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UNIVERSITY OF MIAMI

INITIAL NON-ATTENDANCE AT A SPECIALTY CLINIC FOR CHILDHOOD INTERNALIZING DISORDERS: A PILOT STUDY OF A VIDEO INTERVENTION

By

Rebecca A. Grossman

A THESIS

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Master of Science

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UNIVERSITY OF MIAMI

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science

INITIAL NON-ATTENDANCE AT A SPECIALTY CLINIC FOR CHILDHOOD INTERNALIZING DISORDERS: A PILOT STUDY OF A VIDEO INTERVENTION

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Initial Non-Attendance at a Specialty Clinic for Childhood Internalizing Disorders: A Pilot Study of a Video Intervention

Abstract of a thesis at the University of Miami.

Thesis supervised by Professor Jill Ehrenreich-May. No. of pages in text. (112)

Internalizing disorders in youth are highly prevalent and impairing, yet most children and adolescents never receive treatment for these conditions. Of those who do seek services, it is estimated that as many as 35% of youth do not attend their initial appointments at mental health clinics. Prior research on predictors of and interventions for initial appointment or intake attendance in youth mental health settings has primarily utilized samples of children exhibiting externalizing disorders, with largely inconclusive or modest findings. However, there are indicators that predictors of initial appointment attendance may be unique based on clinical concerns (e.g. internalizing versus externalizing disorders), and clinically tailored interventions may be more effective for improving attendance, particularly in youth with internalizing disorders. This study aimed to better identify predictors of non-attendance at intake in a sample of families seeking treatment for youth with internalizing disorders, and to test the acceptability and utility of a preparatory video for improving intake attendance compared to usual screening procedures. An extended phone screen, which included a series of items hypothesized to predict attendance, was used to collect data prior to appointment scheduling. Fifty-five families scheduled for an intake were randomized to receive either an informational video



about the nature of the intake appointment and parenting tips for managing child anxiety and distress before the appointment (n = 27), or screening as usual (n = 28). Families that viewed the video rated it as moderately helpful, but only 51.85% viewed the video. Ratings of parent motivation were relatively high, and few parents reported concerns about their child being ambivalent about coming to the clinic. Furthermore, few families cancelled their appointments, and no families in the sample no-showed. This indicates the intervention tested may not have been needed in the present sample. Exploratory analyses using logistic regression revealed that higher family income was a marginally significant predictor of the odds of attendance without cancelling or rescheduling. Several bivariate correlations indicated significant associations between measures on the phone screen, including a positive relationship between family accommodation and anxiety symptom severity, as well as an inverse relationship between child age and parental participation in children's anxiety-related behaviors. Implications of the findings and future directions are discussed.



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CHAPTER 1: INTRODUCTION

Depressive and anxiety disorders among children and adolescents are widespread, with the lifetime prevalence by adolescence as high as 31.9% for anxiety disorders and 14.3% for mood disorders (Merikangas et al., 2010). Despite their high incidence and the advances that have been made in understanding and treating these disorders (Zahn-Waxler, Klimes-Dougan, & Slattery, 2000), such disorders are also among the leasttreated psychiatric conditions, particularly in youth (Wang et al., 2005). Importantly, untreated depression and anxiety have a heavy economic burden, causing substantial loss in work productivity (Hoffman, Dukes, & Wittchen, 2008; Simon et al., 2001), and they are among the leading global causes of disability burden in youth (Erskine et al., 2014). Even when treatment is sought, many youths do not ultimately go on to receive services. Estimates of non-attendance at first-session or intake appointments at child and adolescent mental health clinics are as high as 15 to 35% following initial contact with the clinic (Morrissey-Kane & Prinz, 1999), which is problematic for accurately detecting and treating youth mental health problems, as well as appropriately allocating clinic resources (Benway, Hamrin, & McMahon, 2003).

Despite these high no-show rates, health services research in this domain is limited, and efforts to understand what might predict failure to attend appointments are often inconclusive, with particularly inconsistent findings regarding predictors of nonattendance (for a review, see Benway et al., 2003). Furthermore, few studies have tested interventions to improve initial attendance for youth mental health treatment (Benway et al., 2003). Importantly, much of the literature aimed at understanding and improving attendance at first-time clinic appointments has focused on samples of youth with



1

primarily externalizing disorders referred for treatment at community-based clinics, and the generalizability of these findings to samples of internalizing youth and other types of clinical service settings remains unclear (Kazdin, 1996). Research on internalizing disorders across the lifespan, which will be subsequently reviewed, suggests that predictors of intake attendance in this population may be unique, and a tailored intervention for improving this initial attendance may be warranted. As such, the goal of this study was to evaluate the acceptability and utility of a video intervention delivered to parents prior to the scheduled visit to improve intake attendance, and to identify predictors of initial appointment non-attendance at a specialty clinic for youth with internalizing disorders. This preliminary research was undertaken with the hope of establishing the feasibility of a pre-attendance intervention and then subsequently testing it in more routine care settings within the community.

Importance of Treatment for Youth Internalizing Disorders

Internalizing disorders among youth have consistently been identified as vastly undertreated, and the majority of those with anxiety or depressive disorders never receive care (Merikangas et al., 2010; Saxena, Thornicroft, Knapp, & Whiteford, 2007; Wang et al., 2005). The consequences of untreated depression and anxiety have been well documented; research indicates that a longer duration of untreated illness for anxiety disorders is associated with a greater likelihood of having later comorbid disorders (Altamura, Camuri, & Dell'Osso, 2013). Furthermore, research in adult samples with previously undiagnosed and untreated depression and/or anxiety disorders found that the presence of these disorders resulted in significantly compromised health outcomes, similar in magnitude to the outcomes resulting from chronic physical illness (Schonfeld



et al., 1997). Among youth, anxiety and depressive disorders longitudinally predict additional psychiatric disorders later in life (Bittner et al., 2007), more pessimistic views of oneself and others (Nolen-Hoeksema, Girgus, & Seligman, 1992), and higher rates of suicidal ideation and suicide attempts with longer duration of symptoms (Ryan et al., 1987). Childhood internalizing disorders are also associated with a greater likelihood of adult functional impairment in a number of domains, including health issues, legal difficulties, financial instability, and social instability (Copeland, Wolke, Shanahan, & Costello, 2015). Importantly, an earlier age of internalizing disorder onset is associated with longer delays in seeking treatment (Wang et al., 2007), meaning that childhoodonset disorders may be particularly associated with a longer duration of untreated illness. These findings underscore the importance of early intervention for youth internalizing disorders, as well as the significance of ensuring successful entry and engagement within clinical settings, beginning with attendance at the first clinic appointment.

Treatment Seeking Pathways and Predictors of Help-Seeking for Child and Adolescent Mental Health Problems

Given that the present study deals with attendance at initial clinic appointments, literature on help-seeking behavior, more generally, may provide a useful framework from which to understand the steps leading up to the first appointment. Recent theoretical models and empirical work on this topic have suggested a complex picture of parental help-seeking for one's child that is frequently non-linear (Shanley, Reid, & Evans, 2008). Several theoretical models of help-seeking, including those of E. J. Costello, Pescosolido, Angold, and Burns (1998) and Stiffman, Pescosolido, and Cabassa (2004), describe parents as "gateway providers" for mental health services, in which parents are crucial in terms of recognizing the child's mental health problem and taking the appropriate steps to



seek help for the child, underscoring the large role parents play in whether youth ultimately receive treatment. Further complicating the pathway to clinical services for youth, theoretical models of help-seeking and access to mental healthcare often propose that various factors in each step of the process of seeking treatment influence the ultimate outcome: whether or not treatment is received (Albers & Scrivner, 1977; Andersen, 1995; Logan & King, 2001). For example, perceptions *about the source of help or the problem for which help is being sought* (by either the parent or child), *environmental or situational factors that may affect access to the source of help*, and *motivation for help* may all impede or facilitate the ultimate receipt of mental health treatment for the child in question (Albers & Scrivner, 1977). Cauce et al. (2002) have argued that, for youth and their parents, problem-recognition and the decision to seek help are also affected by

their parents, problem-recognition and the decision to seek help are also affected by several cultural and contextual factors, such as cultural beliefs about mental health and the child's socioeconomic status, which may inhibit or enable help-seeking. These authors argue that, although ultimate service utilization is related to initial recognition of a problem, this relationship may be indirect and may not be reliable (Cauce et al., 2002). This point is particularly salient when considering the pathway from the initial stages of help-seeking to attendance at intake, as factors that affect help-seeking may similarly affect initial attendance at evaluative appointments.

Extensive research has documented underlying attitudinal and psychological factors associated with help-seeking, but relatively little work has extended this research to examine the role these factors play in initial appointment attendance. For example, an early study by Rickwood and Braithwaite (1994) found that among adolescents, sex was the most powerful predictor of help-seeking after controlling for symptoms, such that



females were more likely to seek help than males. However, when controlling for initial symptom severity, sex, social network support, higher levels of private selfconsciousness, and willingness to disclose mental health status were significantly related to help-seeking among adolescents. Others have found that adolescents' willingness to seek help was predicted by higher adaptive functioning, greater psychological distress, and fewer barriers to treatment (Sheffield, Fiorenza, & Sofronoff, 2004). While adolescents typically require caregivers to seek help, the adolescent's own attitude may influence parental decisions to seek help; for example, an adolescent's negative attitude towards help may directly or indirectly influence the parent to decide not to seek help (Logan & King, 2001).

In the adolescent and young adult literature, concerns regarding stigma have also been consistently identified as a primary reason those needing help choose not to seek it. That is, concerns about being perceived negatively by peers for seeking treatment for mental health issues can decrease one's willingness to seek services (Gulliver, Griffiths, & Christensen, 2010). Similarly, stigma has also been found to predict parental helpseeking for one's children, such that parents who perceive more stigma are less likely to seek help (Dempster, Wildman, & Keating, 2012). A more recent study furthered this finding, showing that parents who *hold* more stigma (i.e., have more stigmatizing attitudes towards others with mental illness) are also significantly less likely to have a child who uses mental health services (Gronholm et al., 2015).

Treatment seeking in internalizing disorders. A smaller body of literature has examined the concept of treatment seeking specifically for mood and anxiety disorders, and suggests that the barriers to seeking treatment, and ultimately attending



appointments, may be unique in this population, warranting tailored interventions. Lorian and Grisham (2011) hypothesized that people with anxiety disorders would be less likely to seek professional help and disclose personal information to a clinician, given the tendency towards risk aversion and behavioral avoidance inherent to these disorders. In a clinically anxious sample of adults who had not previously sought treatment, these authors found that willingness to seek treatment was positively associated with social risk-taking and self-reported risk-taking behaviors, suggesting that discomfort regarding perceived needs for self-disclosure and risk-taking may be unique factors in determining help-seeking for internalizing disorders (Lorian & Grisham, 2011). In young adults, actual service utilization as well as the intention to seek services is better predicted by the presence of comorbid depression (with another disorder) than level of impairment alone, with these results suggesting that the combinative impact of depressogenic symptoms and related behavioral consequences of these symptoms may be a unique motivator for service initiation (Aalto-Setälä, Marttunen, Tuulio-Henriksson, Poikolainen, & Lönnqvist, 2002). Such findings provide support for the hypothesis that unique factors may predict help-seeking among adults with internalizing disorders, and potentially among youth with these disorders, which may affect ultimate attendance at appointments.

Nonetheless, relatively little work has been conducted examining the unique barriers to treatment seeking specifically among *youth* with internalizing disorders. Garland and Zigler (1994) found that among older children, negative attitudes towards help-seeking were associated with depressive symptoms, lower self-efficacy, and a negative attributional style. This suggests that those youths who most need help may be less likely to seek it from parents or service providers.



Avoidance, Ambivalence, and Fearfulness Towards Treatment

While cultural, contextual, and other situational variables may facilitate or impede willingness to seek treatment overall, perhaps most relevant to the current study is the concept of treatment ambivalence or fearfulness, as it may be particularly relevant in the internalizing disorders. Several theories have been developed to explain the constructs of treatment ambivalence, avoidance, and/or fearfulness. Kushner and Sher (1989) hypothesized that treatment fearfulness, defined as "a subjective state of apprehension that arises from aversive expectations about the seeking and consumption of mental health services," would result in reluctance to seek psychological help (Kushner & Sher, 1991, p. 197). They conceptualized the decision to seek treatment as arising from a conflict between competing approach and avoidance tendencies. In an initial observational study of this construct with adults, their findings indicated that level of psychological distress was significantly related to treatment fears about therapist responsiveness, personal image, and coercion. Furthermore, they found that individuals who needed treatment but did not receive it were significantly different from those who received treatment in their levels of treatment fearfulness (Kushner & Sher, 1989). They hypothesized that treatment fearfulness was directly related to treatment motivation, commitment, and engagement, all of which have been shown to predict positive treatment outcomes (Kushner & Sher, 1991). Regarding this construct in youth, Kushner and Sher (1991) further hypothesized that parent treatment fears may be relevant in the youth treatment-seeking process but distinct from those fears present when seeking treatment for oneself. To date, however, there have been only a handful of studies examining parent and child treatment fearfulness among clinical samples of youth.



Also relevant to the present study is the model proposed by Schauman and Mansell (2012) to explain ambivalence towards help-seeking and, ultimately, its effect on attendance at initial appointments. The model, known as the Loss of Valued Control Model (LVC), posits that people initially seek help with a goal of controlling a problem in their life over which they have little control (i.e., their mental illness). Individuals may then perceive a loss of valued control, in which help-seeking interferes with something over which they already have relatively little control. Importantly, this loss of valued control can take place even before treatment has begun. As a result of this loss of valued control, the individual may experience ambivalence due to the conflict between the desire to gain control over their symptoms and the desire to maintain whatever control they may still have over the problem. Finally, the use of maladaptive coping strategies, such as avoidance, rituals, safety behaviors, and suppression, may allow individuals to feel as though they still have some level of immediate control without ultimately contributing to the higher-order goal of feeling better; these strategies are referred to as forms of "arbitrary control." These methods of arbitrary control are particularly relevant in depressive and anxiety disorders, given that such strategies are often employed by children and adults with these disorders (Ehrenreich, Buzzella, & Barlow, 2007). The LVC model is also unique in that it extends the process of help-seeking to attendance at initial appointments, while previous models have typically extended only until the first instance of contact with the service provider, such as the intake phone call (Stiffman et al., 2004).

Some empirical work has shown that increasing client control on some level (e.g., opting-in to appointments or self-scheduling) may improve attendance (Schauman &



Mansell, 2012). A prospective study by Murphy, Mansell, Craven, and McEvoy (2014) utilizing a sample of individuals with depressive and anxiety disorders, aged 16 and older, found that when levels of depression were low, positive attitudes towards therapy and lower ambivalence (conceptualized within the LVC Model) increased the odds of initial appointment attendance by 4.1. Delgadillo, Moreea, Murphy, Ali, and Swift (2015) also studied the effect of using an informational leaflet prior to prior to the initial appointment to improve attendance at the first session of therapy. They found that the leaflet, which included information on approach-avoidance conflicts was not superior to the usual waitlist condition, and that pairing the leaflet with a text message also did not affect rates of attendance. Given these mixed findings on low-cost strategies for attendance, the extent to which this model and these findings can be applied to younger children and/or parents is unclear.

