<td></td>
<td></td>
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<tr>
<td>59</td>
<td>Does your child's alcohol or drug use ever make him/her do something he/she would not normally do-like breaking rules, missing curfew or breaking the law?</td>
<td></td>
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<tr>
<td>60</td>
<td>Do you think your child loses control and gets into fights?</td>
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<tr>
<td>61</td>
<td>To your knowledge has your child skipped school during the past month?</td>
<td></td>
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<tr>
<td>62</td>
<td>Does your child have trouble getting along with any of his/her friends because of his/her alcohol or drug use?</td>
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<tr>
<td>63</td>
<td>Does your child have a hard time following directions?</td>
<td></td>
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<tr>
<td>64</td>
<td>Does your child have friends who have hit or threatened to hit someone?</td>
<td></td>
<td></td>
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<tr>
<td>65</td>
<td>Do you ever think your child can't control his/her alcohol or drug use?</td>
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<tr>
<td>66</td>
<td>Do you have a pretty good idea of your child's interests?</td>
<td></td>
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<tr>
<td>67</td>
<td>Do you and your spouse usually agree about how to handle your child?</td>
<td></td>
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<tr>
<td>68</td>
<td>Do your child's friends cut school a lot?</td>
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<tr>
<td>69</td>
<td>Does your child worry a lot?</td>
<td></td>
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<tr>
<td>70</td>
<td>Does your child often feel like he/she wants to cry?</td>
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<tr>
<td>71</td>
<td>Is your child afraid to be around people?</td>
<td></td>
<td></td>
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<tr>
<td>72</td>
<td>To your knowledge does your child have friends who have stolen things?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>Is your child restless and can't sit still?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Does your child scream a lot?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Are most of your child's friends older than your child?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX L:

Additional Questionnaire - Parent

A. Gender
What is your sex?
o Male
o Female

B. Age
In what year were you born? _________

C. Marital Status
What is your marital status?
o Currently Married
o Widowed
o Divorced
o Separated
o Never married

D. Education
What is the highest degree or level of school you have completed? If currently enrolled, mark the previous grade or highest degree received.
o None
o 8th grade or less
o 9th, 10th or 11th grade
o 12th grade, no diploma
o High school graduate - high school diploma or the equivalent (for example: GED)
o Some college credit, but less than 1 year
o 1 or more years of college, no degree
o Associate degree (for example: AA, AS)
o Bachelor's degree (for example: BA, AB, BS)
o Master's degree (for example: MA, MS, MEng, MEd, MSW, MBA)
o Professional degree (for example: MD, DDS, DVM, LLB, JD)
o Doctorate degree (for example: PhD, EdD)

E. Employment Status
Are you currently...?
o Employed for wages
o Self-employed
o Out of work and looking for work
o Out of work but not currently looking for work
o A homemaker
o A student
o Retired
o Disabled
F. Household Income
What is your total household income?
- Less than $10,000
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $69,999
- $70,000 to $79,999
- $80,000 to $89,999
- $90,000 to $99,999
- $100,000 to $149,999
- $150,000 or more

G. Ethnicity
Please specify your ethnicity.
- Hispanic or Latino
- Not Hispanic or Latino

H. Race
Please specify your race.
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- Multiracial
- White
- Other ____________________________

I. In thinking about mental health disorders in children, please state whether you agree or disagree with the following statements:
- A child could snap out of the disorder
  - Agree
  - Disagree
  - Neutral
- A disorder is a sign of weakness
  - Agree
  - Disagree
  - Neutral
- A disorder is not a real medical illness
  - Agree
  - Disagree
  - Neutral
- Children with a disorder are dangerous
  - Agree
  - Disagree
  - Neutral
- Children with a disorder are unpredictable
  - Agree
  - Disagree
  - Neutral

J. In thinking about mental health disorders, please select whether you find each type of person listed below helpful or harmful in treating your child?
- Family Physician
  - Helpful
  - Harmful
  - Neutral
- Teacher
  - Helpful
  - Harmful
  - Neutral
- Counselor
  - Helpful
  - Harmful
  - Neutral
- Social Worker
  - Helpful
  - Harmful
  - Neutral
- Telephone counseling service
  - Helpful
  - Harmful
  - Neutral
- Psychologist
  - Helpful
  - Harmful
  - Neutral
Psychiatrist  o Helpful  o Harmful  o Neutral
Close family member  o Helpful  o Harmful  o Neutral
Close friend  o Helpful  o Harmful  o Neutral
Deal with alone  o Helpful  o Harmful  o Neutral
Other _______________________________ o Helpful  o Harmful  o Neutral

K. How likely are you to seek help from the types of people you chose in the previous question?
  o Very Likely
  o Somewhat Likely
  o Slightly Likely
  o Not Very Likely
  o Not at all Likely
  o Not sure

L. In thinking about mental health disorders, please select any statement below that you think would prevent you from seeking help for your child:
  o Too embarrassed/shy
  o The cost
  o Concern that the person might feel negative towards you or your child
  o Concern that what the person might say is wrong
  o Concern about what other people might think of your child seeing the person
  o Too far to travel
  o Too hard to get an appointment
  o Concern about side effects
  o Not liking the type of treatment that is likely to be offered
  o Thinking that nothing can help
  o Having to wait for an appointment
  o Child refuses to go
  o My religion or culture does not believe in mental health disorders
  o Other _______________________________
  o Don’t know

M. Do you remember seeing or hearing a story about mental health problems in children in one or more of the following sources (check all that apply):
  o The newspaper
  o A magazine
  o Radio
  o TV
  o The internet
  o Somewhere else
  o Don’t know
APPENDIX M: LETTER OF COOPERATION

January 17, 2013

Tulane IRB

Letter of Cooperation

Middle Flint Behavioral HealthCare has agreed to allow the following research study to be conducted on site: EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN’S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT. Participants for the study may be recruited from the agency. The agency does not have an IRB. Please accept this letter of cooperation as an agreement between the IRB and the study site.

Sincerely,

Lesley Clack, LPC, NCC
Director of Outpatient Clinics
Middle Flint Behavioral HealthCare
APPENDIX N: LETTER OF INVITATION

March 12, 2013

To the Parent___________________________________ and Child
__________________________________________:

You and your child are invited to participate in a research study that is being conducted at Middle Flint Behavioral HealthCare. The study is entitled: EXPLORING THE DIFFERENCES IN PERCEPTION OF CHILDREN’S MENTAL HEALTH ISSUES BETWEEN PARENTS AND ADOLESCENTS AND ITS EFFECT ON ADOLESCENTS RECEIVING THE PROPER LEVEL OF TREATMENT. Your participation or lack of participation in the study will not in any way affect your or your child’s relationship with services at Middle Flint Behavioral HealthCare.

You and your child are eligible to participate in the study because your child is between the ages of 12 and 18 and is currently enrolled in services at Middle Flint Behavioral Healthcare. The study will take a total of about 1 hour of time for you and your child to complete a survey and information sheet. If both you and your child complete the survey and information sheet, you will each be given a $10 gift card as a thanks for your participation in the study.

There are no costs to you for your participation in the study. Transportation is not available, and transportation to and from the clinic is the responsibility of the study participants.

If you and your child would like to participate in the study, please contact the Principal Investigator, Lesley Clack, at (229) 931-4749 to set up an appointment to complete the survey.

Sincerely,

Lesley Clack, LPC, NCC

Student Researcher, Tulane University

Director of Outpatient Clinics, Middle Flint Behavioral HealthCare