

2008

The role of the theory of planned behavior in therapists' involvement of parents in youth treatment

SherECE Antoinette Fields
University of South Florida

Follow this and additional works at: <http://scholarcommons.usf.edu/etd>

 Part of the [American Studies Commons](#)

Scholar Commons Citation

Fields, SherECE Antoinette, "The role of the theory of planned behavior in therapists' involvement of parents in youth treatment" (2008). *Graduate Theses and Dissertations*.
<http://scholarcommons.usf.edu/etd/238>

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

The Role of the Theory of Planned Behavior in Therapists' Involvement of Parents in
Youth Treatment

by

Sherecce Antoinette Fields

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Psychology
College of Arts and Sciences
University of South Florida

Major Professor: Vicky Phares, Ph.D.
Marc Karver, Ph.D.
William Sacco, Ph.D.
Kristen Salomon, Ph.D.
Doug Rohrer, Ph.D.

Date of Approval:
June 30, 2008

Keywords: parents, psychotherapy, children, clinician behavior, attitudes

© Copyright 2008, Sherecce A. Fields

Dedication

This dissertation is dedicated to the memory of my father. Your memory has continued to inspire me to be the best me I can be.

Acknowledgments

I would like to thank my advisors Dr. Vicky Phares and Dr. Marc Karver for all of their advice and encouragement during the completion of this project and throughout my journey as a graduate student. I would like to thank the members of both the family research group and alliance lab for their companionship and help in completion of this project. I would also like to thank my friends, Erin Clark, Elena Lopez and Ted Dwyer for their friendship and aid when I needed support. I would especially like to thank my mother, JoAnn, my sister, Nekashia and my brother, David for believing in me and giving me lots of love. Last but not least, I would like to thank my husband, Martin, for his love and understanding and many, many backrubs.

Table of Contents

List of Tables	iii
List of Figures	iv
Abstract	v
Introduction	1
Theory of Planned Behavior	2
Behavioral Intention	3
Attitude	4
Subjective Norm	5
Perceived Behavioral Control	7
Application of the Theory of Planned Behavior	9
Health Professional Attitudes	10
Importance of Parental Involvement in Youth Mental Health Treatment	13
Parental Involvement in Therapy	14
Intake/Evaluation	14
Treatment Initiation and Participation	16
Treatment Outcome	18
The Current Study	24
Methods	26
Participants	26
Measures	27
TPB Questionnaire	27
Demographics Questionnaire	30
Procedure	31
Results	33
Descriptive Statistics	33
Correlational Analyses	34
Path Analysis	35
Follow-up Analyses	39
Subjective Norm	39
Demographics	39

Correlational Analyses between Therapist Demographics and TPB variables	42
Posthoc ANOVA Analyses	44
Gender	46
Ethnicity	47
Education	48
Therapeutic Orientation	49
Discipline	50
Practice Setting	52
Discussion	54
Posthoc Analyses	56
Attitude	56
Subjective Norm	57
Perceived Behavioral Control	58
Behavioral Intention	58
Limitations	59
Implications	60
Future Directions	61
Conclusions	62
References	63
Appendices	81
Appendix A: Pilot TPB Questionnaire	82
Appendix B: Revised TPB Questionnaire	85
Appendix C: Demographics Questionnaire	88
Appendix D: Invitation Letter	91
Appendix E: Informed Consent	92
About the Author	End Page

List of Tables

Table 1	Means and standard deviations for TPB subscales	34
Table 2	Pearson correlations between TPB subscales	35
Table 3	Summary of correlation analyses between demographic variables	41
Table 4	Summary of correlation analyses between demographic and TPB variables	42
Table 5	Means and Standard Deviations for Categorical Demographic Variables	45
Table 6	Analysis of Variance for Gender	46
Table 7	Analysis of Variance for Ethnicity	47
Table 8	Analysis of Variance for Education	49
Table 9	Analysis of Variance for Therapeutic Orientation	50
Table 10	Analysis of Variance for Discipline	51
Table 11	Analysis of Variance for Practice Setting	53

List of Figures

Figure 1.	Results of Original Path Analysis of Intention	36
Figure 2.	Results of the Revised Path Analysis of Intention	37
Figure 3.	Results of the Final Path Analysis of the Theory of Planned Behavior	38

The Role of the Theory of Planned Behavior in Therapists' Involvement of Parents in
Youth Treatment

Sherecce A Fields

ABSTRACT

The theory of planned behavior has been studied in a wide variety of health related research. One area that has not evaluated the relevance of the TPB is that of therapists' attitudes for involving parents in treatment. The current study examined the feasibility of Ajzen's (1985) Theory of Planned Behavior for explaining whether or not therapists include parents in treatment. Participants in this study were therapists with at least one-year experience in treating youth under the age of 11. It was hypothesized that all of the variables of the TPB would be significant predictors of therapists' intention to include parents in treatment. Overall, results of this study provided support for the role of the Theory of Planned Behavior in predicting therapists' inclusion of parents in youth treatment although subjective norm was not a significant predictor of intention and subsequent inclusion of parents in youth treatment. Results of posthoc analyses reveal that there are several therapist demographic characteristics that are related to TPB constructs. Specifically, coursework and training in Family Systems was found to be related to positive attitudes about involving parents in treatment. Also, therapists in practice settings were much more likely to intend to include parents in youth treatment than those in school settings. In addition, therapists' estimate of the percentage of the

percentage of time others in the field include parents in youth related treatment was significant predictor of their ratings of subjective norm. These results highlight the importance of the relationship between therapist training and orientation and attitudes toward parental involvement. They also highlight the importance of examining precursors to the development of TPB constructs. Clinical implications of these results are discussed.

Introduction

Emotional/behavioral problems in children and adolescents are an important national issue. Based on an epidemiological study and other more recent research (Goodman, Hoven, & Narrow, 1998; Jaffee, et al., 2005; Roberts, Roberts, & Xing, 2007), it is estimated that between 6.6 and 39.0 % of children and adolescents in the US meet criteria for a psychiatric disorder. Unfortunately, only approximately 30% of children in need of treatment ever receive psychiatric services (Kazdin, 1996). According to The Surgeon General (1999), the assessment and recognition of mental health problems in children and the integration of child and family mental health services into all systems that serve youth are important goals.

Although children and adolescents can sometimes receive mental health services at school, the majority needs to rely on their parents to initiate treatment and maintain their access to treatment. It is usually the responsibility of the parent to determine treatment sight, need for treatment, and monitor attendance and adherence (Nevas & Farber, 2001). Therapist attitudes and behaviors can influence the parental relationship and subsequently, child attendance and adherence (Orrell-Valente et al., 1999). This study explored the validity of the Theory of Planned Behavior to predict therapist inclusion of parents in treatment for their children.

Theory of Planned Behavior

The Theory of Planned Behavior (Ajzen, 1985, 1991) suggests that individuals' acting out a behavior could be directly predicted by their intentions to act. These intentions are based on their attitudes toward engaging in the action (do they feel that the behavior will result in the outcome they want), their perceived behavioral control (do they feel confident in their ability to engage in the behavior), and their subjective norm (perceived social pressure to engage in the behavior). For example, in a study of condom use (Sutton, McVey & Glanz, 1999), the extent to which condom use was seen as being associated with fewer personal costs and increased personal benefits (measure of attitude), the extent to which individuals believed that important others viewed condom use as important (subjective norm), as well as the perception of potential difficulty of using condoms and their level of control over using condoms (perceived behavioral control) were all significantly related to individuals' intention to use condoms.

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA) posited by Fishbein and Ajzen (1974), which included the attitude and subjective norms components, but not the component of perceived behavioral control. The TPB was designed to be an extension of the TRA, which would accommodate behaviors that are not entirely under an individuals' volitional control such as problem drinking (Schlegel et al., 1990), weight loss (Schifter & Ajzen, 1985), and gift giving (Netemeyer, Andrews, & Durvasula, 1993). Because the TPB is more relevant to this area of study, the components of the TPB are reviewed next.

Behavioral intention

Intentions, according to the TPB, are designed to encapsulate the motivational factors that influence how a human behaves (Ajzen, 1991). According to Ajzen, the intention construct gives an indication of the effort people are willing to exert as well as how hard they are willing to work for a behavior. The TPB posits that the intention to act is directly related to actually engaging in the behavior. Notably, a major implication of the Theory of Planned Behavior is that intention will predict behavior better than attitude (Garling & Fujii, 2002).

Intention has been shown to be directly related to behavior (Millstein, 1996). Using hierarchical regression, Millstein found that intention to perform a behavior added a significant amount of variance over and above that of attitudes, social norms, and perceived behavioral control, which lends support for its placement in the model. In a meta-analysis by Sheppard, Hartwick, and Warshaw (1988), behavioral intention was found to be significantly related to subsequent behavior (mean $r = .49$). Intention has been found to account for 20-40% of variance in social and health behaviors in prospective studies (Armitage & Conner, 1991; Conner & Sparks, 1996; Godin & Kok, 1996). A more recent study found that TPB variables (i.e. subjective norm, perceived behavioral control, and attitude) accounted for 73% of the variance in individuals' intention to donate blood (Giles, McClelahan, Cairns, & Mallet, 2004). Based on the evidence, it seems reasonable that behavioral intention could be a mediator between the TPB constructs of attitude, subjective norm and perceived behavioral control and actual behavior.

Attitude

Attitude is a construct that has received considerable attention in the social sciences over the years (Oskamp & Schultz, 2005). Gordon Allport proposed the first comprehensive definition of the construct of attitude in 1935. His definition stated that attitude was a state of readiness. This state is developed by experience and has a dynamic influence on the individual's behavior. Since that time, definitions of attitude have been based at least in part on this early conception. According to Eagly and Chaiken (1993), attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. Attitude is described by Ajzen as the extent to which a person appraises a behavior favorably, i.e. they believe that the behavior will lead to a positive outcome (Ajzen, 1991). According to the Theory of Planned Behavior, this construct is considered to be directly related to an individual's intention to perform a behavior. Specifically, the more favorably one views a behavior, the greater the likelihood that he or she will have the intention to perform that behavior.

Research has shown that attitude is a strong predictor of behavioral intention. Murgraff, McDermott and Walsh (2001) examined individuals' attitudes about drinking more than 2 units of alcohol at a time and found attitude to be a significant predictor of single-occasion drinking patterns. Specifically, individuals with a more negative attitude towards drinking within low risk limits (i.e. 2 or less units of alcohol at once) are more likely to have the intention to and to subsequently exceed those limits. Jones, Courneya, Fairey and Mackey (2005) found that the attitude that exercise is a useful and important behavior was a direct predictor of oncologists' behavioral intention to recommend exercise to those newly diagnosed with breast cancer but not their actual

recommendations to patients. This is consistent with what is suggested by the Theory of Planned Behavior. This distinction is important because according to the TPB (Ajzen, 1991), attitude predicts intention but does not directly predict behavior and this finding supports this conception.