As might be anticipated given the overarching literature on this topic, relatively few researchers have examined concepts such as treatment fearfulness and ambivalence among those seeking treatment for emotional disorders. In an adult sample, Rowa et al. (2014) found that those with Social Anxiety Disorder (SAD) and OCD had more concerns about the personal consequences of treatment compared to those with Panic Disorder, and that those with SAD had more concerns in this area than those with Generalized Anxiety Disorder (GAD). Furthermore, they found that those with SAD had more concerns about the inconvenience of treatment than those with Panic Disorder. When they examined the relationship between treatment ambivalence and outcomes of treatment, they found that in those with SAD there was a modest relationship between greater treatment ambivalence and lower levels of symptom change. Their work suggests



that even *between* anxiety disorders treatment fears may be unique, providing support for the concept of clinically tailored interventions for improving initial attendance. Furthermore, this indicates that concerns about treatment may have consequences for the outcome of treatment among adults with emotional disorders.

Using the same measure of treatment ambivalence in children seeking intensive treatment for OCD, Selles, Rowa, McCabe, Purdon, and Storch (2013) found that treatment ambivalence was most strongly correlated with measures of non-OCD anxiety, suggesting that those with additional anxiety disorders, who are perhaps more in need of treatment, were the most ambivalent about it. More recently, Selles et al. (2017) also found that child-rated treatment ambivalence was positively correlated with childreported anxiety severity in a sample of youth seeking psychotherapy for anxiety disorders, and that parent-rated anxiety impairment and anxiety sensitivity were positively associated with parents' treatment worries. This suggests that, not surprisingly, the presence of heightened anxiety symptoms may also increase fears and ambivalence towards treatment for those very symptoms in both parents and youth. Both of these studies also found that greater treatment worries in some domains (e.g., worries about the therapeutic process) were associated with increased *family accommodation* (Selles et al., 2017; Selles et al., 2013), defined as changes in family's behavior and plans in order to reduce child distress (Thompson-Hollands, Kerns, Pincus, & Comer, 2014). This latter finding, in particular, has important implications for the study of initial appointment nonattendance among youth with internalizing disorders, as those children with high treatment ambivalence may express a desire not to attend appointments. Indications about youth ambivalence or treatment fearfulness may then be maintained by parental



accommodation behaviors, or a parent's desire to reduce their child's immediate distress by allowing the child to avoid what might cause distress (e.g., the initial clinic appointment). A child with concerns about attending a clinic appointment may verbalize these concerns directly or may indirectly express them by engaging in avoidance or escape-oriented behaviors. As a result, accommodating parents of children with internalizing disorders may allow their child not to attend the initial appointment more often than parents lower in accommodation behaviors. Ultimately, this may result in a missed initial appointment and might maintain the child's ambivalence toward future treatment. Indeed, in both studies by Selles and colleagues (2017; 2013), treatment worries were assessed in families who *attended* the initial appointment, so it is possible that families who ultimately do not attend would have more worries and engage in greater family accommodation.

Parents' role in child anxiety. Concerns regarding treatment and the concept of treatment fearfulness have been well documented in the literature, although no systematic study of these concerns has been conducted in children outside of the work of Selles et al. (2013). Based on their research, one might hypothesize that children exhibit comparable treatment ambivalence to adults, and that this may be similarly linked with higher levels of anxiety and family accommodation, at least among youth with OCD and possibly other internalizing disorders. As such, it is important to examine the literature on parental *reactions* to youth distress in this context, as this may be related to resultant attendance at intake appointments, given that parents may readily accommodate their child's ambivalence about attending the appointment.



With regard to parental reinforcement of anxiety and avoidance behavior, in a study by Barrett, Rapee, Dadds, and Ryan (1996), anxious and non-anxious children were presented with a series of ambiguous social situations and asked to indicate their interpretation of the situation (i.e. what they thought might be happening) and their response to the situation before and after discussing it with their family. After family discussion, anxious children were more likely to exhibit an avoidance response on the task, suggesting avoidant solutions to the situation, compared to non-anxious children. Follow-up work by Dadds, Barrett, Rapee, and Ryan (1996) examining the content of these family interactions revealed that parents of non-anxious children were more likely to communicate positive consequences of the child's proposed response and to support their prosocial behavior than parents of anxious youth. This suggests that parent communication with anxious youth, without appropriate intervention, may result in increased avoidance, potentially including avoidance of initial appointments.

In terms of accommodation of anxious behaviors and managing children's distress, Aschenbrand and Kendall (2012) found that parents of non-anxious youth took significantly longer than parents of anxious youth to intervene in a hypothetical vignette about a child when they were told the child was anxious, suggesting that these parents of non-anxious youth were less likely to support and accommodate anxious behaviors. The same study found that parents of anxious children exhibited increased negative affect and decreased positive affect after listening to the vignette of an anxious child, indicating that their tolerance for the child's distress may be lower than parents of non-anxious youth (Aschenbrand & Kendall, 2012). This suggests that parents of youth with anxiety symptoms may be more likely to intervene or act to reduce expression of youth distress.



Reports on family accommodation suggest stark differences in such behaviors across families of children with anxiety disorders, families of children with OCD, and families of non-anxious youth. Using a measure for family accommodation, Lebowitz, Scharfstein, and Jones (2014b) found that parents of children with OCD and children with other anxiety disorders were significantly higher in family accommodation than parents of non-anxious youth. Distress resulting from family accommodation and the reported consequences of not accommodating the child's anxiety were not significantly different in these groups, indicating that the impact of family accommodation across disorders is similar (Lebowitz et al., 2014b). In another sample of anxious youth, 100% of mothers reported some form of behavioral participation in their child's anxiety symptoms. Furthermore, 92.7% of mothers and 70.4% of children in this sample reported making changes to the family routine as a result of the child's anxiety (Lebowitz, Scharfstein, & Jones, 2014a). Such results highlight the prevalence of family accommodation for children's worries and distress, illustrating that parents of youth with anxiety and internalizing symptoms may be more likely to accommodate treatment ambivalence by allowing the child to avoid the initial appointment, as well.

Attrition from Mental Health Treatment

Though distinct from initial appointment non-attendance, there exists a relatively larger body of literature regarding attrition *after* beginning treatment in both adult and child samples (e.g., Armbruster & Kazdin, 1994; Wierzbicki & Pekarik, 1993). While predictors of attrition once therapy has begun may be unique from predictors of intake non-attendance, research in this domain has important implications for the present study, given the limited body of literature on intake non-attendance in internalizing samples of



children and adolescents. Recent estimates suggest that as many as 50% of youth seeking treatment terminate early (Becker et al., 2015), though variations in definition may result in a range of estimates (Warnick, Gonzalez, Weersing, Scahill, & Woolston, 2012). In understanding predictors of attrition, a great deal of the research has been done on what have been referred to by Kazdin (1996, p. 138) as "variables of convenience": that is, those variables that are collected during the intake process, largely related to demographics, socioeconomic status, and referral information. As a result, most research understanding therapy attrition has not examined underlying attitudes or psychological characteristics of either the parent or the child. Despite several decades of work on the topic, however, most findings remain mixed or unclear regarding predictors of attrition from child treatment (Armbruster & Kazdin, 1994). For example, findings on socioeconomic status as a predictor of attrition are inconsistent, though it has been hypothesized that those of higher socioeconomic status are more likely to keep initial appointments and less likely to drop out (Armbruster & Kazdin, 1994). Consistently, youth with externalizing disorders appear more likely to terminate treatment early. However, externalizing disorders have also been linked to dysfunctional family characteristics and lower socioeconomic status in the literature, suggesting an indirect relationship between treatment dropout and family dysfunction (Kazdin, 1996; Reiss, 2013). Given these findings, it has been suggested that among children with diverse diagnoses, predictors of dropout may become non-significant, and that dropout predictors may vary between clinical populations (Kazdin, 1996). As such, interventions aimed at improving clinic attendance may vary between clinical populations or for differing clinical foci – such as internalizing versus externalizing disorders. To date, however, the



majority of research conducted to understand attrition from child treatment has been conducted in community clinics, urban settings, and among largely externalizing disorder populations (Lindsey et al., 2014). One study examining attrition in a child anxiety specialty clinic found that those who dropped out of treatment were more likely to come from single-parent households and be of minority status, but no measures were used to evaluate parent or child attitudes towards treatment (Kendall & Sugarman, 1997). In the absence of prior research on attrition and non-attendance in specific clinical populations, however, assessing barriers similar to those examined in prior studies of attrition appears warranted in an internalizing sample.

Predictors of pre-treatment attrition. A small body of work examining pretreatment attrition and intake non-attendance has revealed important findings with implications for understanding those factors that predict who does not show up to initial clinic appointments. Several studies have found that among adults, younger patients are less likely to attend initial appointments (Carpenter, Morrow, Del Gaudio, & Ritzler, 1981; Nicholson, 1994). Gottesfeld and Martinez (1972) found that patients who mentioned some expectation about what the initial clinic appointment would be like were more likely to attend the appointments, while those who did not show up at initial appointments were more likely to describe negative expectations (e.g. ambivalence or fearfulness). In a review of studies regarding intake non-attendance, Nicholson (1994) found that more than 20% of those patients who failed to keep initial appointments did so because of anxiety about what they might encounter, suggesting that treatment fears and ambivalence may play a large role in initial appointment attendance. Among internalizing



disorders specifically, Issakidis and Andrews (2004) found that adults with depression were less likely to follow through with treatment than those with other disorders.

Within the child and adolescent literature, predictors of intake non-attendance have been largely inconsistent. Some studies have found that older children are less likely to attend intake appointments, while others have found that the presence of behavioral problems, being female, and having older parents were predictive of non-attendance and/or failure to follow through with the initial appointment (Benway et al., 2003; Lowman, Delange, Roberts, & Brady, 1984). Others have found that ethnicity and referral source are predictive of intake non-attendance in community mental health centers, with those of minority status and mandated referral being less likely to attend initial appointments (Sherman, Barnum, Buhman-Wiggs, & Nyberg, 2009). In a psychiatric clinic for childhood social phobia, one study found that concern about required use of study medication was the primary reason cited by parents for not enrolling their child in a treatment research study (Young et al., 2006). This further supports the notion that predictors of non-attendance may be better understood by examining predictors within specific clinical populations (Kazdin, 1996).

Previous Interventions to Improve Attendance at Intake Appointments

A small number of previous studies have examined the effects of various interventions for improving attendance at intake appointments. Common interventions include opt-in appointment systems, orientation and reminder letters, telephone calls, preintake questionnaires, and decreased appointment wait time, all of which appear to have mixed results (Schauman, Aschan, Arias, Beards, & Clement, 2013). According to a review by Schauman et al. (2013), the most promising of these strategies for increasing



attendance at initial appointments may be the use of orientation or reminder letters (providing information about the clinic and/or a reminder about the appointment), as well as accelerating the appointment wait time. Broadly speaking, other interventions using motivational interviewing-based strategies (Miller & Rollnick, 2012) to encourage treatment utilization and engagement for at-risk clients, parents, and others have also shown some promise (Gopalan et al., 2010). Furthermore, some interventions to improve initial treatment attendance have required families to attend initial orientation meetings to address barriers to attendance and increase motivation by clarifying the need for treatment and increasing caregiver investment prior to beginning treatment (e.g., McKay, Stoewe, McCadam, & Gonzales, 1998).

Though findings remain mixed regarding the efficacy of extant interventions, several of these efforts have been aimed at increasing awareness of or memory for appointments, despite no empirical research having shown that forgetfulness about appointments predicts non-attendance (Etchegary, Carrey, Curran, & Hatchette, 2010). In more recent years, however, work in community clinics and urban populations has moved toward more contextually-driven interventions aimed at assessing and addressing barriers to attendance (Benway et al., 2003). For example, Coatsworth, Santisteban, McBride, and Szapocznik (2001) developed an intervention known as Brief Strategic Family Therapy (BSFT), with specific techniques utilized from the point of initial contact (typically by phone) aimed at improving engagement in subsequent BSFT treatment for adolescent externalizing or substance use issues. The intervention was developed based on the concept of modifying the systemic family interactions contributing to the behavior problems as well as those problems contributing to engagement and treatment retention.



In their study, 104 families of high-risk minority teens between the ages of 12 to 14 were randomly assigned to receive the BSFT intervention or a community comparison condition, which used standard scheduling practices of calling the family up to three times to schedule the appointment, with no additional engagement intervention. Results of this study showed that 81% of those in the BSFT condition and 61% of those in the control condition attended initial appointments, a statistically significant difference (Coatsworth et al., 2001).

Michelson and Day (2014) used a similar intervention model to BSFT, in which a contextually-driven phone intervention was delivered to caregivers of youth seeking treatment at a clinic for socially disadvantaged families. Families were randomly assigned to receive the active phone intervention (n = 107) or standard clinic procedures (opt-out letters to families; n = 62). This 20-30-minute phone call allowed clinic staff to identify and address potential barriers to attendance unique to each family. Findings indicated that those who received the intervention were significantly less likely to miss their first appointment compared to those who were in the control condition.

Stern et al. (2014) also used a similar engagement intervention coupled with the standard clinic phone screen at an urban community mental health center for youth, ages 5 to 12. Families randomized to the enhanced engagement phone intake (n = 45) received an extended phone intake in which clinic staff expressed an understanding of the family's needs, addressed potential barriers to treatment, and increased self-efficacy and treatment motivation. The control group (n = 54) received the standard intake phone screen. They found that 76% of those in the engagement intervention attended their initial appointments, while 57% of those in the control condition attended their appointments;



those randomized to receive the engagement intervention were 3.19 times more likely to attend their appointments than those in the control group (Stern et al., 2014).

While these studies have important strengths, many of them were designed to assess systemic or situational barriers for youth mental health treatment, rather than psychological or attitudinal barriers to treatment, including treatment fearfulness or ambivalence. In the adult literature, however, there is some evidence that such interventions seem to hold promise. In a study by Sheeran, Aubrey, and Kellett (2007), adult participants were assigned either to a control group (n = 240) or an experimental group (n = 236) that was mailed a questionnaire with an *implementation intention* intervention, in which they were instructed to repeat an "if, then" statement about how to handle their concerns regarding treatment, such as, "as soon as I feel concerned about attending my appointment, I will ignore the feeling and tell myself this is perfectly understandable!". Results indicated that those who received the intervention were significantly more likely to attend the initial appointment (75% attendance) compared to the control group (63% attendance; Sheeran et al., 2007). Conversely, (Delgadillo et al., 2015) examined the effect of a leaflet describing approach-avoidance conflicts and implementation intentions for increasing initial appointment attendance. Even when coupled with a reminder text message, there was no significant difference in appointment attendance between the experimental group and the usual group. Clough and Casey (2014) also found no significant difference in attendance between individual receiving text message reminders and those that did not before their initial psychotherapy appointment. Taken together, these findings suggest that more intensive strategies, like those of Coatsworth et al. (2001); Michelson and Day (2014); and Stern et al. (2014) may



be most effective. To date, however, data on the use of these types of low-cost attendance interventions in children and adolescents or their parents has not yet been published.

Additionally, few methods beyond phone, text messaging, and mail communication have been used for delivering existing interventions. Importantly, prior studies indicate that the use of videos to deliver interventions, such as preparatory videos for improving the knowledge of services, have been effective. Coleman and Kaplan (1990) found that a pre-therapy videotape preparation video delivered to youth ages 8 to 16 and their mothers seeking treatment for behavior problems (n = 24) resulted in greater knowledge of the structure and process of therapy, compared to a control group that did not receive the video intervention (n = 24). Interventions using such novel methods to improve initial attendance by targeting treatment ambivalence and subsequent parental accommodation of this negative affect in youth with internalizing disorders have yet to be studied.

Purpose of the Study

Given the paucity of research on the topic and the mixed findings regarding predictors of intake non-attendance for child mental health treatment, as well as the mixed findings on the effectiveness of low-cost interventions for this problem, the present study examined intake non-attendance in youth seeking treatment for internalizing disorders. Specifically, the study evaluated the feasibility and acceptability of a video-based preparatory intervention for parents delivered prior to their intake appointment. This intervention was aimed at providing instruction for parent management of children's ambivalence, and to a certain extent, parental ambivalence.



Additionally, this study assessed the intervention's effectiveness for improving the odds of attendance at intake appointments compared to a screening as usual condition.

Previous research using pre-intake interventions aimed at managing concerns regarding treatment has proven effective for improving initial appointment attendance in adult samples and samples of youth in community clinics (Michelson & Day, 2014; Sheeran et al., 2007). As noted, the use of preparatory videos for both mothers and children seeking psychotherapy has also been shown to improve knowledge of the structure and process of therapy, as well as result in better parent-reported outcomes for children after several sessions of therapy (Coleman & Kaplan, 1990). Thus, it was hypothesized that the pre-intake preparatory video would be acceptable to both parents and clinic staff. Furthermore, it was hypothesized that parents who viewed the preparatory video would be more likely to attend initial appointments, and less likely to cancel than those randomized to be screened and scheduled as usual (Screening as Usual; SAU).

To date, no conclusive findings on predictors of intake non-attendance for child mental health treatment have emerged. Furthermore, no study has evaluated these predictors in a specialty clinic for internalizing youth (Benway et al., 2003). Therefore, a secondary aim of this study was to identify predictors of intake non-attendance and rescheduling based on a series of questions delivered during the phone screen. Brief measures assessing hypothesized predictors of non-attendance in this sample were selected for use in the phone screen. It was hypothesized that scores on these measures would predict intake attendance, when controlling for the effects of the intervention. The



overall aims and hypotheses of this study are further outlined below. The primary aims of this study were as follows:

Aim 1. To evaluate the feasibility and acceptability of a parent preparatory video intervention delivered prior to intake among families of youth with internalizing disorders requesting care at a specialty clinic for child and adolescent internalizing disorders.

Aim 1, Hypothesis 1. It is hypothesized that the preparatory video will be acceptable to parents randomized to receive the video intervention prior to the initial appointment.

Aim 2. To examine the effectiveness of the preparatory video for improving intake attendance compared to screening procedures as usual.

Aim 2, Hypothesis 1. Those randomized to view the preparatory video will be more likely to attend the initial appointment (i.e., less likely to cancel, reschedule, or no-show) at a specialty clinic for youth internalizing disorders compared to those randomized to the Screening as Usual condition.

The secondary aims of the investigation were as follows:

Aim 3. To identify predictors of intake appointment non-attendance for families scheduled to be evaluated within a clinic for youth with internalizing disorders. Data on hypothesized predictors of attendance will be collected from participating parents during the phone screen.

Aim 3, Hypothesis 1. Ethnic minority status will increase the odds of intake nonattendance, controlling for randomization condition.



Aim 3, Hypothesis 2. Lower family income will increase the odds of intake nonattendance, controlling for randomization condition.

Aim 3, Hypothesis 3. Lower parent level of education will increase the odds of intake non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 4. Higher number of dependents will increase the odds of intake non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 5. Older age will increase the odds of non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 6. Greater self-reported parent psychopathology, as measured by the four-item Patient Health Questionnaire (PHQ-4; Kroenke, Spitzer, Williams, & Löwe, 2009) will increase the odds of non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 7. Lower self-reported parent motivation for youth's treatment, as measured by the Motivation for Youths Treatment Scale items (Breda & Riemer, 2012) will increase the odds of non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 8. Higher parent-reported levels of family accommodation, as measured by items on the Family Accommodation Scale for Anxiety (FAS-A; Lebowitz et al., 2013), will increase the odds of non-attendance, controlling for randomization condition.

Aim 3, Hypothesis 9. Lower ratings of child's ability to cope with coming to the clinic will increase the odds of non-attendance, controlling for randomization condition.

Aim 4 (Exploratory). Given the possibility that not all families randomized to the Video conviction will actually view the video, additional exploratory analyses will



examine whether those that do and do not watch the video differ significantly on demographic variables and measures collected on the phone screen. Because this aim is exploratory, there is no a-priori hypothesis regarding group differences between those that do and do not view the video.



CHAPTER 2: METHOD

Participants

To evaluate the acceptability and feasibility of a pre-intake preparatory video for improving initial attendance, 55 caregiver-child pairs were recruited consecutively from the group of families that scheduled intake appointments at a University-based research clinic that primarily serves children between the ages of 6-17 with anxiety, obsessivecompulsive (OC) spectrum, and depressive disorders. During the eight months of the study, 110 families completed a phone screen for participation in clinical research at this clinic. Of these families, 75 consented to, and subsequently completed, the extended phone screen for the study. Thirty-five families did not complete the extended phone screen for the study for various reasons, including being screened primarily in Spanish, not having enough time, and not having interest in participating in the extended screen. Based on this initial phone screen, 60 English-speaking caregiver-child pairs for whom the child's primary problem was suspected to be an anxiety, OC spectrum, or depressive disorder (as determined by program supervisor) were scheduled for an initial intake appointment. Of the 75 total families that completed the extended phone screen, 15 were not scheduled for an initial intake either because they were unable to be reached for scheduling, they declined to schedule an appointment, or they were referred elsewhere for services. A full breakdown of the participant flow through the study is presented in Figure 1. A copy of the full phone screen is detailed in Appendix A. At the program in question, services were offered on a sliding scale based on combined family income, with a diverse sample of families inquiring about services, and anxiety disorders being the modal presenting problem.



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Among the 60 families scheduled for initial appointments, the first five were allocated to a pilot condition to test technical aspects of the video intervention, and were subsequently excluded from most data analysis (unless otherwise specified in the analytic procedures and results). The remaining 55 families were randomized to receive the Video intervention (n = 27) or the Screening as Usual condition (n = 28). The majority of youth participants were male (n = 33, 60.0%), White (n = 53, 96.36%), and Hispanic (n = 43, 78.18%). The mean age was 10.80 years old (SD = 3.14). Sample demographics are presented in Tables 1 through 9.

Procedures

All families seeking treatment or research opportunities for their children through the research clinic first completed a phone screen as part of a broader, IRB-approved screening and treatment protocol within the program. Based on this phone screen, families eligible for further evaluation were then scheduled for an initial intake appointment to fully assess eligibility, presenting problems, and diagnostic status, along with several research questionnaires and tasks. During the initial phone screen, a member of the research team introduced the current study. Verbal consent to complete the study's extended phone screen was obtained from families that expressed willingness to participate. Families who were also eligible to be scheduled for an intake appointment were then contacted to schedule this assessment after completing the phone screen. At the time of intake scheduling, 55 caregivers were randomized to receive a link to the Video intervention (n = 27) or to the Screening as Usual condition (n = 28). Eligible caregiverchild pairs included those who indicated that they had computer and Internet access (in order to receive and view the video link). The caregiver completing the initial phone



screen was the point of contact throughout the intake process, and was asked to accompany the child to the intake appointment, and was invited to view the video via email. No incentive was provided to participate in the study or view the video, and families were allowed to view the video at any time they wished before the intake appointment. As specified below, automated email reminders were provided to some families assigned to the Video intervention until they clicked the link to view the video.

As noted, families scheduled for an intake appointment were randomized to receive the Video intervention – a preparatory video and tip sheet (detailed in Appendices B and C)– or Screening as Usual. As part of usual care procedures, all families in the study, regardless of condition assignment, received a confirmation email upon scheduling, as well as a phone call reminder the business day before the appointment. Randomization was done at the time of scheduling the intake appointment. Families that scheduled appointments were consecutively randomized using a 1:1 randomization scheme generated on the website Randomization.com (Dallal, 2007). The Video condition included an email link to a video focused on addressing parent concerns regarding attendance and other barriers to the initial appointment. Families in the Video condition also received a PDF document as an email attachment with specific tips for preparing children for the initial appointment (similar to the content of the video), along with directions to the clinic.

Given the high rate of video viewing during the pilot phase (n = 4, 80.0%), it was initially decided that an email with the link to the video would be sufficient for encouraging participants to view the intervention video. However, after randomizing 14 families, eight of them to the video condition, the rate of video viewing was lower than



expected (25.0% view rate). Therefore, it was determined that reminder emails should be implemented to increase uptake of the intervention. The remaining families randomized the video condition (n = 19) received a brief automated reminder email every other day until they viewed the video or until the date of their initial assessment (if the video was not yet viewed). Given the change in procedure, additional analyses were conducted to determine if the addition of reminder emails had any effect on video viewing. Qualitatively, the addition of reminder emails appeared to improve the rate of viewing slightly; prior to implementing the reminders, only 37.5% of those randomized to the video condition spent more than three minutes on the website, compared to 63.16% after the implementation of reminder emails. Rates of viewing before and after implementation of email reminders are presented in Table 10.

Those families in the Screening as Usual group were scheduled for an intake and received a standard confirmation email, as well as a confirmation call prior to the appointment. After verbal consent was obtained from all caregivers by phone, informed consent was again obtained online using the electronic data capture system (i.e., Qualtrics) before watching the video intervention for those families randomized to receive the preparatory video. Each family randomized to the Video intervention was sent a unique link to the video.

At the time of the initial intake, parents and children completed the Anxiety Disorders Interview Schedule for DSM-5 Child Version, Child and Parent Report Forms (ADIS-5-C/P; Silverman & Albano, In press), a semi-structured interview to assess anxiety symptoms and diagnostic status. Once the intake was completed, families returned for a feedback session to discuss clinical impressions from the interview, as well



as treatment recommendations. Eligible families were offered treatment through the research clinic, either within a research study, or clinically outside of a current research study. Children who were not eligible for treatment received service referrals in the community and were provided with contact information for such community resources. **Intervention**

Preparatory video. The preparatory video (and accompanying tip sheet) was designed to provide relevant information to parents based on hypothesized barriers to treatment within this population. All parents in this condition received information about parent management of child anxiety and related conditions, common barriers to treatment, information about transportation and parking at the clinic, and information about the nature of the appointment. The script for this video is provided in Appendix B. Parents also received a "tip sheet" along with the confirmation email containing the link to the video. These families also received a reminder call the day before their appointment, and reminder emails to view the video every other day until they did so, or until the day of their appointment. The tip sheet included all the information provided during the preparatory video and served as a back-up in case of technical difficulties with video retrieval or play-back, in addition to reinforcement of concepts relayed in the video.

Furthermore, using electronic data collection to distribute the video link to parents, individual identifying codes allowed for the tracking of those families who did and did not click the link to watch the video, as well as the duration spent on the webpage for the video.



Control condition. Parents in the control condition (Screening as Usual) received a similarly structured email confirmation without a link to a preparatory video, and without the additional tip sheet. As is standard for all families scheduled at the clinic, they received directions to the office, information about the time, date, and duration of the appointment, and a reminder call the day prior to their appointment.

Measures

Phone screen. To collect data about hypothesized barriers to treatment, selected items from the rating scales described in greater detail below were administered over the phone during the extended phone screen. In an effort to avert findings based only on intake attenders and/or those willing to complete questionnaires in advance of an intake appointment, brief measures assessing hypothesized barriers to attendance were administered over the phone during screen. A copy of the phone screen is included in Appendix A.

Demographic and background information. Background and demographic information were obtained during the initial phone screen. Demographic information included the child and family's race, ethnicity, age, gender, and yearly income. Information about previous therapy, psychiatric hospitalizations, and psychiatric medications was also collected during the phone screen. Referral source and reason for referral were documented as well. Information about parent level of education and parent occupation was collected, as well as number of dependents. To quantify parent level of education in the analyses, categorical variables were converted to ordinal variables, such that the lowest level of education was scored as 1 (*Less than high school*), and the highest



level of education was scored as 7 (*Graduate degree*). For two-parent households, an average of these scores was used.

Screen for Child Anxiety and Related Emotional Disorders. To assess severity of anxiety, the five-item version of the parent-reported Screen for Anxiety and Related Emotional Disorders (SCARED) was completed over the phone during the extended phone screen (Birmaher et al., 1999). The 5-item scale assesses the child's anxiety by asking parents to rate the frequency of anxiety-related symptoms on a scale of 0 to 2 (0 =*not true or hardly ever true*; 2 = *very true or often true*). The authors of the original scale selected the five items from the original 41-item scale by identifying the items on the full measure that loaded highest on a discriminant function analysis classifying children with anxiety disorders diagnosed by structured interview. The abbreviated measure was reported to have similar psychometric properties to the full-length scale (internal consistency $\alpha = .90$), as well as specificity and sensitivity in both the parent and child report versions (Birmaher et al., 1999). In the current sample of families that completed the extended screen (n = 75), internal consistency of the abbreviated SCARED was low $(\alpha = .46)$. This is likely because items on the scale assess distinct anxiety disorder clusters (e.g., social anxiety, generalized anxiety, etc.) and the measure may be more useful for distinguishing anxious from non-anxious individuals, rather than dimensionally assessing the overall severity of anxiety in a clinical sample.

Motivation for Youth's Treatment Scale. The Motivation for Youth's Treatment Scale (MYTS) is an 8-item measure of intrinsic motivation for treatment, with corresponding parent/caregiver and child self-report forms (Breda & Riemer, 2012). Respondents rate statements on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly*



agree), and the measure yields a total motivation score, as well as two subscale scores: recognition of the youth's problem and readiness to participate in the youth's treatment, with higher scores indicating greater motivation. In the original sample, total scores and subscale scores on both the parent/caregiver and child forms yielded high internal consistency, with Cronbach's alphas ranging from .84 to .89 (Breda & Riemer, 2012). In the present study, parents were administered the questions from the Treatment Readiness subscale. The internal consistency of the MYTS Treatment Readiness in the sample of families that completed the study phone screen (n = 75) was low ($\alpha = .23$). This is likely due to the very low variability in responses on this scale, as most caregivers rated high levels of Treatment Readiness and the calculation of Cronbach's alpha is influenced by the variance of individual items on a scale (which was low in this sample). Because of the poor psychometric properties of this measure in the present study, planned analyses using this measure were not conducted.