However, some research has shown that attitude can be a direct predictor of behavior. Braithewaite et al. (2002) found general practitioners' positive attitudes toward using internet-based support networks to be a significant predictor of their use of an internet-based support network. Not only does some research show that attitude can add significantly to the direct prediction of behavior, but it can also be the only predictor of intention. A positive attitude towards the supply of antifungals to individuals with vaginal candidiasis was the sole predictor of pharmacists' intention to sell antifungals to patients (Walker et al., 2004). This type of finding is not consistent with the TPB in that it does not support the notion that subjective norm, and perceived behavioral control are necessary constructs to predict intention. It is important to note that Ajzen (1991) suggests that the relative importance of attitude (as well as the other constructs of subjective norm and perceived behavioral control) is expected to vary across different situations and behaviors. Due to this variation, it is important to examine each construct individually for its contribution to the behavior under study.

Subjective Norm

One of the most understudied and controversial constructs related to the Theory of Planned Behavior is that of Subjective Norm. Subjective norm refers to the degree to

which a person feels social pressure to perform or not perform a behavior from people in their environment considered to be important and influential (Ajzen, 1991).

This construct is posited to be directly related to an individuals' intention to perform a behavior. For example, Sutton, McVey, and Glanz (1999) found that a more positive subjective norm was predictive of an intention to use condoms during sexual activity. Johnson and Hall (2005) also found subjective norm to be a significant predictor of intention to engage in safe-lifting behavior. Quine and Rubin (1997) found subjective norm to contribute the most variance when determining whether children would wear bicycle helmets. Specifically, children's perceptions of whether their peers would accept their use of helmets were highly indicative of whether they used them. This finding raises the question of whether there are developmental differences in how much each construct contributes to overall behavior.

While there have been several studies that have found evidence that subjective norm predicts intention to perform a behavior, one study (Murgraff et al., 2001) found that subjective norm did not lend any significant variance to the prediction of single occasion drinking in college students. Researchers have criticized the subjective norm component of the TPB stating that it is obsolete because some studies have found very little predictive power in this construct (Terry & Hogg, 1996). However, this argument against the subjective norm component has been criticized because the majority of those studies with findings not supporting the predictive ability of subjective norm had only one item. In studies where more than one item has been used to assess subjective norm, predictive ability has been established (Armitage & Conner, 1991).

Perceived Behavioral Control

The one construct that distinguishes between the Theories of Reasoned Action and Planned Behavior is that of Perceived Behavioral Control. Perceived Behavioral Control as described by Ajzen (1991) is posited as how difficult a person perceives a behavior to be to perform. This construct takes into account past experiences that an individual may have had related to attempting the behavior at hand as well as anticipated impediments and obstacles. It also encompasses individuals' beliefs that they are able to perform a behavior.

Perceived behavioral control is thought to be related to intentions to perform a behavior as well as being directly related to behavioral outcome. It is important to understand that the theory assumes that behavioral intention can only lead directly to behavior if the behavior is under volitional control. If not, then their perception of their ability to perform the behavior becomes a very important factor. If they view themselves as having the necessary resources and the ability to perform the behavior they will be more likely to intend to perform and subsequently perform the behavior (Ajzen, 1991). It has been shown empirically that measures of PBC improve predictions of intention from attitude and subjective norm as well as predictions of behavior from intention (Garling & Fujii, 2002)

Some authors have argued that the perceived behavioral control construct does not capture the whole picture of conceptions of control. While the construct of perceived behavioral control is designed to be a type of umbrella that covers many aspects of control, some argue that it does not address the more specific and in-depth aspects of control. Some researchers suggest adding a construct, self-efficacy, which would provide

a more in-depth view of an individual's perception of control. Self-efficacy was defined by Bandura (1982) as being a person's judgment of how well they can perform a behavior. While there has been some support for the added predictability of self-efficacy to the theory, the evidence is equivocal. Only a few studies have supported the added predictability of self-efficacy (Conner & Armitage, 1998; White, Terry & Hogg, 1994), while, conversely, some authors have argued that a distinction between perceived behavioral control and self-efficacy is not necessary (Sparks, Guthrie, & Shephard, 1997). Ajzen (1991) argued that the two constructs were synonymous.

The variable of perceived behavioral control has received the greatest attention in the area of health behaviors (Armitage & Conner, 2001). Certain health behaviors such as medication adherence may not be under volitional control. For example, if you cannot afford to acquire medication, it would be impossible to adhere to a medication regime. Also, there may be perceived barriers to performing behaviors that could lead to better health outcomes, such as finding time to exercise or not having transportation to a doctor or drug store. For these reasons, it makes sense that research in these areas should focus on the construct of perceived behavioral control because the inclusion of perceived behavioral control to the Theory of Reasoned Action was intended to account for these situational factors.

Research examining the effectiveness of Perceived Behavioral Control (PBC) in studies of health behavior has been numerous. Studies have found PBC to be meaningful in a variety of health behaviors. Perceived Behavioral Control was found to be the largest predictive factor of safe-lifting behavior (Johnson & Hall, 2005). Specifically, safe lifting was three times more related to a person's sense of control than to what others thought

about the behavior (Subjective norm). Perceived Behavioral Control was also found to be a significant predictor of single-occasion drinking (Murgraff et al., 2001), exercise in newly diagnosed breast cancer survivors (Jones et al., 2005), and general practitioners attitudes about using internet-based risk assessment and decision support (Braithewaite et al., 2002). Therefore, there is a lot of evidence that supports the need for the construct of Perceived Behavioral Control in prediction of certain health related behaviors.

Application of the Theory of Planned Behavior

The TPB has been studied in several domains of psychology. The efficacy of the Theory of Planned Behavior was evaluated by Armitage and Conner (2001). They reviewed 185 studies that evaluated the theory's ability to predict behavior. Their meta-analysis found that the theory accounted for 27% of the variance in behavior and 39% of the variance in intention. Topics ranged from leisure activity (Ajzen & Driver, 1992), to giving gifts on Valentine's Day (Netemeyer et al., 1993), to smoking (Maher & Rickwood, 1997).

A review of the literature (PsychInfo) revealed that the TPB has been used to study a wide variety of topics. The most studied areas included volunteering, job activities, computer use, and health behaviors. The most extensively studied area related to the Theory of Planned Behavior (325 out of 527; 61.7%) examined the prediction of health-related activities. For example, the TPB has been supported for predicting the intention to use (Fazekas, Senn & Ledgerwood, 2001; Sutton, McVey & Glanz, 1999) and the actual use of condoms (Gredig, Niderest, & Parpan-Blaser, 2006; Jemmott &

Jemmott, 1991). The TPB has been studied less extensively in relation to the behavioral intention of health professionals.

Health Professional Attitudes

While there were over 300 studies examining the TPB in health related behaviors, only seven studies could be found that examined the attitudes of health professionals. One study by Millstein (1996) found that physician attitudes toward and perceived behavioral control over educating adolescents about sexually transmitted diseases (STDs) was a significant predictor of their intention to educate adolescents about STDs and their subsequent delivery of that service. One study by Walker, Grimshaw, and Armstrong (2001) found that the TPB predicted 40% of the variance in intention to prescribe antibiotics to patients with sore throat. Another study by the same research group (Walker, et al., 2004) found that the TPB provided a good description of pharmacist behavior as well. Specifically, they found that the TPB accounted for 19% of the variance in pharmacists' intention to recommend non-prescription antifungals. Attitude was found to be the best predictor of intention. This finding was supported by Braithewaite, et al. (2002) who found that attitude was the best predictor of general practitioners' intentions to use internet based services to aid in assessment of patients. Lastly, a study by Arnold et al. (2006) found that the TPB predicted intentions of nurses, physiotherapists and radiographers to work for the UK's National Health Service.

Two of these seven studies examined the application of the Theory of Planned Behavior to nurses' behavior. In particular, McCarty, Hennrikus, Lando, and Vessey (2001) found that the TPB predicted delivery of smoking cessation advice by nurses.

However, they found that only the attitudes and perceived behavioral control constructs were significant predictors. Subjective norm was not shown to be a significant predictor. The measure of subjective norm used in the study was the unit that the nurses worked on (e.g. oncology, intensive care, etc.) which was not consistent with the suggestions of Ajzen (2002) in that the subjective norm construct should examine how one feels other important individuals in your life feel about engaging in a behavior. A simple examination of work environment does not capture this idea sufficiently. The fact that the study was lacking in construct validity may be the reason that this construct did not show significance. Edwards et al. (2001), in another study of nurses, found that all of the constructs of the TPB predicted nurses' intentions to administer opioids to patients for pain relief and that the overall model predicted 40% of the variance in intentions. The construct of perceived behavioral control was found to be the most predictive.

Although research in this area is very limited, these initial findings suggest that different variables may be more significant for different types of health professionals. This conclusion would be consistent with Ajzen's (1991) view that different constructs within the theory may be more salient for different individuals in different situations.

Given that research on health professionals is so limited in this area, it stands to reason that there would be few if any studies on the theory of planned behavior as it relates to mental health therapist attitudes. Measuring therapist attitudes is an important area of research. Therapists engage in many behaviors that influence the outcome of treatment. Several researchers have examined how therapist behaviors influence treatment process and outcome. Keijsers, Schaap, and Hoogduin (2000) reviewed the literature on therapist behaviors such as showing empathy and positive regard,

confrontational behavior, and self-disclosure and found that the vast majority of therapist behaviors have some effect on treatment outcome. However, most of the literature on therapist behavior does not examine how therapist attitudes influence these behaviors. If we can understand how therapists' attitudes influence their behavior in therapy, we can better train therapists in how to deal with and alter those attitudes to increase treatment outcome.

One area that has received little attention is parental involvement and the role that therapist attitudes have in parental involvement in treatment. These beliefs may hinder the level of therapists' engagement in working with parents of child clients (Orrell-Valente et al., 1999). It is also hypothesized that these beliefs may influence therapists' willingness to invite parents to be involved in therapy in the first place. These attitudes and beliefs could be influenced by the theoretical orientation of the therapist, relationships between the therapist and their own parents, and the number of family therapy courses taken (Duhig et al., 2002).

Therapists sometimes have perceptions that parents are inadequate and unwilling to help their children (Johnson, Renaud, Schmidt, & Stanek, 1998; Petr & Allen, 1997). These attitudes and beliefs may influence the roles that therapists feel are appropriate for parents to take in the therapy process (Alexander & Dore, 1999). For example, most therapists only involve parents in the assessment phase of the therapeutic process. These therapists may feel that parents can contribute information about the child's past, but that therapy should focus on the child directly (Alexander & Dore, 1999).

The importance of parental involvement in treatment has been examined extensively in the literature. Many researchers have argued that parental involvement is

an important component of effective treatment for children and adolescents (Barmish & Kendall, 2005; Kendall, 1994; Silverman, Ginsburg & Kurtines, 1995). However, what is meant by parental involvement is often unclear and the term is often not defined at all. Researchers studying parental involvement have measured it in a variety of ways. One of the most widely used measures of involvement is number of sessions attended by the parent. For example, when measuring involvement of mothers and fathers in treatment, Lazar, Sagi and Fraser (1991) used percentage of meetings with mothers and/or fathers as a measure of involvement.

Although attending sessions could be an important component of involvement, this measure does not take into account actual involvement or participation in the treatment process. Prinz and Miller (1996) suggested that quantity and quality of participation go hand in hand when considering parental involvement. Other researchers have also suggested that having parents apply treatments at home with the children may be a beneficial level of involvement (Knox, Albano & Barlow, 1996; Webster-Stratton, 1985).