Family Accommodation Scale – **Anxiety.** The Family Accommodation Scale – Anxiety (FASA) is a 13-item scale that was adapted from the Family Accommodation Scale for pediatric Obsessive Compulsive Disorder to assess the frequency of family accommodation across all anxiety disorders (Lebowitz & Omer, 2013; Lebowitz et al., 2013). The scale was evaluated utilizing a sample of school-age children in specialty anxiety clinics and general outpatient clinics, and includes nine items relating to accommodation of anxiety, with an additional four items assessing the distress and consequences resulting from this accommodation. Within the nine accommodation items, parents are asked to report the frequency with which they have engaged in each item over the previous month on a 5-point Likert scale (0 = never; 4 = daily). The four items related



to distress and consequences of accommodation ask parents to indicate the level of distress experienced as a result of each situation on a 5-point scale (0 = no; 4 = extreme). Higher scores on the accommodation section and the distress section indicate more frequent accommodation and higher levels of distress, respectively. The accommodation items were shown to have acceptable internal consistency, with Cronbach's alpha of .90 in specialty anxiety clinic samples, and Cronbach's alpha of .91 in the general outpatient sample. Furthermore, accommodation as measured by the FASA was significantly correlated with anxiety symptom severity as measured by the Screen for Child Anxiety and Related Emotional Disorders (Lebowitz & Omer, 2013). Factor analysis revealed a two-factor solution, with one factor relating to parent modifications for the child's anxiety and the other relating to parent participation in the child's symptoms (Lebowitz et al., 2013). In this study, the FASA scale was administered to parents by phone, with the exception of the four items related to the consequences of not engaging in accommodation (which are not included in the total score). In the present sample of participants who completed the extended phone screen (n = 75), the total FASA had good internal consistency ($\alpha = .82$). On the Participation subscale, internal consistency was also acceptable ($\alpha = .74$), as was internal consistency for the Modification subscale $(\alpha = .70)$

Patient Health Questionnaire for Depression and Anxiety. The 4-item version of the Patient Health Questionnaire for Depression and Anxiety (PHQ-4) was used to asses for symptoms of depression and anxiety in caregivers (Löwe et al., 2010). Prior research indicates that parental psychopathology predicts poorer treatment attendance (Gordon, Antshel, Lewandowski, & Seigers, 2010; Nock & Ferriter, 2005). The measure



includes two subscales, as well as a total score. Individuals complete the questionnaire by rating the frequency of symptoms experienced over the previous two weeks on a 4-point Likert scale, with 0 indicating low frequency (*not at all*) and 4 indicating high frequency (*nearly every day*). The initial validation of the scale indicated that internal consistencies for the three scores derived were all acceptable: Cronbach's alpha for the total score was .85, for the Anxiety score $\alpha = .82$, and for the Depression score $\alpha = .81$. In the current sample, scale reliability for the PHQ-4 Total score was high ($\alpha = .84$), and was acceptable for the Anxiety subscale ($\alpha = .70$) and the Depression subscale ($\alpha = .87$).

Measure of acceptability. After viewing the video, families randomized to the Video condition were prompted to rate how helpful they found the video on a scale from 1 to 4, from *not at all helpful* to *very helpful*. The purpose of this item was to assess the extent to which parents found the preparatory video useful. This also served to better determine which families watched the video or did not watch the video. After viewing the video, caregivers were asked to once again rate how resistant they felt their child would be to coming to the first appointment (1 = not at all, 5 = a lot). They were also asked to indicate who viewed the video (i.e., whether both parents viewed it, whether the child viewed it), and to rate their likelihood of showing the video to their child (1 = not at all *likely*, 5 = very likely). Finally, a link to view the video again was provided. Data on time spent on the video page was collected through Qualtrics. A copy of these questions is presented in Appendix D.

Video viewing. Amount of time spent on the Qualtrics survey (which was recorded automatically with Qualtrics data collection) was used as a proxy to determine whether or not the family viewed the video. Because the video was approximately six



minutes long, families who spend three or more minutes on the survey were counted as having viewed the video. Families that spent three or fewer minutes, or did not open the link for the video were counted as not having viewed the video.

Intake attendance. The primary outcome of this investigation was based on attendance at the intake appointment on the date and time originally scheduled. The following information was recorded for each participant: (a) whether or not they attended the intake appointment and (b) the number of times the initial appointment was cancelled and/or rescheduled. Rates of attendance and rescheduling are presented in Table 11.

Data Analysis Plan

The primary method of analysis for this study was logistic regression. Logistic regression is a regression model that allows one to model the relationship between a set of predictor variables and a categorical outcome (Brincks, 2015; Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996). In order to conduct logistic regression using categorical variables, including intervention group and appointment attendance, dummy coding was used. Prior work suggests that use of multiple predictor variables with insufficient events per variable can result in biased regression coefficients (Peduzzi et al., 1996). Given that the number of events (cancellations and no-shows) was low in this study, efforts were made to limit the number of predictor variables, and therefore the ability to control for confounds was limited. However, consistent with Vittinghoff and McCulloch (2007), between five and nine events per variable is acceptable.

Preliminary analyses. To rule out the possibility of confounding variables between the Video and Screening and Usual conditions, chi-square and independent samples *t*-tests were conducted using the phone screen variables.



Aims 1 and 2: Preparatory video versus Screening as Usual. To assess the feasibility and acceptability of the preparatory video intervention, descriptive statistics based on the single-item acceptability measure were examined (Aim 1). In addition, the rate of viewing for those randomized to the Video condition was also examined.

Because the procedures were modified to include additional reminders, Binary logistic regression was used to determine if the addition of reminder emails predicted the odds of viewing the video for the subgroup of participants randomized to the Video condition. Video viewing was dummy coded, with not having viewed the video as the reference category (this included all participants who spent less than three minutes on the video and those that did not view any of the video). Results of the logistic regression were not significant, indicating that the addition of reminder emails did not increase the odds of viewing the video ($\chi^2(1) = 1.50$, p > .05; see Table 12 for results). This may have been the result of a small sample size, as rates of video viewing were observed to increase once the reminders were implemented (37.5% viewed before reminders, compared to 63.16% viewing once reminders were implemented; see Table 10). However, because the results of this regression were not statistically significant, the remainder of the analyses for Aim 2 did not include reminder status as a control variable, as it appeared to have no confounding effects.

To examine the hypothesis that those families who received the preparatory video were more likely to attend the initial appointment (Aim 2), binary logistic regression was planned. However, due to the absence of no-shows from the sample, this analysis could not be conducted. Instead, analyses were conducted using a dummy-coded binary variable that indicated whether the family attended the appointment without rescheduling



or cancelling. This variable was used as the dependent variable in analyses for Aims 2 and 3, and hypotheses regarding attendance remained the same. Specifically, it was hypothesized that the odds of attending the initial appointment (without cancellation or rescheduling) would be significantly higher for those viewing the preparatory video than those in the Screening as Usual condition.

Because not all families viewed the video, additional exploratory analyses were conducted to examine whether baseline characteristics (as reported in the phone screen) predicted video viewing. These predictors included demographic variables, as well as measures collected during the phone screen. As described above, families that spent 3 minutes or longer on the Qualtrics survey were classified as having viewed the video.

Aim 3: Predictors of appointment attendance. Additional analyses were conducted to examine predictors of attendance at scheduled appointments. As described above, because of the low number of cancellations and no-shows, analyses examined baseline predictors of whether or not the family attended the appointment without cancelling or rescheduling at least once. Logistic regression was used with dummy coded randomization condition entered as a covariate in the model. Selection of predictors was based on previous literature and theoretical predictors of non-attendance, including demographic and psychological/attitudinal factors.

Demographic and socioeconomic variables (Aim 3, Hypotheses 1 through 5). Based on previous work examining barriers to treatment (Kazdin, 1996), it was hypothesized that lower socioeconomic status would increase the odds of non-attendance at intake. To assess this, logistic regression using demographic data collected during the phone screen as predictor variables, with randomization condition as a covariate, was



conducted. Lower family income, lower level of parent education, higher number of dependents, and being of minority status were all hypothesized to increase the odds of cancelling or rescheduling the initial appointment. In addition, previous work indicates that older children may be less likely to attend appointments (Benway et al., 2003; Lowman et al., 1984); thus, logistic regression was used to test the hypothesis that older age would increase the odds of cancelling or rescheduling for randomization condition.

Psychological and attitudinal variables (Aim 3, Hypotheses 6 through 9). The extended phone screen assessed various constructs hypothesized to affect treatment attendance. For logistic regression analysis, data collected through this phone screen were used as predictors of cancelling or rescheduling, with randomization group entered as a covariate. It was hypothesized that higher levels of parent psychopathology, as measured by the PHQ-4 (Löwe et al., 2010), would increase the odds of cancelling or rescheduling. Higher levels of family accommodation, as measured by the FASA (Lebowitz et al., 2013), were hypothesized to increase the odds of cancelling or rescheduling. Finally, lower ability to cope with coming to the clinic, as measured by the single-item coping question, was hypothesized to increase the odds of rescheduling or cancelling.



CHAPTER 3: RESULTS

Preliminary Analyses and Descriptive Statistics

Once data collection was completed, data were transferred from data entry forms (for the phone screen) and downloaded from Qualtrics (for those in the Video condition). Data collected on paper was entered into a database by a trained research assistant and checked by a second research assistant. Scales were scored based on instructions given by scale authors. Categorical variables were dummy coded when necessary for analysis. Given the low rate of missing data, listwise deletion was used to handle missing data. All analyses were conducted using SPSS Version 24.0.

A series of independent sample *t*-tests and chi-square analyses examined whether there were group differences between those randomized to the Video condition and those randomized to SAU. On the chi-square tests, there were no significant differences found between the Video and SAU groups on gender, race, ethnicity, parent marital status, history of being hospitalized, history of prior therapy, medication status, or referral source. No significant differences between the Video and SAU group means were observed on the independent samples *t*-tests for average parent level of education, annual income, number of dependents, child's age, child's grade, or scores on the SCARED, FASA, MYTS, PHQ-4 and parent rating of children's coping with coming to the clinic. Results of these analyses are presented in Tables 1 through 9.

Aim 1: Feasibility and Acceptability of Preparatory Video

To evaluate the feasibility and acceptability of the video intervention, descriptive statistics on rate of video viewing and scores on the single-item helpfulness question in the video intervention survey were examined. Because actual video viewing could not be



determined directly, the amount of time spent on the video page was used as a proxy for video viewing. Families that spent three minutes or longer on the video were counted as having viewed the video. Of the 27 participants randomized to the Video condition, 55.6% (n = 15) spent three minutes or longer on the video, 14.8% (n = 4) spent less than three minutes on the video, and 29.6% (n = 8) did not view the video at all. Of the four families that spent less than three minutes on the video, two of these completed the questions presented after the video, but did not view the video (i.e., they likely clicked past the video).

Of those that opened the link for the video (n = 19), most spent between 5 and 10 minutes on the video and survey (63.16%, n = 12). Four people spent less than three minutes on the video and survey (21.05%), and the remaining three spent 40 minutes or longer on the survey (15.8%). This may have been because they opened the link and left it open for a longer period of time before closing their browsers.

Of those that viewed the video, the mean rating for how helpful they found the information in the video was 4.00 (SD = 1.16) on a 5-point scale (5 = very helpful). Consistent with our hypothesis, the video was perceived as moderately helpful to families. However, on average parents reported a moderately low likelihood of showing the video to their child (M = 2.63, SD = 1.50). Of the 16 participants that completed the Qualtrics questions that followed the video, most indicated that one caregiver watched the video alone (n = 14, 87.5%), while two families indicated that both caregivers viewed the video together (12.5%). None of the participants reported that their child watched the video.



Overall, parents rated their child's ability to cope with coming to the clinic as relatively high, based on the phone screen (M = 3.21 on a 4-point scale, SD = 0.90). In addition, those families that were randomized to the Video condition and completed the questions that followed the video reported relatively low concern about their child being nervous or resistant about coming to the clinic (M = 2.63 on a 5-point scale, SD = 1.31). This suggests that there may have been less need for the video intervention than initially anticipated, as children may have expressed little ambivalence or worry about attending the appointment.

Aim 2: Effect of Preparatory Video on Intake Attendance

To examine the effectiveness of the preparatory video for improving intake attendance compared to SAU, binary logistic regression was used. However, as described in Table 11, no family in any condition no-showed for the intake appointment. Even when including cancellations, the low base rate across the sample left insufficient power to conduct the planned analyses. Instead, binary logistic regression was conducted to examine whether the video increased the odds of families attending the appointment without rescheduling or cancelling at any point. This "intent-to-watch" analysis included all participants randomized to the Video condition, whether or not they actually viewed the video. Randomization group was dummy-coded and entered as a predictor, with SAU as the reference category. The five families in the pilot group were not included in the analysis. The results for this regression were not significant and did not support the hypothesis, indicating that the video did not have a significant effect on the odds of cancelling or rescheduling the appointment ($\chi^2(1) = 0.01$, p > .05; see Table 13 for results).



A second logistic regression was done to examine whether actually viewing the video predicted the odds of attending the appointment without cancelling or rescheduling. Video viewing was categorized as described above, with families who watched three minutes or longer of the video being counted as having watched the video. Video viewing was then dummy-coded and entered in the model as the predictor, with not viewing the video as the reference category. The families from the pilot group were not included in the analysis. Results showed that viewing the video did not significantly predict the odds of attending the appointment without cancelling or rescheduling ($\chi^2(1) = 1.50, p > .05$; see Table 14 for full results)

Aim 3: Predictors of Attendance, Controlling for Randomization

As part of the study's third aim, a series of logistic regression analyses were done to determine if demographic and/or psychological and attitudinal variables predicted the odds of appointment attendance, controlling for randomization condition. Because of the low number of cancellations and the absence of no-shows from the sample, these analyses used a dichotomous, dummy-coded variable that was coded to indicate whether or not the family attended the appointment without rescheduling or cancelling at any point. Attendance at the appointment without rescheduling or cancelling was coded as the reference category, so that results could be interpreted in terms of the odds of having cancelled or rescheduled. Randomization condition was entered into the model as a dummy-coded variable (SAU as the reference category) to control for any effects of receiving the video intervention and accompanying tip sheet.

The first set of analyses for this aim addressed demographic and socioeconomic variables. Logistic regression examining family income (in thousands of dollars) as a



predictor of rescheduling or cancelling (controlling for randomization group) revealed a marginally significant result (Aim 3, Hypothesis 2). The odds of rescheduling or cancelling increased by 1% for every thousand-dollar unit change in family income, controlling for randomization condition ($\chi^2(2) = 4.55$, p = .10). Annual family income in thousands of dollars made a marginally significant contribution to the model; B = 0.01, *S.E.* = 0.01, Wald's $\chi^2(1) = 3.52$, p = .06, O.R. = 1.01. Minority status, average parent level of education, the number of dependents, child's age, PHQ-4 scores (subscales and total), FASA scores (subscales and total), and child's ability to cope with coming to the clinic did not significantly predict the odds of rescheduling or cancelling, controlling for randomization condition. The full results of these regression analyses are presented in Table 15.