Importance of Parental Involvement in Youth Mental Health Treatment

Children usually do not refer themselves for treatment. Therefore, it is usually the responsibility of the parent to refer the child, to make sure that the child shows up for appointments, and to monitor adherence to the treatment program (Nevas & Farber, 2001). If parents do not have a good relationship with the therapist, they may be unlikely to follow through with a treatment plan and may not encourage their child's participation in treatment.

A case has been made that parental characteristics are related to child and adolescent attrition rates (Pekarik & Stephenson, 1988). This factor is important considering that the attrition rate in child treatment is approximately 47% (Kazdin, 1996; Wierbicki & Pekarik, 1993). Additional evidence suggestive of the importance of parents is that higher levels of parental stress are related to lower rates of attendance in therapy sessions (Andra & Thomas, 1998; Kazdin & Wassell, 1998) as well as higher rates of attrition (Kazdin, 1990). Factors related to level of parental stress (such as parental age, single parent families, and parental psychopathology) have also been shown to have a significant relationship with parents' level of engagement in child and adolescent treatment (Kazdin, Mazurick & Bass, 1993).

Parental Involvement in Therapy

Intake/Evaluation

Not only are parents responsible for getting their children to therapy sessions, but their actual participation in all stages of treatment also has direct influences on outcome (Kendall, Reber & McLeer, 1990). From the very beginning of treatment (i.e. the assessment phase) parents have a direct influence during the therapy process. They are usually the ones who are interviewed by the therapist about the nature of the child's problems. Without parental involvement in the assessment process, there would be inadequate information to develop the necessary case conceptualization in order to plan and deliver treatment.

Parents and their children do not always agree on symptoms and specific behaviors (Achenbach, McConaughty, & Howell, 1987; Yeh & Weisz, 2001). This lack

of agreement could be based on a number of different scenarios. First of all, a child may not be willing to acknowledge engaging in behaviors that may be seen as inappropriate based on social or cultural constraints. Therefore, this process could lead to parents reporting symptoms not reported by their child (Epkins, 1996). Second, the youth and their parents could have differing ideas about what is really a problem. One study by Kramer and colleagues (2004) found that 12-97% of symptoms were reported by one informant and denied by the other. They also found that in some cases disagreements were related to parents and children having different thresholds for problematic behavior. Based on the lack of agreement between informants, several researchers have suggested that information be collected from multiple sources during the assessment and evaluation phases of treatment (Cantwell, Lewinsohn, Rohde, & Seely, 1997; Renk & Phares, 2004).

As far as evaluation for treatment is concerned, several parent characteristics have been shown to influence their perceptions of their child's problems, including ethnicity (Zimmerman, Khoury, & Vega, 1995), their own level of psychopathology (Brennan, Hammen, & Katz, 2002), and gender of the parent (Singh, 2003). One study found that maternal psychopathology influenced mothers' reports of their child's level of internalizing disorders compared to teachers' and group care workers' reports (Kroes, Veerman, & DeBruyn, 2003). It has been shown that mothers who are depressed are inaccurate reporters of their children's externalizing behavior as well (Forehand, Lautenschlager, Faust, & Graziano, 1986). Another study by Weissman, Feder, and Pilowsky (2004) found that depressed mothers reported three times greater risk for behavioral problems in their children than did non-depressed mothers. It is unclear whether this finding is due to mothers' report of the problem or if this number reflects the

actual risk in these children. Fathers were not included in this study, so no conclusion could be drawn regarding paternal psychopathology and reports of child behavior.

This research suggests that evaluating parents before gathering information from them about their children may be very important and may give a better global picture of the nature of the child's (and family's) functioning. The research suggests that therapists should pay attention to the possible underlying influences of parental reports of child behavior such as ethnicity, parental psychopathology, and parent gender in the assessment process. This same point can be made about the treatment process.

Treatment Initiation and Participation

Because of current interest in understanding the nature of parents' roles in treatment, several researchers have examined this process. For example, parents who have a higher level of mental health efficacy (Fields, Handelsman, Karver, & Bickman, 2004), and a positive attitude toward participation in child treatment are more likely to seek treatment in the first place (Gustafson, McNamara, & Jensen, 1994), and have higher levels of treatment continuation (Farley, Peterson, & Spanos, 1975; Singh, Janes, & Schechtman, 1982). Also, it has been found that active parental participation in treatment was a moderately strong predictor of the youth-reported alliance with their therapists (Fields et al., 2004). These findings suggest that there are parental factors that influence the participation of the parents as well as their children in the therapeutic process.

The majority of studies published on the parents' roles in the treatment of their children, however, have focused exclusively on mothers. Mothers can have a significant

influence on the attendance of their children for therapy sessions. Children of younger mothers and those who have mothers with a history of antisocial behavior are more likely to dropout early in treatment (Kazdin & Mazurick, 1994). Perhaps this pattern is due to other barriers associated with being a younger mother, for example, lack of outside caregivers for other children or an inability to take time off from work.

Calam, Bolton, and Roberts (2002) found that maternal expressed emotion (in particular, mothers who were more critical, hostile or emotionally over-involved), depression and parenting stress were significantly related to non-attendance for an initial scheduled appointment. Corkum, Rimer, and Schachar (1999) found other maternal factors that were related to enrollment for treatment and subsequent engagement. In particular, they compared prior knowledge of ADHD with enrollment and participation in ADHD treatment. They found that higher maternal knowledge of ADHD predicted initial enrollment in the program. Perhaps, if parents have more knowledge of ADHD and the factors that are associated with good outcomes, they may be more likely to feel that treatment will be beneficial to their children.

In the case of father involvement in treatment, Berg and Rosenblum (1977) found that about 30% of families appeared at the first session of family therapy without the father. This lack of father inclusion in treatment is not limited to treatment by psychologists. Lazar et al. (1991) found that social workers were likely to involve mothers more than fathers in family services. Interestingly, the greater the number of years on the job, the less the social workers involved fathers in treatment.

Fathers play an important role in whether the family begins or continues in treatment. Fathers tend to be more resistant than mothers to continuing in therapy (Berg

& Rosenblum, 1977) and if they do not attend at least some of the therapy sessions, the entire family is less likely to continue treatment (Bischoff & Sprenkle, 1993). In addition, single-parent families (who are most often single-mother families) are more likely to drop out of treatment prematurely (Dakof, Tejada, & Liddle, 2001; Kazdin et al., 1993; Kendall & Sugarman, 1997).

Little research has been conducted on the fathers' contribution to the therapy process. This is surprising considering that most of the children seeking services have at least some contact with their father. Phares and Lum (1997) found that 42.4% of children and adolescents referred to an outpatient clinic lived with both biological parents, and of those who lived with their single mother, 40% had at least monthly face to face contact with their father. Despite the number of children and adolescents with paternal contact, mothers are usually the only ones invited to be involved in treatment (Phares, 1997). A study by Duhig, Phares, and Birkeland (2002) found that the percentage of treatment sessions that included fathers ranged from 21.2% to 39.5% depending on family constellation versus 51.4% to 65.5% for mothers. Overall, research suggests that both mothers and fathers play a significant role in treatment for children and families. Future research should reflect this fact.

Treatment Outcome

Parents' participation in the treatment process has been shown to influence outcome as well. However, it is unclear whether parental involvement is beneficial in all circumstances. One study by Mendlowitz, Manassis, and Bradley (1999) found that parental involvement in treatment led to significantly better outcomes than cognitive-

behavioral therapy with the child alone in the treatment of childhood anxiety disorders. They defined parental involvement as teaching parents ways to cope with their child's anxiety as well as ways to aid the child in practicing skills in the home. Knox et al. (1996) found that exposure and response prevention alone had very little effect on improving symptoms of obsessive-compulsive disorder in children, however, when parents were included in the treatment, significant improvements in children's behaviors were seen. This finding could be due to parents reinforcing the skills learned in treatment in the home. In a recent meta-analysis of therapy relationship process variables, Karver, Handelsman, Fields and Bickman (2006) found that active parental participation in treatment was a moderately strong predictor of treatment outcome. However, research on parental participation tends to be based almost entirely on mothers. When fathers are included in research, the results tend to be comparable.

When fathers are included in family therapy, and the family follows through with the treatment, the results tend to be positive (Carr, 1998). Coplin and Houts (1991) reviewed the involvement of fathers in parent training programs and found that paternal participation was related to better treatment gains. It has been shown that maintenance of treatment techniques and outcomes were higher in families where both mothers and fathers were involved in parent training compared with families in which only the mothers participated. This higher level of maintenance could be due to increased consistency of the application of therapy techniques (Horton, 1984) as well as the parents being able to remind each other of the techniques learned (Webster-Stratton, 1985). Bagner and Eyberg (2003) found similar results in that mothers reported greater long-term maintenance of treatment gains when the father was involved in treatment than

when the father was not involved in treatment. When the father was not involved in treatment, children showed a loss in treatment gains at four-month follow-up. One study by Bennum (1989) found that the father's perceptions that a therapist was competent and provided guidance had a stronger relationship to outcome than the mothers' perceptions of the therapist. This finding could be due to fathers having more influence in a family due to their higher status in the family (depending on the family) or may be due to the potential of fathers sabotaging therapy if they do not perceive it positively (Berg & Rosenblum, 1977).

Mothers also have a significant effect on the outcomes of therapy for their children. Sonuga-Barke, Daley and Thompson (2002) found that mothers' ADHD symptoms were related to the effectiveness of a parent-training program. Children of mothers with higher levels of ADHD symptoms showed no improvement after parent training whereas children of mothers with lower levels of ADHD symptoms showed significant improvements after treatment. This pattern suggests that mothers' ADHD symptoms influenced mothers' ability to obtain the skills in parent training or their ability to implement the skills once acquired. Similarly, Van Furth, Van Strien, and Martina (1996) found that critical maternal attitudes were predictive of poorer outcomes following treatment for eating disorders.

Even when parents are not directly involved in treatment, they can influence outcomes. Southam-Gerow et al. (2001) found that higher levels of maternal self-reported depressive symptoms were related to poorer treatment outcomes in families receiving services at a child and adolescent anxiety clinic. Perhaps maternal psychopathology should be addressed and treated as well in order to better facilitate the outcomes of

children. Research suggests that both mothers and fathers, in certain instances, can have a significant role in children's outcomes in therapy. There are, however, potential parental variables (such as negative cognitions, critical expressive styles, etc.) that may need to be addressed before treatment can be successful for children or adolescents.

It is interesting to note that although there have been a few studies on the role of fathers in the therapeutic process; most of these studies are related to fathers' added benefit to mothers' involvement. Very few of these studies address individual paternal characteristics that may influence the process or outcome of treatment. Although the need for more research on fathers has been demonstrated, there remains a dearth of research on fathers' roles in the therapy process.

It is also interesting to note that most of the studies examining parental involvement have been done for children with externalizing behavior problems (Corkum et al., 1999; Sonuga-Barke et al., 2002). Research on the involvement of parents in treatment for internalizing disorders has been examined less often. However, recently studies are beginning to find that some parental involvement in treatment for internalizing disorders may prove beneficial (Spence, Donovan, & Brechman-Toussaint, 2000).

Based on the available research for the benefits of involving parents in certain therapeutic situations, one would think that parental involvement, as some component of treatment, would occur fairly often. However, this is not the case. As mentioned earlier, involvement of parents in child and adolescent therapy is the exception, not the rule. Kovacs and Lohr (1995) reviewed 18 years of mental health treatment studies and found that only 40% included parents in the treatment process. When parents are asked to participate in treatment, it is usually the mother who gets invited to participate. Fathers

are almost never included in the treatment of their children and adolescents. So, while it has been shown that involving parents in certain treatment modalities can be quite beneficial, their actual rate of participation is quite low. A number of parental, child, and treatment factors such as the age of the child, presenting problem, parental psychopathology, and family relationship have been suggested to contribute to this low level of involvement (Crawford & Manassis, 2001; Duhig et al., 2002). However, this study will specifically focus on therapist contribution to low levels of parental involvement. Given the potential importance of therapists' attitudes and beliefs about parental involvement in treatment, it is worthwhile to identify a theoretical model through which these connections can be understood.

If one applies the Theory of Planned Behavior and the past studies on behavioral prediction with health professionals to therapists' attitudes toward including parents in youth therapy, one would expect that therapists' attitudes could have an important role in the efforts they make to engage parents into treatment. An interesting study by Manfred-Gilham, Sales, and Koeske (2002) found that when therapists viewed client barriers to treatment as important, they were more likely to make extra efforts to engage clients in treatment. This finding has implications for therapist attitudes and how therapist attitudes influence subsequent behavior. Specifically, if therapists' view parent involvement as important, they may make extra efforts to engage parents in their child's treatment.

One study specifically examined therapists' attitudes about having parents in treatment. Flynn (1998; cited in Walters, Tasker, & Bichard, 2001) surveyed therapists about their attitudes for including mothers and fathers in therapy and found that the majority of therapists actually felt that including fathers more often in therapy would be

beneficial. However, he found that therapists were not likely to perform behaviors that would influence fathers to be more engaged. For example, therapists were more likely to initiate contact with mothers and to use mothers to contact fathers instead of the therapists contacting fathers directly. Even when therapists felt that including fathers was beneficial, their actual level of inclusion was very low. The authors offer no evidence to explain the disconnect between attitudes and behavior, however, one can use the TPB to generate possible explanations.

So it would stand to reason that if therapists do not feel that involving parents in treatment will influence the outcome of the treatment positively (a component of attitudes), they would probably be even less likely to try to include parents. This outcome would also be likely if therapists feel that they are not competent enough to work with parents in therapy. If therapists are in a professional culture where involving parents is seen as beneficial (e.g. settings with an emphasis on family systems perhaps) or feel that including parents will be seen positively by those they hold in high regard, they may be more likely to make an effort to engage parents into treatment (subjective norm portion of the TPB). Figure 1 applies these concepts to the Theory of Planned Behavior.

Figure 1 shows the proposed application of the TPB to therapists' intention to include parents in treatment. The far left column consists of elements of the TPB that could influence therapists' intention to involve parents. Consistent with the Theory of Planned Behavior, and as seen in the far left column, attitudes toward having parents in treatment, subjective norm and therapist perceived behavioral control are all suggested to be predictive of therapists' intentions to include parents in treatment. Intention (in the

middle column) is directly related to inclusion of parents. All components of Figure 1 will be analyzed in this study.

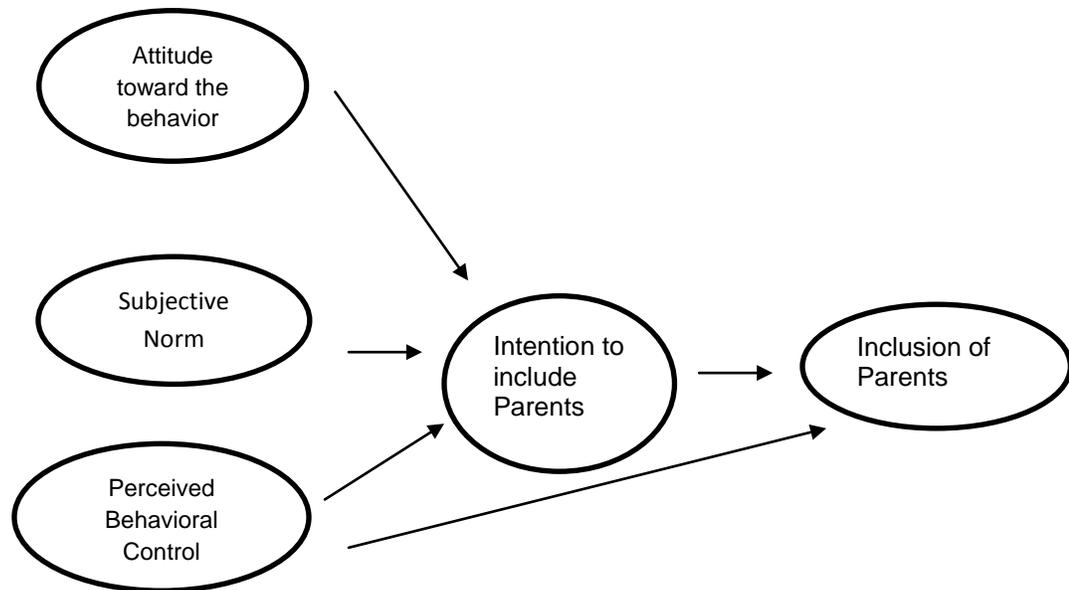


Figure 1. Application of Theory of Planned Behavior to Therapists' Involvement of Parents

The Current Study

The current study examined the feasibility of Ajzen's (1985) Theory of Planned Behavior for explaining whether or not therapists include parents in treatment. This study also examined the relationship between the TPB and The Theory of Reasoned Action in relation to therapists' inclusion of parents. Specifically, this study examined whether the inclusion of the perceived behavioral control construct was relevant for the understanding of therapist inclusion of parents in treatment. The following hypotheses were addressed:

- 1) Perception of the value or effectiveness (attitude) of including parents in youth treatment will be a significant predictor of intention to include parents.

- 2) Perception of significant others' views of including parents in youth treatment (subjective norm) will be a significant predictor of intention to include parents.
- 3) Actual inclusion of parents (behavior) and intent to include parents (intention) will be significantly predicted by the perceived behavioral control over the ability to include parents.
- 4) Actual inclusion of parents will be significantly predicted by the intention to include parents in youth treatment.

Methods

Participants

Participants in this study were 125 mental health professionals (psychologists, social workers, psychiatrists, school psychologists and mental health counselors) who specialize in working clinically with children and families. The mean age of participants was 39.47 (SD = 16.53). The sample consisted of 31 (26.5%) males and 86 (73.5%) females. Participants consisted of 15 (12.7%) African Americans, 88 (74.6%) Caucasian, 6 (5.1%) Hispanic, and 9 (7.6%) other ethnic individuals. Professionals with at least one year of experience working with children under the age of 11 were included. The average number of years experience working with children was 12.8 (SD = 11.94). Most participants had a doctoral (63, 52.9%) or masters level (43, 36.7%) education. The remainder of participants were either bachelors level (6, 5.1%) or unspecified (5, 4.2%).

Participants were from a variety of disciplines and practice settings and reflected a number of theoretical orientations. The majority of participants (77, 63.6%) were psychologists. The remainder of participants consisted of mental health counselors (13, 10.7%), family therapists (11, 9.1%), social workers (7, 5.8%), and other disciplines (13, 10.7%). Participants were in private practice (40, 33.1%), academic settings (19, 15.7%), school settings (17, 14%), outpatient child mental health settings (14, 11.6%), community mental health centers (7, 5.8%), and other practice settings (24, 19.8%). Participants consisted of therapists whose orientations were cognitive/behavioral (65, 54.6%), family

systems (17, 14.3%), eclectic (15, 12.6%), psychodynamic (11, 9.2%), and other (11, 9.2%).

According to Kline (1998), in order to achieve enough power (medium effect size) for a path analysis, there should be an ideal sample size of 20 times the number of parameters. For the current model, there are 5 parameters, which would make a minimum of 100 participants acceptable.

Participants were recruited through mailing lists from the State of Florida licensing board, which has access to listings of individuals licensed in Florida (even if they now live out of state), including social workers, psychiatrists, counseling psychologists, clinical psychologists and school psychologists as well as emails to Directors of Clinical Training around the country. These sources were expected to allow for a representative sample of therapists in the nation who work with children and adolescents.

Measures

A. TPB Questionnaire (Appendices A and B)

The design of the questionnaire was planned to measure the constructs of the Ajzen and Fishbein model. Construction of the questionnaire followed specific guidelines outlined by Ajzen (2002) for the construction of a TPB questionnaire. Ajzen suggested developing sets of questions specific to the constructs being tested rather than adapting a previously designed measure (Ajzen, 2002). He stated that to do otherwise could lead to using measures that are invalid and unreliable. Ajzen (2002) stated that the semantic differential is most commonly used in construction of TPB questionnaires because of its

ease of construction. He also suggested that questions be randomly presented in non-systematic order. Many items in the scale were reverse scored in order to minimize response bias.

Currently, there are no published studies that explore the application of the TPB with therapists' attitudes about including parents in youth treatment. Therefore, an initial measure (Appendix A) was created and piloted on a small group of professionals (8 graduate students and 4 professors in clinical psychology) to ensure face validity and relation of items to the constructs. Respondents gave feedback on scale construction, wording of items, and clarity of items and response choices. The resulting questionnaire (Appendix B) is the result of the feedback from the 12 respondents.

Evaluations of scales designed under these conditions have supported this type of scale construction. For example, alphas using this construction have ranged from 0.65 to 0.99 (Johnson & Hall, 2005; Murgraff et al., 2001; Walker et al., 2004). The alphas for this constructed scale in the current sample ranged from 0.75 (intention subscale) to 0.81 (behavior subscale), which is consistent with alphas from previous studies.

Intention.

Behavioral intention in this research study is considered to be the extent to which a therapist plans to include parents in their treatment of youth. Three items located randomly throughout the questionnaire were used to assess this construct. Each item was measured using a 7-point semantic differential scale. Negatively worded items were reverse scored so that higher numbers reflected greater intentions to include parents in

treatment. The score for this subscale was computed by taking the mean of the three items. Alpha for this subscale was 0.75.

Attitude.

Attitudes in this research study were considered to be the therapist's feelings and beliefs about including parents in treatment sessions with youth. Five items located randomly throughout the questionnaire were used to assess this construct. Each item was measured using a 7-point semantic differential. Negatively worded items were reverse scored so that higher numbers reflected greater attitudes about including parents in treatment. The score for this subscale was computed by taking the mean of the five items. Alpha for this subscale was 0.80.

Subjective Norm.

Subjective norm in this study was considered to be the extent to which a therapist perceives significant people in their lives (such as colleagues and family members) as endorsing parental involvement in treatment with youth. Five items located randomly throughout the questionnaire were used to assess this construct. Each item was measured using a 7-point semantic differential. Negatively worded items were reverse scored so that higher numbers reflected greater levels of subjective norm for inclusion of parents in treatment. The score for this subscale was computed by taking the mean of the five items. Alpha for this subscale was 0.79.

Perceived Behavioral Control.