Exploratory Analysis

Given the relatively low rate of video viewing (51.85% of those assigned to Video condition), a series of exploratory logistic regressions were done to examine whether baseline characteristics (as reported in the phone screen) predicted the odds of viewing the video. Variables were entered as predictors of video viewing (a binary variable determined by having spent three minutes or longer on the video, with not viewing the video as the reference category). Minority status, family income, average parent level of education, number of dependents, child's age, PHQ-4 score (total and subscales), FASA score (total and subscales), as well as SCARED scores were all tested individually as predictors of viewing the video. Results indicated that the model with family income included was a significant predictor of video viewing at the trend level $(r^2(1) = 2.88, p = .09)$. For every thousand-dollar unit change in family income, the odds



of viewing the video decreased by 2% (B = -0.02, Wald's $\chi^2(1) = 2.33$, O.R. = 0.98). None of the other independent variables predicted the odds of viewing the video. Full results of these analyses are presented in Table 16.

To examine other possible associations between measures collected on the phone screen, a final set of exploratory correlations were done. Data from all families who completed the extended phone screen, including those in the pilot condition (n = 75) were used in this analysis. Several zero-order correlations were found to be significant. The number of dependents was positively correlated with scores on the PHQ-4, indicating a higher frequency of parental depressive or anxiety symptoms among parents with more dependents, r(73) = .51, p < .01. Furthermore, scores on the FASA were positively correlated with scores on the SCARED, indicating that greater severity was associated with more family accommodation. Specifically, the total FASA score, as well as the Participation subscale score and the Modification subscale score were positively correlated with SCARED scores (FASA Total with SCARED, r(74) = .417, p < .01; FASA Modification with SCARED, r(74) = .337, p < .01; FASA Participation with SCARED, r(74) = .403, p < .01). Finally, the FASA Participation subscale was inversely correlated with the child's age, suggesting that parents of older children reported less participation in children's anxiety-related behavior, r(74) = -.307, p < .01. A full correlation matrix can be found in Table 17.



CHAPTER 4: DISCUSSION

The burden of youth internalizing disorders is well documented, as are the consequences of untreated internalizing disorders (Bittner et al., 2007; Nolen-Hoeksema et al., 1992; Ryan et al., 1987; Schonfeld et al., 1997). It is well known that these disorders are substantially undertreated, and only a minority of youth receive help for their symptoms (Merikangas et al., 2010). Furthermore, as many as 35% of youth fail to attend initial appointments for treatment (Morrissey-Kane & Prinz, 1999), demonstrating a need to understand the reasons for such non-attendance, as well as the best methods to address this problem.

Overall, the results of this study demonstrate the complexity of investigating nonattendance at psychotherapy, as well the difficulties in understanding how to decrease it. Findings regarding reasons for non-attendance, as well as methods to reduce it are decidedly mixed (Oldham, Kellett, Miles, & Sheeran, 2012). The present study was not able to further identify an effective, novel method to reduce non-attendance, though it provided insight regarding future strategies that might be attempted, as well as insight regarding populations that may have more or less of a need for such interventions. These inconclusive findings shed light on several important considerations that should be made when developing and implementing tools to improve attendance at clinics. These ideas are subsequently discussed.

The primary aim of this research was to determine whether a preparatory intervention was acceptable and feasible for improving first-time attendance at a University-based research clinic. Despite relatively high ratings of the video's helpfulness by those families that did view the video, only about half of the families



randomized to view the video ultimately did so. The addition of reminder emails to encourage people to view the video did not significantly improve rates of viewing, although this null finding may have been a result of the small sample size. Examining the frequencies of video viewing, the rate of families that viewed the video (i.e., spent more than 3 minutes on the Qualtrics survey) nearly doubled when email reminders were added (37.5% of families viewing the video before adding reminders, compared to 63.16% viewing the video after implementing reminders). Unfortunately, given the novelty of this approach for delivering the intervention, no studies to date exist that allow for a comparison of the rates of video viewing in this sample. Though there exist numerous studies that have used preparatory videos like the one studied, all of these videos were delivered in-person at the clinic or research site (e.g., Coleman & Kaplan, 1990; Johansen, Lumley, & Cano, 2011). Because the aim of this study was to increase attendance, in-person viewing of the video would have been impossible.

Exploratory analyses to determine whether any of the variables collected in the extended phone screen predicted the odds of video viewing revealed that family income predicted video viewing at a trend level. This result suggested that for each thousand-dollar unit change in family income, the odds of viewing the video decreased by 2%. One possible explanation for this finding is that more affluent families felt little need to view a preparatory video in the first place, as they experienced fewer barriers to treatment. However, families with more barriers to treatment may similarly experience challenges to viewing the video. Therefore, future studies should carefully consider the best medium for delivering interventions to improve attendance. Those families with significant barriers to attendance may be less likely to access such interventions voluntarily.



Alternatively, families with higher incomes may have additional conflicting demands associated with having a higher level of income, such as more demanding parent work hours or a lessened perceived need for the service itself, either of which may have prompted more frequent rescheduling and/or cancellations.

Our results indicated that the video did not have a significant effect on the likelihood of cancelling or rescheduling. While the initial plan was to examine no-shows, the sample recruited for the study had high attendance rates overall, and no participants no-showed. Even so, the analyses presented in the study were low in power, given the low numbers of families who rescheduled and cancelled. While there is debate in the literature regarding the appropriate number of events per variable needed to conduct logistic regression, and some have asserted that five to nine events per variable is acceptable (Peduzzi et al., 1996; Vittinghoff & McCulloch, 2007), the prevailing view is that there should be at least ten events (Peduzzi et al., 1996). Unfortunately, given the sample size for this study and the high rates of attendance, the events per variable in many of the regressions fell slightly below this. Furthermore, statistical power to detect an effect was low.

It should be noted, however, that such high attendance rates are not representative of what has been reported in the literature for initial attendance at other mental health clinics for youth, which have been previously estimated to range between 15 and 35% (Morrissey-Kane & Prinz, 1999). The rates of attendance in this sample are consistent with the high ratings on the MYTS Treatment Readiness scale, which indicated high levels of motivation. High attendance rates in the present sample may further explain the rate of video viewing, as families may already have been highly motivated to attend, and



therefore did not feel the need to view the video. Given this possibility, using a selective approach to attendance interventions, rather than a universal one, may be more appropriate for clinics with sufficient resources to deliver more intensive services. This might allow clinics to use more intensive, in-person and phone-based interventions like those of Coatsworth et al. (2001). Michelson and Day (2014), and Stern et al. (2014). A selectively delivered strategy could target specifically those families who present with significant barriers to attendance. This may be a more cost-effective method for deploying such interventions, given that these interventions may require greater personnel involvement and more clinic resources.

Another important consideration of research into attendance interventions is the nature of the content that these interventions should include. Approaches for improving appointment attendance have included orientation letters, reminders, opt-in systems, and, more recently, interventions based on motivational theories (Benway et al., 2003; Delgadillo et al., 2015; Schauman et al., 2013; Schauman & Mansell, 2012). These varied approaches, however, have had mixed success. For example, neither Clough and Casey (2014) nor Delgadillo et al. (2015) found an effect for either text message reminders, which addressed forgetting, or orientation leaflets which educated patients on managing approach-avoidance conflicts.

One possibility for these null findings, as postulated by Kazdin (1996), is that different types of interventions may be needed for different clinical populations. In the present study, for example, we found that family income had a marginally significant effect on the odds of cancelling or rescheduling the appointment, such that each unit change in income increased the odds of cancelling or rescheduling. This might be



explained by the fact that higher-income families may be less concerned about cancelling or rescheduling, as they may have access to alternative resources. Similarly, these families may have access to clinics with shorter wait times, and may therefore choose to cancel the initial appointment in order to receive treatment earlier. Therefore, a unique approach may be needed to target such barriers, rather than a "one-size-fits-all" strategy for encouraging families to attend initial appointments.

Another important conclusion from this study was that parents in the sample reported relatively little concern about their children being resistant to coming to the clinic, indicating that the intervention approach used, which focused on helping parents manage children's avoidance, may not have been necessary in this particular sample. And although there was not a significant effect for type of intervention used in this study, which addressed child avoidance and parental accommodation, conclusive evidence regarding predictors of appointment attendance in *any* clinical population of children remains limited, as studies continue to demonstrate mixed and conflicting results. In the absence of clear and consistent predictors of initial appointment attendance, it is difficult to identify appropriate targets for intervention.

Future work examining predictors of appointment attendance in this specific population is warranted to better design interventions that address barriers unique to these samples. Alternatively, newer approaches based on the Theory of Planned Behavior may be more appropriate for parents, like those described in the study protocol developed by Etchegary et al. (2010), as well as recent studies in adult samples (Delgadillo et al., 2015; Schauman & Mansell, 2012), which use Implementation Intentions to increase the likelihood of attending the appointment. One advantage of this theoretical framework for



addressing attendance is that it is applicable to approach-avoidance conflicts, in general, including (but not limited to) those associated with parental accommodation of children's negative affect and anxiety. Such an approach may be one way to target the issue of attendance more broadly, without needing to identify specific predictors.

Notably, although the content of the video intervention in this study did not have an effect on attendance, it is possible that it may have had an effect on other domains that were not measured. For example, research has shown that preparatory videos addressing parent, child, and adult client expectancies for therapy are beneficial for families and for therapy outcomes (Coleman & Kaplan, 1990; Johansen et al., 2011; Shuman & Shapiro, 2002). The present study did not assess parental expectancies for the initial appointment, which may have been changed by viewing the video. Furthermore, data on the information gained from the video (e.g., understanding the nature of parental accommodation) was not collected, and data on treatment outcomes was not examined.

Finally, exploratory correlations demonstrated several interesting associations gleaned from the extended phone screen that may warrant further study. A greater number of dependents reported on the phone screen was positively correlated with higher scores on the PHQ-4, indicating that parents with more dependents may experience more anxiety and/or depressive symptoms. This finding is not surprising, given that having more children to care for poses an additional burden, particularly in families where one child may be experiencing symptoms of an internalizing disorder. In addition, scores on the FASA were significantly correlated with scores on the SCARED. This is consistent with the report of Lebowitz et al. (2013), who found that family accommodation was associated with anxiety disorder severity. This finding makes sense, given that the need



for parental accommodation is often a marker of disorder severity. Finally, scores on the FASA Participation subscale were inversely correlated with children's age, such that younger children had higher scores on the Participation subscale. This is consistent with prior research on family accommodation, which has also shown greater levels of accommodation among younger children (Thompson-Hollands et al., 2014). Younger children likely require more active participation from families to accommodate anxiety, while older children may cope with anxiety more internally, or by avoiding, rather than requesting parental participation in anxiety behaviors. Another possibility is that parents of younger children may struggle to establish a level of involvement that is developmentally appropriate for the child's age without accommodating the child's anxiety (Thompson-Hollands et al., 2014). In addition, several studies have found that family accommodation is highest among youth diagnosed with separation anxiety disorder (Lebowitz et al., 2013; Thompson-Hollands et al., 2014), which is known to have the earliest age of onset among anxiety disorders (mean onset at 6.5 years; E.J. Costello, Egger, Copeland, Erkanli, & Angold, 2011). Thus, the association between parental participation in anxiety and age may be indirect, such that higher levels of accommodation are associated with a diagnosis or symptoms of separation anxiety, which is in turn associated with the child's age. Future research might further examine the developmental course of parental accommodation for anxiety disorders.

Study Limitations

Though the purpose of this study was as a preliminary examination of a tool for improving attendance at intake appointments at a specialty clinic for child internalizing disorders, several limitations are noted. First, our data suggest that the need for an



intervention to address intake attendance may be absent in a specialty clinic such as the one utilized in this investigation, given the relatively homogenous sample, the strong motivation, and the relative lack of non-attendance observed. For example, over the course of the study, none of the families failed to attend the appointment, and only a small number of families called in advance to cancel or reschedule their appointments. Furthermore, parents reported high motivation to engage in treatment, and few parents expressed concerns about their children being resistant to coming to the clinic. As such, several planned analyses could not be conducted, and those that were conducted relied on a small proportion of the sample that cancelled or rescheduled. This can be problematic in logistic regression, as some have argued for a minimum of ten events per predictor variable (Peduzzi et al., 1996; see Vittinghoff & McCulloch, 2007 for an alternative view), and the resulting analyses had low power to detect an effect. Future research in community mental health clinics, and clinics with higher rates of non-attendance will be useful for understanding the utility of a preparatory video for improving attendance. Indeed, rates of non-attendance in this sample were not typical of those reported in the literature, which typically range between 15 and 35% in youth mental health clinics (Morrissey-Kane & Prinz, 1999).

Another limitation was the use of time spent on the Qualtrics page as a proxy for having viewed the video. Though this was the best tool for determining if families viewed the video, it is possible that families opened the link and spent time on the video page without directly viewing or listening to the content. Furthermore, there was no way to determine whether families reviewed the attached handout, which discussed information from the video. It is possible that families who did not view the video



received the same amount of information from the handout, or that some families viewed neither the video nor the handout. Future research should examine the preferred medium of parents for receiving information prior to clinic appointments. It may also be advisable to assess the information gleaned from interventions like the one examined, in order to better determine whether these interventions directly modify attitudes, knowledge, or expectancies.

Given the limited research on video interventions delivered directly to participants (rather than those videos displayed in the clinic), a benchmark for assessing the rate of video viewing in this sample was not available. While the 51.85% of the sample that viewed the video was substantially lower than the 80% of the pilot group that viewed the video, it remains unclear what rate of video viewing would be expected in a sample like this one, or even in other clinical samples.

Several of the measures used on the phone screen, including the SCARED and the MYTS, demonstrated low internal consistency, which limited the ability to draw strong conclusions from the data. In addition, the use of single-item ratings, such as those to assess children's resistance to coming to the clinic, may have compromised our ability to detect predictors of attendance at the clinic. Fortunately, Selles et al. (2017) have recently developed a parent- and child-report measure to assess treatment worries and ambivalence. Indeed, using long-form measures of rating scales is ideal when the option is feasible, given that short-form rating scales cover a narrower range content which may change the construct that is captured by the scale (Widaman, Little, Preacher, & Sawalani, 2011). While using longer measures may have increased internal consistency and may have been more effective for identifying predictors of appointment attendance, it



likely would have compromised the feasibility of the phone screen, given that it would have significantly extended the time required to complete the screen. One way to address the poorer measurement properties of a short-form measure is by using Structural Equation Modeling to develop latent variables of the constructs being evaluated. Use of latent variables for these purposes is advantageous because it partials out measurement error and specific variance (Widaman et al., 2011). While Structural Equation Modeling typically requires a larger sample size, using this strategy in the future for data collected from abbreviated measures may be most appropriate.

Finally, the racial and ethnic composition of this study sample was relatively homogenous, with 96.36% identifying as White, and 78.18% identifying their ethnicity as Hispanic/Latino. Annual income was also quite high, with the mean annual income for the sample reported at over \$101,000 dollars. In addition, most of the sample was referred via pediatricians or word of mouth (27.3% and 36.4%, respectively), and none of them were mandated to receive treatment and were therefore highly motivated. Overall, this sample was likely not representative of the population of families seeking mental health services in the United States, or in the same geographic region where the research was conducted. A more representative sample of those seen in local community clinics, as well as clinics that accept insurance rather than self-paying clients alone, may reveal different findings.

Future Directions

The results of this study indicate that there is still more work to be done to understand predictors of attendance and attrition at youth mental health clinics. To date, findings remain largely inconclusive, as various studies have reported contradictory



results regarding factors that predict attendance at initial clinic visits and attendance throughout the course of therapy (e.g., Benway et al., 2003; Lowman et al., 1984; Sherman et al., 2009) . Though there is some reason to believe that predictors of nonattendance may be specific to clinical populations (Kazdin, 1996), the present sample had relatively low levels of non-attendance, making it difficult to examine this possibility. Research with larger samples at community clinics might be considered as a next step, given that the problem of non-attendance may affect these clinics more than it does specialty clinics. Clinics treating children who are be school- or court-referred for services might benefit from appropriately tailored interventions to address nonattendance, given that motivation may be lower in families that are not self-referred.

Despite the preliminary nature of this study, several exploratory analyses revealed findings that may have implications for future work. Specifically, family income was shown to decrease the odds of viewing the video and to decrease the odds of attending without rescheduling or cancelling the appointment. This suggests that families at a higher income level may be less likely to use informational resources given by clinics, and may be more likely to reschedule or cancel appointments. The precise reason for this relationship is unclear, and future work is warranted to determine the extent to which income affects attendance and adherence with treatment.

Though there exists a body of research examining attrition and absence from youth mental, much of this work has focused on parental variables as predictors, and largely disregards the complex interplay that may take place between children and parents in the process of getting to the clinic, particularly in internalizing disorders where ambivalence may be high. Despite several models of help-seeking for children and



parents, there are relatively few systematic studies to empirically validate these models. In order to assess and intervene with these processes, an empirically driven model is necessary. Perhaps inconsistencies in findings related to attendance at youth mental health clinics will be reduced by a clearer understanding of the dynamics at play between children and parents during the help-seeking process, up until the point of attendance.

Conclusions

This study provides preliminary information regarding initial appointment attendance among families seeking treatment for youth internalizing disorders. Specifically, the results indicate that families in this context have low levels of nonattendance, and efforts may be better spent targeting larger clinics serving a diverse array of presenting problems. Furthermore, while a video intervention was seen as helpful by those parents who viewed it, only about half of those assigned to view the video actually did so. Given this finding, a more efficient or selective method for increasing attendance may be preferred. Even among those families who viewed the video, the results indicated that it had no effect on the odds of attending the appointment without rescheduling or cancelling.

Exploring predictors of video viewing, the results showed that family income was associated with lowered odds of viewing the video. Furthermore, family income was associated with lowered odds of attending the appointment without rescheduling or cancelling, when controlling for randomization condition. Though these findings are preliminary in nature, they indicate the need for further work understanding the role of parental accommodation, and *parent* behaviors that may be utilized in response to children's negative affect and distress, as well as the role family income plays in



predicting adherence and attendance. The exploratory findings also lend support to the idea that more research is needed to understand family accommodation over the course of childhood and among clinical samples of youth with internalizing disorders. Ultimately, this study indicates that more work is needed to precisely predict attendance at clinic appointments, as well as to determine the best strategies to increase attendance. Such research would allow more cost effective and economical use of clinic resources and increase the reach of clinics by allowing them to treat more children more efficiently.



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Measure	M	SD		SD		SD	t df	. 95%
Age	10.96	3.47	10.63	2.82	10.80	3.14	0.39 53	[-1.38, 2.(
Grade	5.89	3.64	5.30	2.77	5.60	3.23	0.68 53	[-1.16, 2.
Number of Dependents	2.68	1.25	2.63	0.88	2.65	1.08	0.17 53	[-0.54, 0.4
Annual Family Income Thousands of Dollars	120.53	102.77	82.29	40.06	101.01	78.81	1.69 45	[-7.22, 83
Average Parent Level of Education	5.54	1.41	5.46	1.26	5.50	1.33	0.20 53	[-0.65, 0.
Coping with coming to clinic	3.36	1.03	3.11	0.89	3.24	0.96	0.95 53	[-0.27, 0.
MYTS Treatment Readiness	4.98	0.08	4.92	0.18	4.95	0.14	1.62 53	[-0.01, 0.
SCARED	4.04	1.84	3.89	2.47	3.96	2.15	0.25 53	[-1.03, 1.
PHQ-4 Total	4.29	2.98	3.96	3.39	4.13	3.16	0.38 53	[-1.40, 2.
PHQ-4 Depression	1.32	1.68	1.44	1.78	1.38	1.72	-0.26 53	[-1.06, 0.
PHQ-4 Anxiety	2.96	1.64	2.52	1.76	2.75	1.70	0.97 53	[-0.48, 1.
FASA Total	16.21	7.43	13.04	7.45	14.65	7.54	1.58 53	[-0.84, 7.
FASA Modification	5.61	3.84	4.33	3.61	4.98	3.75	1.27 53	[-0.74, 3.
FASA Participation	10.61	4.09	8.70	4.72	9.67	4,48	1.60.53	[-0.48, 4

condition.			
	Randomization		
Gender	SAU	Video	Total
Male	17 (60.7%)	16 (59.3%)	33 (60.0%)
Female	10 (35.7%)	11 (40.7%)	21 (38.18%)
Unknown/ Not Reported	1 (3.6%)	0 (0.0%)	1 (1.82%)
3			

Table 2. Results of Chi-Square Test and Frequencies for Gender by RandomizationCondition.

Note. $\chi^2(2) = 1.06$, p > .05. Numbers in parentheses indicate column percentages.



	Randomization		
Race	SAU	Video	Total
American Indian or Alaskan Native	0 (0%)	0 (0%)	0 (0%)
Asian	0 (0%)	0 (0%)	0 (0%)
Black	1 (3.6%)	1 (3.7%)	2 (3.64%)
Native Hawaiian/Pacific Islander	0 (0%)	0 (0%)	0 (0%)
White	27 (96.4%)	26 (96.3%)	53 (96.36%)
More than one	0 (0%)	0 (0%)	0 (0%)
Unknown/Not reported	0 (0%)	0 (0%)	0 (0%)
Black	0 (0%)	0 (0%)	0 (0%)
White	0 (0%)	0 (0%)	0 (0%)

Table 3. Results of Chi-Square Test and Frequencies for Race by Randomization Condition.

Note. $\chi^2(1) = .001$, p > .05. Numbers in parentheses indicate column percentages.



	Randomization			
Ethnicity	SAU	Video	Total	
Not Hispanic/Latino	6 (21.4%)	6 (22.2%)	12 (21.82%)	
Hispanic/Latino	22 (78.6%)	21 (77.8%)	43 (78.18%)	

Note. $\chi^2(1) = .01, p > .05$ Numbers in parentheses indicate column percentages


Table 5. Results of Chi-Square Test and Frequencies for Parent Marital Status by Randomization Condition.

	Randor	_	
Parent Martial Status	SAU	Video	Total
Married	23 (82.1%)	22 (81.5%)	45 (81.8%)
Divorced	4 (14.3%)	4 (14.8%)	8 (14.5%)
Separated	1 (3.6%)	1 (3.7%)	2 (3.6%)

Note. $\chi^2(2) = .004$, p > .05 Numbers in parentheses indicate column percentages.



	Rando		
Has child had prior therapy?	SAU	Video	Total
No	11 (39.3%)	12 (44.4%)	23 (41.8%)
Yes	17 (60.7%)	15 (55.6%)	32 (58.2%)

Table 6. Results of Chi-Square Test and Frequencies for Prior Therapy byRandomization Condition.

Note. $\chi^2(1) = 0.15$, p > .05 Numbers in parentheses indicate column percentages.



 Table 7. Results of Chi-Square Test and Frequencies for Hospitalization History by Randomization Condition.

Has child been hospitalized for	Rando		
psychiatric reasons?	SAU	Video	Total
No	25 (89.3%)	27 (100.0%)	52 (94.5%)
Yes	3 (10.7%)	0 (0.0%)	3 (5.5%)

Note. $\chi^2(1) = 3.03$, p > .05. Numbers in parentheses indicate column percentages.



	Rando		
Referral Source	SAU	Video	Total
Pediatrician	8 (28.6%)	7 (25.9%)	15 (27.3%)
Outside therapist	2 (7.1%)	4 (14.8%)	6 (10.9%)
School	2 (7.1%)	0 (0.0%)	2 (3.6%)
Word of mouth	10 (35.7%)	10 (37.0%)	20 (36.4%)
Website	2 (7.1%)	3 (11.1%)	5 (9.1%)
Presentation in the community	1 (3.6%)	0 (0.0%)	1 (1.8%)
Other source	3 (10.7%)	3 (11.1%)	6 (10.9%)

Table 8. Results of Chi-Square Test and Frequencies for Referral Source byRandomization Condition.

Note. $\chi^2(6) = 3.92$, p > .05 Numbers in parentheses indicate column percentages.



Table 9. Results of Chi-Square Test and Frequencies for Medication Status byRandomization Condition.

Does the child take medication for	Randor		
psychiatric reasons?	SAU	Video	Total
No	23 (82.1%)	21 (77.8%)	44 (80.0%)
Yes	5 (17.9%)	6 (22.2%)	11 (20.0%)

Note. $\chi^2(1) = 0.16$, p > .05 Numbers in parentheses indicate column percentages.



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	Total	19 (100%)		61
· Emails	> 3 minutes	12 (63.16%)	ı	12
Reminder	< 3 min.	3 (15.80%)	I	3
	0 min.	4 (21.05%)	ı	4
	Total	8 (100%)	5 (100%)	13 (100%)
der Emails	> 3 min.	3 (37.5%)	4 (80%)	7 (53.85%)
No Remin	< 3 min.	1 (12.5%)	(%0) 0	1 (7.69%)
	0 min.	4 (50.0%)	1 (20%)	5 (38.46%)
		Video	Pilot	Total

	Rando	Randomization		
	SAU	Video	Total	
Appointment Outcome	%(N)	%(N)	%(N)	
Attended	71.4 (20)	70.4 (19)	70.9 (39)	
Rescheduled	21.4 (6)	14.8 (4)	18.2 (10)	
Cancelled	7.1 (2)	14.8 (4)	10.9 (6)	
No Showed	0.0 (0)	0.0(0)	0.0 (0)	
Total	100.0 (28)	100.0 (27)	100.0 (55)	

Table 11. Frequency of Appointment Outcome by Randomization Condition.



	Odds of Viewing Video					
Predictor	В	S.E. <i>B</i>	Wald's χ^2	O.R.	95% C.I.	
Reminder Emails Received?	-1.05	0.87	1.45	0.35	[0.06,1.93]	
Constant	0.54	0.48	1.28	1.71		
χ^2	1.50					
df	1					
$\overline{p} < .10, **p < .05, ***p < .01$						

Table 12. Logistic Regression of Odds of Video Viewing Regressed on Reminder Emails.



	Odds of Attending the Appointment without						
	Rescheduling or Cancelling						
Predictor	<i>B</i> S.E. <i>B</i> Wald's χ^2 O.R. 95% C.I.						
Randomization group	-0.05	0.59	0.01	0.95	[0.30, 3.04]		
Constant	0.92	0.42	4.80	2.50			
χ^2	0.01						
df	1						
*p < .10, *p < .05, **	**p < .0)1					

Table 13. Logistic Regression of Odds of Attending Appointment without Rescheduling or Cancelling Regressed on Randomization Group.



	Odds	Odds of Attending the Appointment without Rescheduling						
			or Cancel	ling				
Predictor	В	SE B	Wald χ^2	O.R.	95% C.I.			
Video Viewing	1.05	0.87	1.45	1.45	[0.52, 15.77]			
Constant	0.34	0.59	0.33	0.33				
χ^2	1.50							
df	1							
* $p < .10, **p < .05, ***p < .01$								

Table 14. Logistic Regression of Odds of Attending Appointment without Rescheduling orCancelling Regressed on Video Viewing.



	Odds of Attending without Rescheduling or Cancelling					
Predictor	В	S.E. <i>B</i>	Wald's χ^2	O.R.	95% C.I.	
Minority status ^a	1.51	1.10	1.87	4.50	[0.52, 38.94]	
Randomization Condition ^b	0.06	0.61	0.01	1.06	[0.32, 3.48]	
Constant	-2.23	1.10	4.11	0.11		
χ^2	2.55					
df	2					
Annual income in thousands	0.01*	0.01	3.52	1.01	[1.00, 1.02]	
Randomization Condition	0 59	0.73	0.66	1 81	[0.43, 7.55]	
Constant	-2.27	0.84	7.34	0.10	[0.15, 7.55]	
v^2	4.55*	0.01	7.51	0.10		
λ df	2					
Average parent level of	0.42	0.30	2.00	1.52	[0.85, 2,71]	
education	0112	0.00		1.02	[0.00,]	
Randomization Condition	0.10	0.61	0.03	1.10	[0.34, 3.63]	
Constant	-3.30	1.79	3.42	27.09		
χ^2	2.48					
df	2					
Number of dependents	-0.48	0.32	2.22	0.62	[0.33, 1.16]	
Randomization Condition	0.07	0.61	0.01	1.07	[0.32, 3.52]	
Constant	0.30	0.88	0.12	1.35		
χ^2	2.52					
df	2					
Age	-0.13	0.10	1.68	0.88	[0.72, 1.07]	
Randomization Condition	0.02	0.60	0.00	1.02	[0.31, 3.34]	
Constant	0.48	1.13	0.18	1.62		
χ^2	1.78					
df	2					
PHQ-4 Total	-0.02	0.10	0.04	0.98	[0.81, 1.19]	
Randomization Condition	0.05	0.60	0.01	1.05	[0.33, 3.36]	
Constant	-0.84	0.58	2.08	0.33		
χ^2	0.04					
df	2					
PHQ-4 Depression	-0.10	0.18	0.30	0.91	[0.63, 1.30]	
Randomization Condition	0.06	0.60	0.01	1.07	[0.33, 3.42]	
Constant	-0.79	0.47	2.78	0.45		
χ^2	0.32					
df	2					
PHQ-4 Anxiety	0.04	0.18	0.04	1.04	[0.73, 1.47]	
Randomization Condition	0.07	0.60	0.01	1.07	[0.33, 3.46]	
Constant	-1.02	0.68	2.29	0.36	_	
χ^2	0.05					





	Odds of Attending without Rescheduling or Cancelling						
Predictor	В	S.E. <i>B</i>	Wald's χ^2	O.R.	95% C.I.		
df	2						
FASA Total	-0.05	0.04	1.55	0.95	[0.87, 1.03]		
Randomization Condition	-0.12	0.62	0.04	0.89	[0.26, 2.98]		
Constant	-0.07	0.78	0.01	0.93			
χ^2	1.65						
df	2						
FASA Modification	-0.10	0.09	1.36	0.90	[0.76, 1.07]		
Randomization Condition	-0.07	0.61	0.01	0.93	[0.28, 3.07]		
Constant	-0.38	0.61	0.39	0.69			
χ^2	1.45						
df	2						
FASA Participation	-0.08	0.07	1.25	0.92	[0.80, 1.06]		
Randomization Condition	-0.11	0.62	0.03	0.90	[0.27, 3.02]		
Constant	-0.10	0.83	0.01	0.91			
χ^2	1.30						
df	2						
Coping with coming to	-0.07	0.31	0.06	0.93	[0.51, 1.71]		
clinic							
Randomization Condition	0.03	0.60	0.00	1.03	[0.32, 3.34]		
Constant	-0.67	1.11	0.37	0.51			
χ^2	0.06						
df	2						