Perceived Behavioral Control in this study was considered to be the extent to which a therapist perceived the behaviors of inviting parents into treatment to be difficult to perform. Four items were used to assess this construct. Each item was measured using a 7-point semantic differential. Negatively worded items were reverse scored so that higher numbers reflect greater perceived behavioral control for including parents in treatment. The score for this subscale was computed by taking the mean of the four items. Alpha for this subscale was 0.76.

Actual Behavior.

Actual behavior was estimated by the rate of inclusion of parents in the recent past. Two items were used to assess this construct, one of which was a percentage estimate and the other a 6-point likert rating of how often individuals had been included in treatment sessions in the past month. The percentage estimate was converted to a likert scale using the following method: 0% = 1, 1-25% = 2, 26-50% = 3, 51-75% = 4, 76-99% = 5, 100% = 6. This scaling is consistent with the scaling of the other 6-point item. The score for this subscale was created by taking the mean of the two items. Alpha for this subscale was 0.81.

B. Demographics Questionnaire (Appendix B)

Participants were asked to complete a brief demographics questionnaire after completion of the TPB measure. The demographics questionnaire contained questions

about the therapist's race/ethnicity, gender, level of experience, work atmosphere, number of children, partner status, training, and practice setting.

Procedure

Potential participants were contacted by mail or email. Some participants were mailed the entire packet with a self-addressed stamped envelope to return once completed. Other participants were mailed a postcard that listed a website where they could go and complete the questionnaire online. Others were emailed a link to the website. All subjects received an introductory message either via email or in the mail. The message (Appendix D) provided a description of the study and instructions on how to access the study website. Upon accessing the website, participants were required to read and agree to informed consent which instructed participants about the nature of the study and that this study was anonymous and confidential (Appendix E). Once participants agreed to participate, they were instructed to answer all questions. The TPB questionnaire appeared first followed by the demographics questions. Forty (32%) participants completed the questionnaire on paper and returned in self-addressed envelope. Eighty-five (68%) participants completed the questionnaire online. Overall, a total of 1500 requests were made for participation in the study. Of those 1500, around 150 were returned due to address error. Of the 1350 remaining, only 125 (9%) were returned.

On completion of the study, participants were given the contact information of the researcher. Participants were also directed to a separate page where they were asked to choose a charity to which one dollar would be donated per participant (to a maximum of \$100 per charity), as a sign of appreciation for their participation.

Because part of this study was completed online, there is a potential of sampling error. Individuals who are more comfortable with computers may have been more likely to respond to the study. Although there is a concern for sampling error, on-line data collection has become a standard within the research community (Dillman, 2000). Recent data suggest that participants on web-based surveys are representative of the general community and that the results are comparable with what would have been collected with more traditional paper and pencil methods (Ferrando & Lorenza-Seva, 2005; Gosling, Vazire, Srivastava & John, 2004). Independent samples t-tests were performed to determine if any differences existed between those that completed the questionnaire online versus those that completed the questionnaire by mail. No differences were found between the two groups ($p > .05$); therefore, the data were combined for further analyses. Thus, because no differences were found between hard-copy versus online data collection, potential sampling error was likely inconsequential.

Results

The results section is reported in four sections. The first section provides descriptive statistics for sample, TPB predictor and outcome variables and evaluation of data for normality. Inter-correlations between TPB subscales are reported in the second section. The third section consists of the path analysis for the TPB model. The fourth section consists of follow-up analyses.

Descriptive Statistics

Means and standard deviations for each of the TPB subscales can be found in Table 1. Recall that ratings on TPB questions in the attitude, subjective norm, perceived behavioral control and intention subscales ranged from 1 to 7 and scores on the behavior subscale ranged from 1 to 6, with higher scores reflecting higher agreement with the construct. Even though no measure had a skewness greater than 2, or a kurtosis greater than 3 (they were normally distributed), all of the measures had distributions with noticeable ceiling effects. For example, intention had a mean rating of 6.35 out of a possible total score of 7 (see table 1).

Table 1. Means and standard deviations for TPB subscales

	α	N	Mean	SD	Skewness (SE)	Kurtosis (SE)
Attitude	0.80	121	6.21	0.75	-1.26 (0.22)	2.34 (0.44)
Subjective Norm	0.79	121	6.10	0.74	-0.62 (0.22)	0.01 (0.44)
PBC	0.76	121	5.89	0.94	-0.85 (0.22)	0.04 (0.44)
Intention	0.75	120	6.35	1.17	-1.97 (0.22)	3.05 (0.44)
Behavior	0.81	119	4.37	1.30	-0.49 (0.22)	-0.78 (0.44)

Note: PBC = Perceived Behavioral Control.

Correlational Analyses

Before examining the predictive ability of the TPB constructs, correlational analyses were run to determine the magnitude of the relationships between the constructs. As can be seen in Table 2, all of the TPB measures were significantly correlated with each other except Subjective Norm. Specifically, Attitude was significantly correlated with Intention ($r = .49, p < .001$), Subjective Norm ($r = 0.47, p < .001$), Perceived Behavioral Control ($r = .046, p < .001$), and Behavior ($r = .429, p < .001$). Intention was significantly correlated with Subjective Norm ($r = .25, p < .01$), Perceived Behavioral Control ($r = 0.45, p < .001$), and Behavior ($r = .52, P < .001$); however the effect size for subjective norm is small suggesting that subjective norm does not have as much influence on the intention to include parents in treatment as the other variables. Behavior was significantly correlated with Perceived Behavioral Control ($r = 0.24, P < .01$), although

the small effect size suggests that perceived behavioral control has only a small amount of influence on actual inclusion of parents in treatment. Lastly, Subjective Norm was not significantly correlated with Perceived Behavioral Control ($r = .15, p = .104$). One assumption of path analysis is that none of the variables exhibit multicollinearity. One way to test for violations of this assumption is if correlations between any variables is greater than 0.80. Given that all of the correlations are below 0.60, none of the data violate this assumption.

Table 2. Pearson correlations between TPB subscales

	1	2	3	4	5
1. Attitude	1				
2. Intention	0.49**	1			
3. Subjective Norm	0.47**	0.25*	1		
4. Perceived Behavioral Control	0.46**	0.45**	0.15	1	
5. Behavior	0.43**	0.52**	0.24*	0.51**	1

Note: * $p < .05$ ** $p < .001$

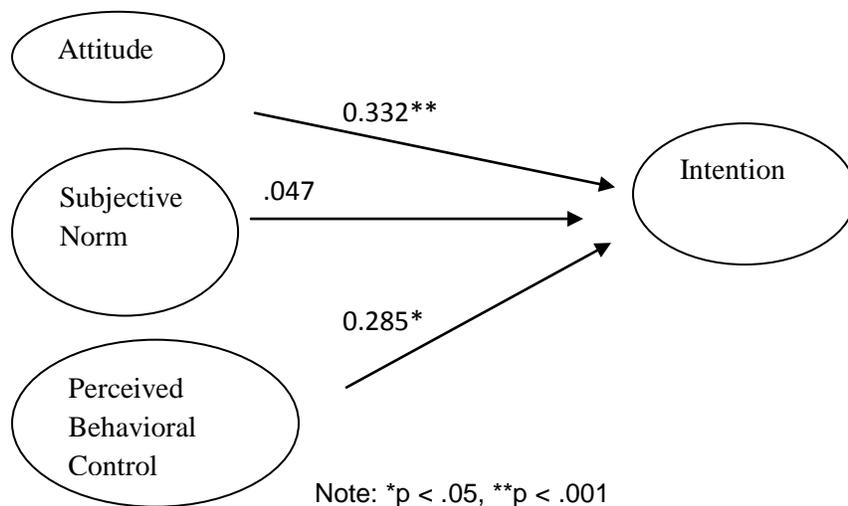
Path Analysis

The Theory of Planned Behavior guided the selection of the variables, as well as the direction of causality in the model. Standardized regression coefficients were used to estimate the strengths of relationships for each path in the model and were estimated

using Ordinary Least Squares Regression. Any path that was not significant at the .05 level was eliminated and the model rerun and reevaluated for goodness of fit.

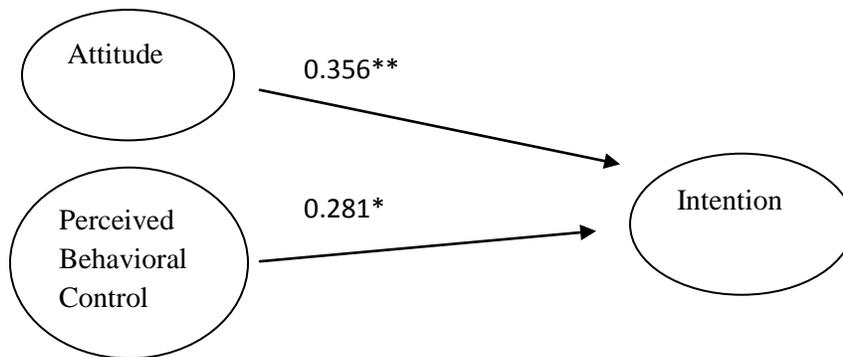
Multiple regressions were conducted for predictors of Intention and Behavior. In the first comparison, Attitude (ATT), Subjective Norm (SN), and Perceived Behavioral Control (PBC) were forced into a regression on Intention (INT). Overall, this model was statistically significant, $R^2 = 0.300$, $F(3, 116) = 16.566$, $p < .001$, accounting for 30% of the variance in intention to invite parents to treatment. Consistent with hypothesis one, Attitude ($\beta = 0.332$, $p < .001$) was a significant predictor of Behavioral Intention. Hypothesis two posited that Subjective Norm would also be a significant predictor of Behavioral Intention. The results of the multiple regression does not support this hypothesis. Subjective Norm did not contribute a significant amount of variance to the prediction of Behavioral Intention ($\beta = .047$, $p = .595$). Results can be found in Figure 1.

Figure 1. Results of the Original Path Analysis of Intention



Based on the non-significant Beta obtained for Subjective Norm, the model was rerun ($R^2 = 0.298$, $F(2, 117) = 24.859$, $p < .001$, accounting for 29.8% of the variance). The path coefficients in Figure 2 reflect the values obtained in the new model. Thus, the first hypothesis, which stated that attitude would be a significant predictor of intention was supported but hypothesis 2, which stated that subjective norm would be a significant predictor of intention, was not supported.

Figure 2. Results of the Revised Path Analysis of Intention

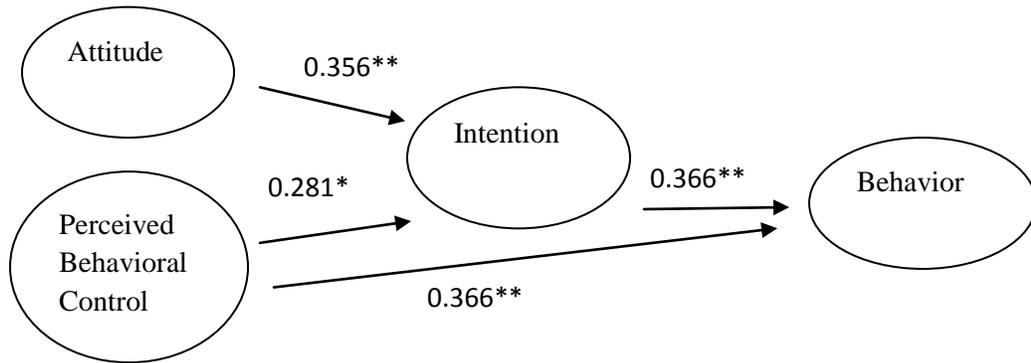


Note: * $p < .05$, ** $p < .001$

In order to test hypotheses 3 and 4, a second series of analyses were completed. In the second comparison, Intention (INT) and Perceived Behavioral Control (PBC) were forced into a regression on Behavior (BEH). Overall, this model was statistically significant, $R^2 = 0.382$, $F(2,115) = 35.564$, $p < .001$, accounting for 38.2% of the variance in inviting parents to treatment. Consistent with hypothesis 3, Perceived Behavioral Control made significant unique contributions to the prediction of Behavioral Intention ($\beta = .281$, $P < .01$) and Behavior ($\beta = .366$, $P < .001$). Lastly, consistent with hypothesis four, the analysis showed that Behavioral Intention was a significant predictor

of Behavior ($\beta = .366, P < .001$). The path coefficients can be found in Figure 3. Thus, hypotheses 3 and 4 were supported.