Note. ^a Minority Status: 1=Yes, 0 = No. ^b Randomization Condition: 1=Video, 0 = SAU. *p < .10, ** p < .05, ***p < .01



v /	Odds of Viewing Video					
Predictor	В	S.E. <i>B</i>	Wald's χ^2	O.R.	95% C.I.	
Minority status	-1.39	1.20	1.34	0.25	[0.02, 2.61]	
Constant	1.39	1.12	1.54	4.00		
χ^2	1.59					
df	1					
Annual income in thousands of	-0.02	0.01	2.33	0.98	[0.96, 1.01]	
dollars						
Constant	1.62	1.13	2.07	5.06		
χ^2	2.88*					
df	1					
Average parent level of	0.15	0.32	0.23	1.16	[0.63, 2.16]	
education						
Constant	-0.61	1.76	0.12	0.55		
χ^2	0.24					
df	1					
Number of dependents	0.55	0.50	1.23	1.74	[0.66, 4.59]	
Constant	-1.21	1.33	0.83	0.30		
χ^2	1.36					
df	1					
Child age	0.09	0.14	0.40	1.10	[0.83, 1.45]	
Constant	-0.74	1.55	0.22	0.48		
χ^2	0.41					
df	1					
PHQ-4 Total	-0.20	0.12	0.03	0.98	[0.78, 1.23]	
Constant	0.30	0.30	0.25	1.35		
χ^2	0.03					
df	1					
PHQ-4 Depression	-0.08	0.22	0.14	0.92	[0.60, 1.42]	
Constant	0.34	0.51	0.46	1.41		
χ^2	0.14					
df	1					
PHQ-4 Anxiety	0.01	0.22	0.002	1.01	[0.65, 1.57]	
Constant	0.20	0.68	0.08	1.22		
χ^2	0.002					
df	1					
FASA Total	-0.07	0.06	1.48	0.93	[0.84, 1.04]	
Constant	1.12	0.84	1.78	3.07		
χ^2	1.58					
df	1					
FASA Modification	-0.07	0.11	0.42	0.93	[0.75, 1.16]	
Constant	0.54	0.63	0.75	1.72	_	
γ^2	0.43					

Table 16. Logistic Regression Examining Predictors of Video Viewing (Exploratory Analysis).



	Odds of Viewing Video					
Predictor	В	S.E. <i>B</i>	Wald's χ^2	O.R.	95% C.I.	
df	1					
FASA Participation	-0.13	0.09	2.04	0.88	[0.74, 1.05]	
Constant	1.37	0.91	2.27	3.93		
χ^2	2.21					
df	1					
SCARED	-0.11	0.16	0.47	0.89	[0.65, 1.23]	
Constant	0.66	0.75	0.77	1.94		
χ^2	0.48					
df	1					
*n < 10 **n < 05 ***n < 01						

p < .10, m p < .05, m p < .01



Meas	sure	1	2	3	4	5	6	7	8	9	10
1.	Age										
2.	Number of	.10									
	Dependents										
3.	Annual Family	21	05								
	Income										
4.	Coping with	04	07	07							
	coming to clinic										
5.	MYTS Treatment	10	.12	.03	.08						
	Readiness										
6.	SCARED	19	01	10	.11	.08					
7.	PHQ-4	.01	.51*	*12	18	08	.08				
8.	FASA	05	02	.14	.01	.02	.34**	.10			
	Modification										
9.	FASA	31**	6.00	08	.07	.15	$.40^{**}$.11	.60**		
	Participation										
10.	FASA Total	22	01	.02	.05	.10	.42**	.12	$.87^{**}$.92**	
11.	Average parent	18	17	.35**	.07	.02	.02	25*	07	17	14
	level of education										

Table 17. Correlations of Phone Screen Measures (Exploratory Analysis).

p* < .10, ** *p* < .05, **p* < .01



Figure 1. Participant Flow





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APPENDIX A

Below is the text of the phone screen that was used as part of the study.

PHONE SCREENING – Child and Adolescent Anxiety and Depression Treatment Introduction: Thank you for your interest in our program. Do you have a couple of minutes for me to briefly tell you a bit about what we do and our process? If YES, proceed with "About CAMAT"

If NO: When would be a good time to call back?

What number can I reach you at?

About CAMAT: We specialize in providing treatment for children and adolescents with anxiety, depression, or emotional difficulties. Generally, we see people between the ages of six to seventeen. Most of the treatment we offer is Cognitive Behavioral Therapy (CBT), which is an evidence-based treatment for mood and anxiety disorders. We also offer other evidence-based treatments as well.

The CAMAT Program is primarily a research and training facility. This means that most of our clinicians are graduate student clinicians currently earning their doctoral degrees in clinical psychology, and are supervised by the direction of CAMAT, Dr. Jill Ehrenreich May. It also means that we often have one or more research studies going on to better understand anxiety and depression, as well as the best ways to treat these disorders. Generally, we offer treatment and assessments at reduced rates or on a sliding scale based on family income.

Screening Process: In order to schedule an appointment, there are a couple of steps to the process. I first need to do a phone screen and get some information about your child (you). From there, I'll review the information with my supervisor. If we



think our program might be helpful for your child (you), we'll schedule an initial assessment in person at our office, or we'll give you some referrals for services in the community that might be a better fit for your child's needs.

If you're scheduled for an in-person assessment, one of our clinicians will interview you and your child separately to get a detailed understanding of what might be going on. Based on this assessment we'll make several treatment recommendations, either through our program or give you referrals in the community. The assessment visit is several hours long, and the whole process can take several weeks, depending on availability of clinicians. I also want to clarify that we won't know until after the assessment, whether we'll be able to offer you treatment.

 Available Now: The phone screen takes about fifteen to twenty minutes. Is now a good time?

If YES: proceed with screen

If NO: When would be a good time to call back?

What number can I reach you at?

General Consent/Confidentiality: Just so you know, I'll be asking some questions about your child's mental health and medical history to see if he/she might be appropriate for treatment through CAMAT. The information I collect will be kept as confidential as possible. Identifying information is kept in locked offices or password protected files accessible only by members of CAMAT. You can skip any questions you do not want to answer, and we can stop the phone screen at any time.

2. Consent: Do you agree to continue? YES/NO



Study Introduction/ Verbal Consent: We are also conducting another small research study to look at how we can prepare parents and children before their first appointment. The purpose of this study is to see if having parents watch a brief video about the appointment can help prepare families for their visit. If you agree to participate, we will ask you several additional brief questions during the phone screen to understand you and your child better. If you are scheduled for the first appointment, we will randomly assign you, like a coin flip, to receive an email with a link to the video, or just a regular confirmation email beforehand. If you and your child are not scheduled, we will do our best to give you referrals to appropriate services. It is your choice to participate in this additional study. You are still eligible to come to our office if you decline participation.

Interest: Would you be interested in participating? YES/NO

If YES,

If you are scheduled for an appointment, and you are assigned to receive the video link, we will send you an email with the link and your appointment information. If you are randomly assigned to receive our standard procedures, we will send you an email link with just the appointment confirmation. Ok, just so you know, as I mentioned, the information we collect about you will be kept as confidential as possible. You can skip any questions you do not want to answer, and you can choose not to participate at any time. The data collected will be retained until the research is complete.

Consent: Do you agree to continue with this study? YES/NO

Child's Information:



3. Child's Name: What is your child's full name?

Make sure name is spelled correctly

If unclear from name: Is your child male or female?

- 4. Age: What is [CHILD]'s Age?
- 5. DOB: What is [CHILD]'s Date of birth?
- 6. School: Where does [CHILD] go to school?
- 7. Grade: What grade is he/she in? [If summer: What grade is he/she going into this fall?]

Parent/Guardian Information:

8. Parent/Guardian Name: Are you his/her parent/guardian? YES/NO

If NO: Explain that a parent/guardian must complete phone screen. Provide contact information for CAMAT to have parent/guardian call back. Do not get contact information for parent/guardian, as the caller may not have their permission to distribute this.

If YES: What is your full name?

- 9. Parent/Guardian Occupation: What is your occupation?
- 10. Parent/Guardian Education: What is the highest level of education you have completed?
- 11. Other Parent/Guardian Name: What is [CHILD]'s father's/mother's full name?Make sure names are spelled correctly
- 12. Other Parent/Guardian Occupation: What is [CHILD]'s father's/mother's occupation?



- 13. Other Parent/Guardian Education: What is the highest level of education [CHILD]'s father/mother has completed?
- 14. Marital Status: Are you and [CHILD]'s father/mother married? YES/NO

If YES: Indicate shared custody

Custody: If NO: Who has legal custody for [CHILD]?

Contact Information:

- 15. Mailing Address: What is your mailing address?
- 16. Primary Phone: What is the best number to reach you?

Is this a cell phone, home phone, or work phone?

17. Other Phone: Are there any other numbers where we can reach that you want us to have on file?

Is this a cell phone, home phone, or work phone?

18. Email: What is your email address?

Fee Information:

- **19.** Yearly Income: **Because our fees are on a sliding scale based on combined family income and number of dependents, do you have an estimate of your family's yearly income?**
- 20. Dependents: How many dependents do you have?
- 21. UM Employee: Are you an employee of the University of Miami? YES/NO

Child's Background/History:

- 22. Height: What is your child's approximate height?
- 23. Weight: What is his/her approximate weight?
- 24. fMRI exclusion: Does he/she have braces or any other metal in his/her body?



- 25. Race: What is his/her race?
- 26. Ethnicity: Is he/she Hispanic or Latino?
- 27. Referral Source: How did you find out about our program?

If mental health professional, get the name

28. Chief Complaint: Can you tell me briefly what the major problem is right now for which you are seeking help?

NOTE: When obtaining information, get specific examples of behaviors and impairment. Ask information about duration and how long problems have been this severe

- 29. School Refusal: Is your child having difficulty attending school? YES/NO
- 30. Previous Therapy: Has he/she been in treatment or is he/she presently being

treated by someone (e.g., minister, family doctor, self-help groups, psychologist,

etc.)? Has he/she ever received Cognitive Behavioral Therapy?

For each treater find out: When?

Where/With Whom?

What was it for?

What type of therapy was this (was it CBT)?

31. Past Hospitalizations: **Has your child ever been hospitalized for emotional**

problems or for substance abuse problems? YES/ NO

NOTE: If the child has been hospitalized within the past 12 months, consult with Dr. Jill Ehrenreich May

For each instance find out: When/How Long?

Where?



Why?

32. Medications: **Is he/she presently taking any psychiatric medications?** YES/ NO *NOTE: Some studies require a stabilization period for medications (i.e. one month stabilization for benzodiazepines and three months for SSRIs, SNRIs, or tricylclic meds/psychotherapy)*

For each medication find out: What medications is he/she taking?

Who prescribes this?

How long has he/she been taking this medication at this dose?

33. Learning Disability/ADHD: **Has your child been diagnosed with a learning**

disability, ADHD, or other learning problem? YES/ NO

If YES: What has he/she been diagnosed with?

34. Special Ed: **Does your child receive Special Education services at school?** YES/NO

If YES: What services does he/she receive?

35. Past Psych Eval: Has your child ever received a CORE evaluation,

neuropsychological testing, or a psychoeducational evaluation? YES/NO

If YES: What kind of evaluation was this?

NOTE: If the child has had any past testing, has a learning disability, or receives Spec. Ed. services, ask the parents to bring any psychological evaluations or the Individualized Education Plan (IEP) with them to the ADIS.

Inclusion/ Exclusion Criteria:

 English-Speaking: Do you and your child speak and understand English? YES/NO



 Substance Abuse (ask if older than 12): Does your child have any alcohol or substance abuse issues? YES /NO

If YES: Can you tell me more about that?

Obtain information about which substances, frequency, and duration of use. NOTE: The program may accept children with substance abuse if they have a primary anxiety disorder.

3. Psychotic Symptoms/schizophrenia: Does your child ever see or hear things other people don't see or hear? YES/NO

If necessary, clarify: These would be things like voices or images that your

child sees, not just when he/she is tired, and not like imaginary friends.

If YES: Can you tell me about that?

How long has this been happening?

4. Bipolar I or II: Has your child ever been diagnosed with Bipolar disorder? YES/NO

If YES: Can you tell me more about this?

When was he/she diagnosed? Who diagnosed him/her?

5. Organic brain syndrome: Does your child have any organic brain syndrome?

YES/NO

If YES: Can you tell me more about this?

 Pervasive Developmental Disorder: Did your child have any developmental delays, such as delays in speech or language? YES/NO

If YES: Can you tell me more about this? At what age did he/she begin to speak?



 a. Does your child have difficulty connecting with others, difficulty with peer relationships, or delays with social communication/relationships? YES/ NO If YES: Can you tell me more about this?

What kind of difficulties does he/she have?

7. Mental Retardation: Does your child have intellectual difficulties or an intellectual disorder? YES/NO

If YES: Can you tell me more about this?

Do you have an estimate of what his/her IQ is?

- 8. Suicidality/Homicidality: Are you aware of [CHILD] having any thoughts about hurting or killing him/herself? YES/NO
 - a. Has he/she been having any thoughts of harming other people? YES/NO If YES: Screen further for suicide/homicide risk, Refer to crisis intervention guidelines.
- 9. Parent/caregiver availability: We require children to have a parent/caregiver accompany them to all visits. Because we often do assessments for research purposes, it is preferred that the same parent/caregiver attend these assessment visits. Would your child have a parent/caregiver available to accompany him/her to all treatment and assessment visits? YES/NO

Other Information:

1. Siblings: Does your child have any siblings? YES/NO

If YES: What are their names?

How old is [SIBLING]?



If siblings under 18: **CAMAT often Partners with another research group on** campus that studies the brains of people with and without anxiety. Would it be ok to give them your contact information, so that someone from their group can call you to tell you more about their research and see if your other children might be interested in participating? YES/ NO

If family consented to Initial Appointment Attendance Sub-Study:

I would like to ask you some additional questions as part of our study to prepare families for the first appointment. During these questions, I will ask you to rate items on a scale; so just your rating is fine to answer these questions.

A. Child Anxiety (brief parent SCARED): I am going to read you some sentences that describe how children feel. For each sentence, tell me if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" for your child during the last 3 months. Let me know if you need me to repeat any questions or any answer choices.