Figure 3. Results of the Final Path Analysis of the Theory of Planned Behavior



Note: * $p < .05$, ** $p < .001$

Overall, the analyses support hypotheses one, three and four but not hypothesis two as follows:

- 1) Perception of the value or effectiveness (attitude) of including parents in youth treatment was found to be a significant predictor of intention to include parents.
- 2) Perception of significant others' views of including parents in youth treatment (subjective norm) was not found to be a significant predictor of intention to include parents.
- 3) Actual inclusion of parents (behavior) and intent to include parents (intention) were found to be significantly predicted by the perceived behavioral control over the ability to include parents.
- 4) Actual inclusion of parents was found to be significantly predicted by the intention to include parents in youth treatment.

Follow-up Analyses

Subjective Norm

Based on the non-significant findings for Subjective Norm, an item analysis was done to determine if any items did not correlate with the subscale. Based on the results, removing item #8 slightly improved the alpha level for the subscale. However, when the regression was rerun with the newly calculated scale, subjective norm remained an insignificant predictor of intention.

Finally, the regression was rerun using item number 22 from the demographic questionnaire (In your estimation, what percentage of professionals who conduct therapy include parents in child related therapy sessions (post-intake)?) as this item was thought to approximate the construct of subjective norm. While the inclusion of this item instead of the subscale mean contributed more variance to the prediction of intention, it was still not a significant predictor of intention.

Demographics

Before examining the relationship between therapist demographic characteristics and TPB variables, correlational analyses were run to determine the magnitude of relationships between the demographic variables. Specifically, years of practice was significantly correlated with age ($r = 0.784, p < .001$), number of family therapy courses ($r = 0.236, p < .05$), number of family therapy CEUs ($r = 0.441, p < .001$), hours of adult treatment ($r = 0.424, p < .001$) and number of children ($r = 0.353, p < .05$). Age of therapist was significantly related to # family therapy CEUs ($r = 0.413, p < .001$), hours

of adult treatment ($0.405, p < .001$), and number of children ($r = 0.397, p < .001$). Number of family therapy courses was significantly related to number of family therapy CEUs ($r = 0.230, p < .05$) and number of hours of adult treatment ($r = 0.298, p < .001$). Number of family therapy CEUs taken was significantly related to hours of adult treatment ($r = 0.233, p < .05$). Lastly, number of family therapy books read was significantly related to number of kids ($r = 0.312, p < .05$). The results of the correlations can be found in Table 3.

Based on the positive relationships between several of the demographic variables and TPB constructs, 4 regressions were run to determine the predictive ability of the 9 demographic variables on attitude, subjective norm, perceived behavioral control and intention. Based on those analyses, number of family therapy books read ($\beta = 0.312, p < 0.05$) and CEUs taken ($\beta = 0.390, p < 0.01$) contributed significant variance to the prediction of attitude scores ($R^2 = 0.323, p = 0.034$). Therapist age ($\beta = 0.468, p < .05$) and their estimate of the percentage of time professionals include parents in youth treatment ($\beta = 0.310, p < .05$) were significant predictors of subjective norm ($R = 0.312, p = 0.044$). The number of hours spent treating adults ($\beta = 0.333, p < 0.05$) and number of family therapy CEUs taken ($\beta = 0.393, p < 0.01$) contributed significant variance to the prediction of perceived behavioral control. No variables contributed any significant variance to the prediction of intention.

Table 3. Summary of correlation analyses between demographic variables

Variable	Years of Practic	AGE	# family courses	# CEU	# family books	Hours child tx	Hours adult tx	Prof include	# kids
Years practice	1.00								
AGE	0.784**	1.00							
# family courses	0.236*	0.178	1.00						
# CEUs	0.441**	0.413**	0.230*	1.00					
# family books	-0.138	-0.172	-0.093	-0.094	1.00				
Hours child tx	-0.040	0.020	0.014	0.093	-0.041	1.00			
Hours adult tx	0.424**	0.405**	0.298**	0.233*	-0.119	-0.019	1.00		
Prof include	0.162	0.105	0.021	0.050	-0.091	0.144	0.130	1.00	
# kids	0.353*	0.397**	0.159	0.243	-0.312*	0.003	0.194	0.226	1.00

Note: *p < .05, **p < .001

Correlations between therapist demographics and TPB variables

Several therapist demographic characteristics were examined for their relationship to the TPB variables attitude, perceived behavioral control, subjective norm, behavioral intention, and behavior. Number of years of practice, therapist age, number of children (# kids), number of family therapy courses taken, number of continuing education credit courses taken in family therapy (# CEUs), number of books/articles read related to family therapy, number of hours seeing child clients, number of hours seeing adult clients, and therapists estimate of the percent of professionals who include parents in treatment (Prof Include) were examined for their relationship to attitude, subjective norm, perceived behavioral control, behavioral intention, and behavior. The results of the correlations can be found in Table 4.

Table 4. *Summary of correlation analyses between demographic and TPB variables*

Variable	Attitude	Subjective Norm	Perceived Behavioral Control	Behavioral Intention	Behavior
Years practice	0.13	-0.28**	0.41***	0.02	0.13
AGE	-0.05	-0.37***	0.33***	-0.06	0.08
# kids	0.18	-0.13	0.28*	0.13	0.32**
# family courses	0.14	-0.06	0.11	0.12	0.09
# CEUs	0.19*	-0.13	0.22*	0.12	0.14
# family books	-0.09	0.03	-0.09	0.15	0.13
Hours child tx	-0.04	-0.11	-0.18	0.04	-0.06
Hours adult tx	0.27**	0.02	0.31***	0.09	0.11
Prof include parents	0.27**	0.27**	0.22*	0.28**	0.26**

Note: *p < .05, **p < .01, ***p < .001

As can be seen in Table 4, number of years of practice and age are significantly negatively correlated to subjective norm ($r = -0.28, -0.37$; $p < .01$) and perceived behavioral

control ($r = 0.41, 0.33; p < .001$). Specifically, the longer a therapist has been in practice and the older a therapist is the less likely they are to perceive that other professionals include parents in treatment and the more likely they are to feel control over their ability to include parents in youth treatment. The number of children a therapist has is significantly related to perceived behavioral control ($r = 0.28, p < .05$) and behavior ($r = 0.32, p < .01$). Specifically, the more children therapist have, the more likely they are to feel control over their ability to include parents in youth treatment and subsequently the more likely they are to actually include parents in youth treatment.

The number of continuing education courses taken was also examined for its relation to TPB variables. The number of continuing education credit courses taken in family therapy is significantly correlated with attitude ($r = 0.19, p < .05$) and perceived behavioral control ($r = 0.22, p < .05$). Specifically, the more continuing education courses in family therapy taken by a therapist, the greater the therapist's perception of the value or effectiveness of including parents in youth treatment and the more likely they are to feel control over their ability to include parents in youth treatment. It is important to note that these are small to medium effect sizes and thus do not explain a lot of variance. The number of hours seeing adult clients is significantly correlated with attitude ($r = 0.27, p < .01$) and perceived behavioral control ($r = 0.31, p < .001$). Specifically, the more hours a therapist spends in providing adult treatment, the greater the therapist's perception of the value or effectiveness of including parents in youth treatment and the more likely they are to feel control over their ability to include parents in youth treatment. Again, it is important to note that these are small to medium effect sizes and thus do not explain a lot of variance.

Lastly, the therapist's estimate of the percent of professionals who include parents in treatment is significantly correlated to attitude ($r = 0.27, p < .01$), subjective norm ($r = 0.27, p < .01$), perceived behavioral control ($r = 0.22, p < .05$), behavioral intention ($r = 0.28, p < .01$), and behavior ($r = 0.26, p < .01$). Specifically, if therapists believe that many other therapists include parents in youth treatment, the greater the therapists' perception of the value or effectiveness of including parents in youth treatment, the more likely they are to perceive that other professionals include parents in treatment, the more likely they are to feel control over their ability to include parents in youth treatment, the more likely they are to intend to include parents in youth treatment, and the more likely they are to actually include parents in youth treatment. There were no significant associations between the number of family therapy courses taken or number of family therapy books read and any of the TPB variables.

Posthoc ANOVA Analyses

Several categorical therapist demographic characteristics were examined for their relationship to the TPB variables attitude, perceived behavioral control, subjective norm, behavioral intention, and behavior. The means and standard deviations for each of these variables can be found in Table 5.

Table 5. Means and Standard Deviations for Categorical Demographic Variables

Category	Demographic	Attitude	Subjective Norm	Perceived Behavioral Control	Intention	Behavior
		M (SD) N	M (SD) N	M (SD) N	M (SD) N	M (SD) N
Gender						
	Male	6.25 (0.67) 31	6.04 (0.78)	6.30 (0.68)	6.53 (0.96)	4.68 (1.14)
	Female	6.16 (0.78) 86	6.13 (0.71)	5.77 (0.97)	6.25 (1.25)	4.30 (1.32)
Ethnicity						
	African American	6.19 (0.72) 15	6.08 (0.65)	5.42 (1.16)	6.09 (1.17)	4.50 (1.30)
	Asian	6.63 (0.60) 6	6.20 (1.12)	5.88 (0.97)	6.83 (0.41)	4.83 (0.98)
	Latino/Latina	6.29 (0.85) 9	6.33 (0.47)	5.72 (1.09)	6.15 (1.08)	3.94 (1.31)
	Caucasian	6.17 (0.76) 89	6.06 (0.75)	5.97 (0.88)	6.36 (1.22)	4.35 (1.30)
Education Level						
	Masters	6.17 (0.63) 43	6.34 (0.67)	5.78 (0.92)	6.44 (1.04)	4.13 (1.33)
	Doctorate	6.41 (0.56) 63	5.96 (0.75)	6.19 (0.79)	6.57 (0.79)	4.68 (1.06)
Theoretical Orientation						
	Psychodynamic	5.81 (1.09) 11	5.78 (0.75)	5.80 (0.78)	5.83 (1.40)	4.20 (1.23)
	Family Systems	6.56 (0.43) 17	6.41 (0.76)	6.29 (0.77)	6.73 (0.66)	4.85 (1.23)
	Cognitive Behavioral	6.18 (0.67) 65	6.03 (0.76)	5.82 (0.95)	6.25 (1.22)	4.28 (1.33)
	Behavioral	6.73 (0.30) 6	6.57 (0.32)	5.25 (0.94)	7.00 (0.00)	4.08 (1.63)
Discipline						
	Family Therapist	6.31 (0.73) 11	5.71 (0.91)	5.70 (1.23)	6.70 (0.34)	4.27 (1.57)
	Mental Health Counselor	5.66 (0.84) 13	5.92 (0.59)	5.44 (1.29)	6.03 (1.50)	3.46 (1.16)
	Psychologist	6.34 (0.60) 77	6.10 (0.72)	6.06 (0.74)	6.48 (0.95)	4.57 (1.19)
Practice Setting						
	Academic	6.12 (0.83) 19	6.19 (0.77)	5.78 (1.06)	6.35 (1.23)	4.50 (1.42)
	School	6.14 (0.94) 17	6.20 (0.56)	5.38 (1.02)	5.63 (1.70)	3.65 (1.70)
	Youth Outpatient	6.37 (0.42) 14	6.49 (0.57)	5.82 (0.91)	6.45 (1.08)	4.36 (0.86)
	Private Practice	6.39 (0.66) 40	5.90 (0.89)	6.38 (0.63)	6.82 (0.41)	4.76 (0.95)

Gender.

In order to test the effect of therapist gender on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 6) were conducted. Therapist gender was significant only for perceived behavioral control ($F(1,115) = 7.829$; $p < .01$), with male therapists ($M = 6.30$, $SD = 0.68$) reporting themselves as having more control over their inclusion of parents than female therapists ($M = 5.77$, $SD = 0.97$).

Table 6. *Analysis of Variance for Gender*

TPB Variable	Source	df	F	p
Attitude				
	Gender	1	0.261	0.610
	Error	114		
Subjective Norm				
	Gender	1	0.340	0.561
	Error	115		
Perceived Behavioral Control				
	Gender	1	7.829*	0.006
	Error	115		
Intention				
	Gender	1	1.260	0.264
	Error	114		
Behavior				
	Gender	1	1.941	0.166
	Error	113		

Note: * $p < .05$

Ethnicity.

In order to test the effect of therapist ethnicity on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 7) were conducted. There were no significant mean differences for therapist ethnicity for any of the TPB variables.

Table 7. Analysis of Variance for Ethnicity

TPB Variable	Source	df	F	p
Attitude				
	Ethnicity	3	0.760	0.519
	Error	115		
Subjective Norm				
	Ethnicity	3	0.423	0.737
	Error	115		
Perceived Behavioral Control				
	Ethnicity	3	1.603	0.193
	Error	115		
Intention				
	Ethnicity	3	0.665	0.575
	Error	114		
Behavior				
	Ethnicity	3	0.629	0.598
	Error	113		

Note: * $p < .05$

Education.

In order to test the effect of therapist education (i.e. doctoral versus masters) on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 8) were conducted. Therapist education was significant for attitude ($F(1, 104) = 4.270; p < .05$), subjective norm ($F(1, 104) = 7.279; p < .01$), perceived behavioral control ($F(1, 104) = 5.879; p < .05$), and behavior ($F(1, 103) = 5.574; p < .05$). Specifically, therapists with a doctorate degree had a greater perception of the value or effectiveness of including parents in youth treatment ($M = 6.41, SD = 0.56$) than those with master's degrees ($M = 6.17, SD = 0.63$), were more likely to feel control over their ability to include parents in youth treatment ($M = 6.19, SD = 0.79$) than those with master's degrees ($M = 5.78, SD = 0.92$) and were more likely to actually include parents in youth treatment ($M = 4.68, SD = 1.06$) than those with master's degrees ($M = 4.13, SD = 1.33$). Therapists with master's degrees ($M = 6.34, SD = 0.67$) were more likely to perceive that other professionals include parents in treatment than those with doctorate degrees ($M = 5.96, SD = 0.75$).

Table 8. *Analysis of Variance for Education*

TPB Variable	Source	df	F	p
Attitude				
	Education	1	4.270*	0.041
	Error	104		
Subjective Norm				
	Education	1	7.279*	0.008
	Error	104		
Perceived Behavioral Control				
	Education	1	5.879*	0.017
	Error	104		
Intention				
	Education	1	0.567	0.453
	Error	103		
Behavior				
	Education	1	5.574*	0.020
	Error	103		

Note: * $p < .05$

Therapeutic orientation.

In order to test the effect of therapeutic orientation on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 9) were conducted. Therapeutic orientation was significant only for attitude ($F(3, 95) = 3.947; p < .05$), with therapists who subscribe to a psychodynamic orientation ($M = 5.81, SD = 1.09$) endorsing a lower perception of the value or effectiveness of including parents in youth treatment than both family systems ($M = 6.56, SD = 0.43$) and eclectic ($M = 6.78, SD = 0.30$) orientations. There were no significant differences found for attitude

between those with cognitive behavioral orientations ($M = 6.18$, $SD = 0.67$) and any other therapeutic orientation.

Table 9. *Analysis of Variance for Therapeutic Orientation*

TPB Variable	Source	df	F	p
Attitude	Orientation	3	3.947*	0.011
	Error	95		
Subjective Norm	Orientation	3	2.662	0.052
	Error	95		
Perceived Behavioral Control	Orientation	3	2.265	0.086
	Error	95		
Intention	Orientation	3	2.203	0.093
	Error	94		
Behavior	Orientation	3	1.020	0.387
	Error	94		

Note: * $p < .05$

Discipline.

In order to test the effect of therapist discipline on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 10) were conducted. Therapist discipline was significant for attitude ($F(2, 98) = 6.285$; $p < .01$), perceived behavioral control ($F(2, 98) = 3.102$; $p < .05$), and behavior ($F(2, 97) = 4.322$; $p < .05$). Specifically, therapists who are mental health counselors ($M = 5.67$, $SD = 0.73$) endorsed a lower perception of the value or effectiveness of including parents in youth treatment than both family therapists ($M = 6.31$, $SD = 0.73$) and psychologists ($M =$

6.34, SD = 0.60), were less likely to feel control over their ability to include parents in youth treatment (M = 5.44, SD = 1.29) than psychologists (M = 6.06, SD = 0.74) and were less likely to actually include parents in youth treatment (M = 3.46, SD = 1.16) than psychologists (M = 4.57, SD = 1.19).

Table 10. *Analysis of Variance for Discipline*

TPB Variable	Source	df	F	p
Attitude				
	Discipline	2	6.285*	0.003
	Error	98		
Subjective Norm				
	Discipline	2	1.536	0.220
	Error	98		
Perceived Behavioral Control				
	Discipline	2	3.102*	0.049
	Error	98		
Intention				
	Discipline	2	1.519	0.224
	Error	98		
Behavior				
	Discipline	2	4.322*	0.016
	Error	97		

Note: * $p < .05$

Practice Setting.

In order to test the effect of therapist practice setting on the TPB variables, five (intention, attitude, subjective norm, perceived behavioral control, and behavior) one-way ANOVAs (Table 11) were conducted. Therapist practice setting was significant for behavioral intention ($F(3, 86) = 5.229; p < .01$), perceived behavioral control ($F(3, 86) = 6.619; p < .001$), and behavior ($F(3, 85) = 3.301; p < .05$). Specifically, therapists who are in a school setting ($M = 5.38, SD = 1.02$) were less likely to feel control over their ability to include parents in youth treatment than those in private practice ($M = 6.38, SD = 0.63$), were less likely to intend to include parents in youth treatment ($M = 5.63, SD = 1.70$) than those in private practice ($M = 6.82, SD = 0.41$), and were less likely to actually include parents in youth treatment ($M = 3.65, SD = 1.70$) than those in private practice ($M = 4.76, SD = 0.94$). There were no significant group differences to intend to include parents in youth treatment between therapists in academic ($M = 6.35, SD = 1.23$) or child mental health outpatient ($M = 6.45, SD = 1.08$) settings.

Table 11. *Analysis of Variance for Practice Setting*

TPB Variable	Source	df	F	p
Attitude				
	Setting	3	0.887	0.451
	Error	86		
Subjective Norm				
	Setting	3	2.228	0.091
	Error	86		
Perceived Behavioral Control				
	Setting	3	6.169*	0.001
	Error	86		
Intention				
	Setting	3	5.229*	0.002
	Error	86		
Behavior				
	Setting	3	3.301*	0.024
	Error	85		

Note: * $p < .05$

Discussion

The current study was conducted to examine the feasibility of the Theory of Planned Behavior to explain whether or not therapists include parents in youth treatment. It was hypothesized that perceptions of the value or effectiveness (attitude) of including parents in youth treatment would be a significant predictor of intention to include parents. The results showed that attitude was a significant predictor of intention to include parents in treatment. This result is consistent with previous research on the Theory of Planned Behavior, which has shown that attitude can be a strong predictor of behavioral intention (Jones, Courneya, Fairey, & Mackey, 2005; Murgraff, McDermott, & Walsh, 2001).

It was hypothesized that perception of others' views of including parents in youth treatment (subjective norm) would be a significant predictor of intention to include parents. The results of the current study were not consistent with this hypothesis. Although this result is not consistent with some TPB research (Johnson & Hall, 2005; Sutton, McVey & Glanz, 1999), it is consistent with a meta-analysis by Armitage and Conner (2001). They found that subjective norm was the TPB component most weakly related to behavioral intention. Some researchers have suggested that subjective norm be removed from the model altogether because of its inconsistent performance in predicting intention (Sparks, Shepherd, Wieringa, & Zimmermann, 1995). While Ajzen's (1991) original TPB model contains subjective norm as a predictor of behavioral intention, Ajzen suggests that each component of the TPB could vary across situations and behaviors. The current finding suggests that for the behavior of

including parents in youth psychological treatment, subjective norm may not be a necessary component of the model.

It was also hypothesized that actual inclusion of parents (behavior) and intent to include parents (intention) would be significantly predicted by the therapist's perceived behavioral control over the ability to include parents. The results revealed that perceived behavioral control was a significant predictor of both behavioral intention and actual inclusion of parents in youth treatment. This result is consistent with research examining the TPB in other health related areas (Braithewaite et al., 2002; Johnson & Hall, 2005; Jones et al., 2005). These results suggest that the theory of planned behavior rather than the theory of reasoned action is a more appropriate model for determining therapists' inclusion of parents in youth treatment. This comes as no surprise considering the TPB was designed to be an extension of the TRA, which would accommodate behaviors not entirely under an individual's volitional control (Ajzen, 1991). Parent participation in youth treatment is dependent on a multitude of factors such as the therapist being limited by the rules of their work setting, parent barriers to treatment (Kazdin et al., 1993), and parent attitudes toward treatment (Orrell-Valente et al., 1999), and therefore is not solely determined by therapist action.

Lastly, the TPB posits that intention to act is directly related to actually engaging in a behavior and therefore, it was hypothesized that actual inclusion of parents would be significantly predicted by the intention to include parents in youth treatment. The results were consistent with this hypothesis and with previous research (Giles, McClelahan, Cairns & Mallet, 2004; Millstein, 1996).

Posthoc Analyses

Several post hoc analyses were conducted to determine the relationship between several therapist demographic and practice variables and the constructs associated with the Theory of Planned Behavior.