	Not True or Hardly Ever True	Somewhat True or Sometimes True	Very True or Often True
1. My child gets really frightened for no reason at all.	0	1	2
2. My child is afraid to be alone in the house.	0	1	2
3. People tell me that my child worries too much.	0	1	2
4. My child is scared to go to school.	0	1	2
5. My child is shy.	0	1	2

B. Family Accommodation of Anxiety (FASA): First, I'm going to read a list of

statements relating to children's anxiety and worries. For each of them I want

you to tell me how often they have happened in your family over the past month-



the answer choices are: Never, 1 to 3 times a month, 1 to 2 times a week, 3 to 6

times a week, or daily. Let me know if you need me to repeat any questions or

In	the last month:	Never	1-3 times/ month	1-2 times/week	3-6 times/week	Daily
1.	How often did you reassure your child?	0	1	2	3	4
2.	How often did you provide items needed because of anxiety?	0	1	2	3	4
3.	How often did you participate in behaviors related to your child's anxiety? [e.g. routines to help them feel less anxious]	0	1	2	3	4
4.	How often did you assist your child in avoiding things that might make him/her more anxious?	0	1	2	3	4
5.	How often have you avoided doing things, going places, or being with people because of your child's anxiety?	0	1	2	3	4
6.	How often have you modified your family routine because of your child's symptoms?	0	1	2	3	4
7.	How often have you had to do things that would usually be your child's responsibility?	0	1	2	3	4
8.	How often have you modified your work schedule because of your child's anxiety?	0	1	2	3	4
9.	How often have your modified your leisure activities because of your child's anxiety?	0	1	2	3	4

C. Motivation for Treatment (MYTS): Now, I'm going to read a list of statements

about how parents or caregivers might feel about their child getting treatment.

For each statement, I want you to tell me <u>currently</u>, on a 1 to 5 scale, whether


you agree with them, with 1 being "strongly disagree" and 5 being "strongly

agree". Let me know if you need me to repeat any questions or any answer

choices.

		Strongly	Disagree	Neither	Agree	Strongly
		Disagree		Agree		Agree
				Nor		
				Disagree		
1.	Getting treatment for my	1	2	3	4	5
	child's problems seems like a					
	good idea to me.					
2.	I want help finding solutions	1	2	3	4	5
	for my child's problems.					
3.	My participation in my	1	2	3	4	5
	child's care is important for					
	him/her to get better.					
4.	I am willing to make some	1	2	3	4	5
	changes in my life to help my					
	child become better.					
5.	It is my decision to get	1	2	3	4	5
	treatment for this child.					

D. Parent Psychopathology (PHQ-4): Now I'm going to read a list of problems. I want to know how often <u>you</u> have been bothered by these problems over the last <u>two</u> <u>weeks</u>. Please tell me if they have bothered you on a 0 to 3 scale, with 0 being *"not at all"*, 1 being *"several days"*, 2 being *"more than half the days"*, and 3 being *"nearly every day"*. Let me know if you need me to repeat any questions or any answer choices.

		Not	Several	More	Nearly
		at	days	than	every
		all		half	day
				the	
				days	
1. F	eeling nervous, anxious, or on edge	0	1	2	3
2. N	Not being able to stop or control worrying	0	1	2	3
3. L	ittle interest or pleasure in doing things	0	1	2	3
4. F	eeling down, depressed, or hopeless.	0	1	2	3



Now I have a couple of questions about your child:

E. Parent Report of Child Appointment Difficulty: On as scale from 1 to 4, with 1

being very well to 4 being very poorly:

	Very			Very
	Well			Poorly
1. How well do you think your child would cope with coming to the clinic?	1	2	3	4

ASSESSMENT SCHEDULING

If family consented to Initial Appointment Attendance Sub-Study [VIDEO

INTERVENTION]: If you would like to schedule an assessment, we can do that now. To remind you, the assessments are several hours long. They usually last 4-5 hours, and can sometimes take longer. During the assessment, a clinician will interview your child and then you (or the person who accompanies your child to the visit) about the problem he/she has been having lately. It's best if the person who comes is the parent/guardian who knows most about what's being going on with your child.

I'll be sending an email with important information about the appointment and how to get to our location, which can sometimes be difficult to find without directions.

If randomized to video intervention: This email will also include a link to the video we discussed earlier. The video is X minutes long. Please take a moment to watch it. At the end we will ask you what you thought of it.

The fee for the assessment will be [FEE]



If reduced: We'll need you to bring documentation of your income to confirm this quote.

I'll also be sending you some forms for you to print and fill out for your appointment. Due to high demand, we have a strict cancellation/rescheduling policy, which is described in the email.

If you have any other questions before your appointment, please feel free to give us a call.

If family DID NOT consent to Initial Appointment Attendance Sub-Study, OR

SCREENING AS USUAL CONDITION:

If you would like to schedule an assessment, we can do that now.

To remind you, the assessments are several hours long. They usually last 4-5 hours, and can sometimes take longer. During the assessment, a clinician will interview your child and then you (or the person who accompanies your child to the visit) about the problem he/she has been having lately. It's best if the person who comes is the parent/guardian who knows most about what's being going on with your child.

I'll be sending an email with important information about the appointment and how to get to our location, which can sometimes be difficult to find without directions.

The fee for the assessment will be [FEE]

If reduced: We'll need you to bring documentation of your income to confirm this quote.



I'll also be sending you some forms for you to print and fill out for your appointment. Due to high demand, we have a strict cancellation/rescheduling policy, which is described in the email.

If you have any other questions before your appointment, please feel free to give us a call.

REFERRALS OUT

Suggested script for referring people out based on phone screen

At this time, we don't have treatment options that would be a good fit for your child and his/her needs. I have some contact information for resources or places that

might be able to help you out, and I'm happy to share those with you.

Document action taken or referrals provided

If child/adolescent is not scheduled for assessment, indicate reason



APPENDIX B

Below is a transcript of the video that will be delivered to caregivers randomized to the video intervention.

Hello, my name is Dr. Jill Ehrenreich-May, and I'm the Director of the Child and Adolescent Mood and Anxiety Treatment Program at the University of Miami. I'd like to take a few minutes to talk to you today about your first appointment with us, and what you and your child can expect. First, I'll talk about getting to the appointment and what the appointment will be like. Then, I'll talk about ways you and your child can prepare for the appointment.

The appointment will be about 4 or 5 hours long, but it may be shorter or longer depending on how much you and your child have to share with us. That may seem like a long time. But, I can guarantee that we will use this opportunity wisely to get to know your child and family in a way that will help us to best personalize your child's care here at CAMAT. We encourage you to bring snacks and activities to the appointment for your child. During the first part of the appointment, a member of our team will meet with you and your child to talk about what to expect. After this brief meeting, we'll ask you, the parent or caregiver, to answer some questionnaires in our waiting room. During this time, one of our clinicians will meet with your child alone to talk about what's been bothering him or her. We'll then take a quick break, and switch for the second half of the appointment. We'll meet with the parents to talk about what's going on with their child and what's been bothering them. While you're being interviewed, your child will be in another room nearby working with one of our staff to complete questionnaires and other related activities.



Our clinic is located on the second floor of the Flipse Building, at the University of Miami, on 5665 Ponce De Leon Blvd. Using Google Maps, you can search our location by entering "University of Miami Department of Psychology. If you arrive by car, you can park in the garage attached to the building on the second floor in the spots marked for the Psychological Services Center. We are also located within walking distance of the metro. If you have any trouble finding us, you can give us a call!

It's common for kids to feel nervous or upset before coming to see us. For many kids, this is a new experience for them. Our goal is to make things easier for you and your child, so we'd like to share a few things we think are helpful to know before your appointment.

- We have a lot of experience working with kids who are nervous or upset during their first appointment. Because of that, we work very hard to help them feel comfortable and at ease when they meet with us. We are used to this and prepared to deal with it.
- At times, children or parents might consider canceling or postponing their appointment because they are worried or nervous or just don't know what to expect. When children are nervous, they might try to avoid the things that make them nervous; avoidance is a common coping strategy that children use.
- Avoidance may manifest itself in many different ways—sometimes kids complain about feeling too tired to sick to come to session, or that they have too much homework, are afraid about talking to someone new about their feelings, or are worried someone from their school might see them here, and some might even be



angry about coming. It's important to realize that these might be avoidance strategies if your child is nervous about coming.

- Understandably, many parents don't want to see their child in distress, or may feel distressed themselves while discussing anxiety and other emotional experiences, so some parents might think to cancel or reschedule the appointment if their children suggest that they are very worried or upset about the appointment.
- But we think it's important to remember that the anxiety or distress you or your child are feeling right now is temporary, and that bringing them to the appointment will likely benefit them in the long run.
- We encourage you to talk to your child before the appointment and tell them what the appointment will be like, and what we'll be talking about. This will help you gauge how they're feeling about coming to the appointment and clarify any misunderstandings.
- If your child is nervous or doesn't want to come, you can validate those feelingsyou can say something like, "I understand that you might be nervous or upset before the appointment. Let's see if it gets better once we get there and see what the appointment is all about."
- If your child is feeling ambivalent about coming to the appointment, they might ask a lot of questions or ask you to reassure them. We encourage parents to help children *tolerate* their anxiety, rather than reassure them everything will be ok. You can say something like, "I know you're feeling nervous about this, but I think it's important that we do it. Even though it doesn't seem like it right now, I think this may help you in the long run."



• Finally, be a cheerleader for your child. Getting help is an important step that your whole family is embarking on. So you can provide them with support and encouragement to help them through difficult situations by telling them how proud you are of them for making it to the appointment - even if they were upset or had otherwise had difficulties beforehand.

If you're still concerned about your child coming to the appointment, or if you're having difficulty getting them in the door, give us a call.

We hope you find this information helpful, and we look forward to seeing you soon! [Cut to screen with CAMAT phone number]



APPENDIX C

Below is a copy of the "tips sheet" which will be provided to parents randomized to the video intervention.

Tips for Your Child's First Appointment

Thank you for making your appointment at the Child and Adolescent Mood and Anxiety Treatment Program (CAMAT)! We would like to share some information and tips that we think might be helpful before you arrive for your appointment.

About the appointment:

- The appointment will be about 4 or 5 hours long, but it may be shorter or longer depending on how much you and your child have to share with us. We want to get to know your child and family so that we can personalize your care at CAMAT.
- We encourage you to bring snacks and activities to the appointment for your child.
- The appointment schedule will be as follows:
 - During the first part of the appointment, a member of our team will meet with you and your child to talk about what to expect.
 - After this, we'll ask you, the parent or caregiver, to answer some questionnaires in our waiting room. During this time, one of our clinicians will meet with your child alone to talk about what's been bothering him or her.
 - We'll then take a quick break
 - For the second half of the appointment, we'll switch. We'll meet with the parents or caregivers to talk about what's going on with their child and what's been bothering them. While you're being interviewed, your child



will be in another room nearby working with one of our staff to complete questionnaires and other related activities.

Getting to our office and parking:

- Our clinic is located on the second floor of the Flipse Building, at the University of Miami, on 5665 Ponce De Leon Blvd.
- Using Google Maps, you can search our location by entering "University of Miami Department of Psychology.
- If you arrive by car, you can park in the garage attached to the building on the second floor in the spots marked for the Psychological Services Center.
- We are also located within walking distance of the metro.
- If you have any trouble finding us, you can give us a call!

Tips for preparing your child:

- It's common for kids to feel nervous or upset before coming to see us. For many kids, this is a new experience for them. Our goal is to make things easier for you and your child, so we'd like to share a few things we think are helpful to know before your appointment.
- We're prepared to help, if your child is nervous or upset about the appointment. We have a lot of experience working with kids who are nervous or upset during their first appointment. Because of that, we work very hard to help them feel comfortable and at ease when they meet with us. We are used to this and prepared to deal with it.
- Children might try to avoid the appointment because they are nervous. At times, children or parents might consider canceling or postponing their



appointment because they are worried or nervous or just don't know what to expect. When children are nervous, they might try to avoid the things that make them nervous; avoidance is a common coping strategy that children use.

- Avoidance may manifest itself in many different ways—sometimes kids complain about feeling too tired to sick to come to session, or that they have too much homework, are afraid about talking to someone new about their feelings, or are worried someone from their school might see them here, and some might even be angry about coming. It's important to realize that these might be avoidance strategies if your child is nervous about coming.
- Seeing your child in distress can be difficult, but we think attending the appointment will be beneficial, long term. Understandably, many parents don't want to see their child in distress, or may feel distressed themselves while discussing anxiety and other emotional experiences, so some parents might think to cancel or reschedule the appointment if their children suggest that they are very worried or upset about the appointment.
 - But we think it's important to remember that the anxiety or distress you or your child are feeling right now is temporary, and that bringing them to the appointment will likely benefit them in the long run.
- Talk to your child before the appointment to tell them what wit will be like. We encourage you to talk to your child before the appointment and tell them what the appointment will be like, and what we'll be talking about. This will help you



gauge how they're feeling about coming to the appointment and clarify any misunderstandings.

- If your child is nervous, express empathy and help them *tolerate* their discomfort, rather than reduce it. If your child is nervous or doesn't want to come, you can validate those feelings- you can say something like, "I understand that you might be nervous or upset before the appointment. Let's see if it gets better once we get there and see what the appointment is all about."
 - If your child is feeling ambivalent about coming to the appointment, they
 might ask a lot of questions or ask you to reassure them. We encourage
 parents to help children *tolerate* their anxiety, rather than reassure them
 everything will be ok. You can say something like, "I know you're feeling
 nervous about this, but I think it's important that we do it. Even though it
 doesn't seem like it right now, I think this may help you in the long run."
- Be a cheerleader for your child when they tolerate their discomfort. Finally, be a cheerleader for your child. Getting help is an important step that your whole family is embarking on. So you can provide them with support and encouragement to help them through difficult situations by telling them how proud you are of them for making it to the appointment even if they were upset or had otherwise had difficulties beforehand.
- If you're still concerned about your child coming to the appointment, or if you're having difficulty getting them in the door, give us a call.

CAMAT

(305) 284-9852, Ext. 0



APPENDIX D

Below is the text that appeared in the electronic data capture system. Families randomized to receive the video intervention were sent a link to this system.

Thank you for scheduling your first appointment at the Child and Adolescent Mood and Anxiety Treatment (CAMAT) Program!

As discussed over the phone, we are conducting another small research study to understand how we can help prepare parents and their children for their first appointment. The purpose of this study is to see if having parents watch a brief video about the appointment can help prepare families for their visit. After reading this you'll see a button to move to the next screen, which will take you to a video that we think might be helpful for you and your child.

We ask that you take a few minutes to view this video. After watching the video, we'll ask you to answer a couple of questions about the video. In total, your participation should take about 7 minutes.

Video Player



Click Next to proceed to questions.

[Once the video is completed, the following will appear on the next screen]

Please answer the following questions:



How much do you think that your child will be nervous or resistant about coming to their

first appointment?

Not at all				A Lot
1	2	3	4	5

Please rate how helpful you found the information shared in the video.

Not At All				Very Helpful
Helpful				
1	2	3	4	5

Who viewed the video (Check All That Apply)?

Me alone (the parent/caregiver)
The child's other parent/caregiver (mother/ father)
My child

[If "My child" not checked, the following appears]

How likely are you to show the video to your child?

Not At All				Very Likely
Likely	2	3	4	5
1	2	5	4	5

If you would like to view the video again, you may do so here:

[Link to video]

[Once the questions are answered, the following will appear on the screen]

Thank you for your time!

Child and Adolescent Mood and Anxiety Treatment Program

University of Miami

(305) 284- 9852 Ext. 0



Coral Gables, FL 33146