Attitude

The results of post hoc analyses identify several factors related to therapists' attitudes about involving parents in treatment. First, therapist level of education was related to whether they felt including parents in youth treatment was important. Specifically, those therapists with doctoral degrees reported more global positive evaluations about the inclusion of parents in treatment. While it is uncertain why this might be the case, one finding was interesting. Those therapists with a family systems orientation or more coursework in family systems reported more global positive evaluations about including parents in treatment. Traditionally, family systems treatment has focused on the inclusion of the family as a unit in treatment (Liddle, Dakof & Diamond, 1991; Liddle & Hogue, 2000; Minuchin, 1981) so it would stand to reason that training in this treatment style would lead to more positive attitudes about including parents in treatment. It is possible that those therapists with doctoral degrees may have had more exposure to different types of classes and training opportunities that may have increased their chances of being exposed to family systems. Therefore those therapists may be more likely to view including parents in treatment more favorably, however, more research is needed to examine whether this may be the case.

Contrary to the family systems orientation, some researchers suggest that those with a traditional psychodynamic orientation may view parents as primary contributors to their

children's disturbances (Alexander & Dore, 1999). They suggest that therapist and parent negative evaluations may be likely to diminish clinician's optimistic expectations regarding parents being active contributors to the treatment process. Even if therapists have a positive or neutral opinion about parents' contributions to psychopathology, psychodynamic therapists have traditionally worked exclusively with youth clients individually in therapy and not with the parents. The results of this study seem to support these viewpoints. Therapists with a psychodynamic orientation were more likely to evaluate inclusion of parents less positively than those from eclectic or family systems orientations.

Subjective Norm

Several factors were examined for their relation to the construct of subjective norm. Interestingly, only variables related to experience level were related to subjective norm (age, years of practice, education level). It could be the case that those with less experience look to more experienced colleagues for guidance in practice activities. While this study did not examine mediation between subjective norm and intention, one study by Latimer & Ginis (2001) examined the importance of subjective norm and its relationship to individual's fearfulness associated with receiving disapproval and criticism from others. They found that subjective norm was a positive predictor of intention only when individuals had a high fear of negative evaluation. Fear of evaluation could be a significant factor in less experienced therapists particularly those in training programs or those being supervised for licensure due to the fact that their completion is dependent on approval from a supervisor or advisor.

Perceived Behavioral Control

Almost all of the demographic variables were found to have a significant relationship with perceived behavioral control (i.e. number years in practice, therapist age, number of children, number of family therapy CEU's taken, and hours of adult treatment). This is not surprising given the nature of the construct. The construct of perceived behavioral control includes information about potential constraints on action as perceived by the actor (Armitage & Conner, 2001). It would seem reasonable that many different factors would influence how much control we feel we have over performing a particular behavior and this seems particularly true for therapists control beliefs about including parents in youth treatment. These results are promising in that they imply that there are various levels of possible intervention to increase control beliefs.

Behavioral Intention

Based on post hoc analyses, only practice setting was found to be related to behavioral intention. Specifically, therapists in private practice were more likely to intend to include parents in youth treatment than those in school settings. There were no differences found for those in academic or child outpatient mental health centers. These results are not surprising. Historically, treatment of youth in the schools has mainly been individual (Shochet et al., 2001). However, recent research has suggested that parental involvement in youth treatment at school has added effects to that of individual treatment alone (Gillham et al., 2006). Which suggests that inclusion of parents in school-based treatment could be just as beneficial as in other practice settings and should be explored further.

Limitations

The results of this study are limited by several factors. First, all constructs of the TPB were measured at the same time. Most studies that examine the feasibility of the TPB as it relates to health-related behaviors use this type of cross sectional design (Armitage & Conner, 2001). However, this design limits the ability to really examine the predictive ability of the variables of attitude, perceived behavioral control, subjective norm and intention to predict actual behavior. Future studies could look at behavior longitudinally to be able to determine how pre-existing behavioral beliefs influence future behavior.

Secondly, all the TPB variables in this study were measured by self-report. While this has been the method of choice in previous research (Downs & Hausenblas, 2005), it calls into question the reliability of the behavioral reports. The relationships found in this study may be inflated due to shared source variance. Future research should use multiple sources to obtain data on TPB variables. Also, Beck & Ajzen (1991) examined the effect of social desirability on the self-report of the TPB variables attitudes and intentions. They found limited evidence that self-report measures may be influenced by social desirability. In their meta-analysis, Armitage & Conner (2001) examined the contrast of the relationship between perceived behavioral control and intention as they related to self-reported and observed behavior. Although they did find a difference in the relationship between TPB variables and self-report versus observed variables, they found that both relationships were significant. This would suggest that while self-report measures may provide over-inflated or more socially desirable reports of behavior, the predictability of the TPB can still be determined by self-report measure. However, the strength of relationships found between TPB variables and behavior may be tempered by the ceiling effect report of behavior. This may suggest the need

for future studies to create items that are better able to differentiate high-end ratings of TPB constructs.

Finally, the results of this study may have limited generalizability. First, generalizability is limited by the very low response rate for this study. This could suggest that there was a difference between those who completed the study and those who did not. Secondly, the sample was composed mostly of women and individuals of Caucasian ethnicity. This may have limited how well the model accounts for therapist behavior if males or in clinicians from other ethnic groups. However, the current sample was comparable to the racial/ethnic and gender composition of the licensing board of the state of Florida as well as the American Psychological Association. Moreover, the participants were recruited from across the state of Florida and the United States, which should increase the generalizability of the results. Also, when ethnicity was examined for effects on TPB variables, no differences were found based on ethnic/racial group.

Implications

Overall, the results of this study highlight the importance of the influence of attitude and perceived behavioral control on the intention of therapists to include parents in youth treatment. Perkins et al. (2007) noted that the majority of studies that examine clinician behavior using the TPB have focused on trying to understand clinician behavior rather than extending the model to understand how to change that behavior. The results of this study could assist in the development of training programs designed to increase parental involvement in treatment. For example, therapists could be given a screener to determine where they fall on each domain (attitude or perceived behavioral control). Based on these

results, individual interventions could be tailored to improve levels of those domains (trainings on the effectiveness of including parents in treatment (attitudes), trainings designed to improve efficacy with working with parents (perceived behavioral control), etc.).

The results of this study also point out a distinction in work setting, training and orientation. Primarily therapists who have received some training in family systems are more likely to view including parents more favorably than those with a psychodynamic background and therapists in private practice were more likely to intend to include parents than those in a school setting. By providing information to students about the efficacy of including parents in treatment and developing best practice guidelines about how this could be done, programs based in a psychodynamic orientation or school-based psychology may increase the inclusion of parents in youth treatment.

Future Directions

The results of this study suggest several avenues for future study. First, the extended TPB model suggests that there are antecedents to the constructs of attitude, subjective norm, and perceived behavioral control (Ajzen, 1991). These antecedents are corresponding behavioral beliefs and each behavioral belief links a certain behavior to a certain outcome. Future studies could extend the research done here to include measures of behavioral belief and their effects on the predictive ability of the TPB.

As mentioned previously, the majority of studies examining parental involvement in treatment have been done for children with externalizing behavior problems (Sonuga-Barke et al., 2002). Recent research has shown that involving parents in treatment for internalizing disorders could prove beneficial (Spence, Donovan, & Brechman-Toussaint, 2000).

However, due to the fact that most of the previous research supporting the beneficial effect of parental involvement in treatment was on externalizing behaviors, it is possible that therapists' attitudes and beliefs about parental involvement may be shaded by type of disorder. Future studies could compare and contrast the effectiveness of the TPB for explaining therapist inclusion of parents in youth treatment based on the type of presenting problem.

Conclusion

The theory of planned behavior is a model that has been used to explain and predict a variety of behaviors (Downs & Hausenblas, 2005). While this model has been used extensively for health-related behaviors (Godin & Kok, 1996), its use to predict health professional behavior has been limited. Even more limited has been the evaluation of the predictive ability of the TPB for therapist behaviors. Overall, the results of this study provided support for the Theory of Planned Behavior for predicting therapist invitation to parents for youth treatment. Results of this study can assist in the development of training programs designed to increase parental involvement in youth treatment as they reveal several entrance points for intervention. Finally, the results of this study point out the distinction in training and orientation and could lead to the dissemination of best practice guidelines across orientations.

References

- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications for cross-informant correlations for situational specificity, *Psychological Bulletin*, 101, 213-232.
- Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality & Social Psychology*, 49(3), 843-851.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior & Human Decision Processes*, 50 (2), 179-211.
- Ajzen, I. (2002). *Constructing a TPB questionnaire: Conceptual and methodological considerations*. University of Massachusetts, Department of Psychology Web site: <http://www.unix.oit.umass.edu/~aizen/pdf/tpb.measurement.pdf>
- Ajzen, I. & Driver, B. (1992). Application of the theory of planned behavior to leisure choice. *Journal of Leisure Research*, 24(3), 207-224.
- Alexander, L. B. & Dore, M. M. (1999). Making the parents as partners principle a reality: The role of the alliance. *Journal of Child and Family Studies*, 8 (3), 255-270.
- Allport, G. (1935). Attitudes. In: *A Handbook of Social Psychology*. Worcester, MA: Clark University Press.

- Andra, M.L., & Thomas, A.M. (1998). The influence of parenting stress and socioeconomic disadvantage on therapy attendance among parents and their behavior disordered preschool children. *Education & Treatment of Children*, 21(2), 195-208.
- Armitage, C. & Conner, M. (1991). Predictive validity of the theory of planned behaviour: The role of questionnaire format and social desirability. *Journal of Community and Applied Social Psychology*, 9, 261-272.
- Armitage, C.J. & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- Arnold, J., Loan-Clarke, J., Coombs, C., Wilkinson, A., Park, J. & Preston, D. (2006) How well can the theory of planned behavior account for occupational intentions? *Journal of Vocational Behavior*, 69, 374-390.
- Bagner, D. M. & Eyberg, S. M. (2003). Father Involvement in Parent Training: When Does It Matter? *Journal of Clinical Child & Adolescent Psychology*, 32(4), 599-605.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 122-147.
- Barmish, A. & Kendall, P. (2005). Should parents be co-clients in cognitive-behavioral therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology*, 34(3), 569-581.
- Beck, A. & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25, 285-301.

- Bennum, I. (1989) Perceptions of the therapist in family therapy. *Journal of Family Therapy*, 11, 243-255.
- Berg, B. & Rosenblum, H. (1977). Fathers in family therapy: A survey of family therapists. *Journal of Marriage and Family Counseling*, 3, 85-91.
- Bischoff, R.J. & Sprenkle, D.H. (1993). Dropping out of marriage and family therapy: A critical review of research. *Family Process*, 32(3), 353-375.
- Braithwaite, D., Sutton, S., Smithson, W., & Emery, J. (2002). Internet-based risk assessment and decision support for the management of familial cancer in primary care: A survey of GPs' attitudes and intentions. *Family Practice*, 19(6), 587-590.
- Brennan, P.A, Hammen, C. & Katz, A.R. (2002). Maternal depression, paternal psychopathology, and adolescent diagnostic outcomes. *Journal of Consulting & Clinical Psychology*, 70(5), 1075-1085.
- Calam, R., Bolton, C., & Roberts, J. (2002). Maternal expressed emotion, attributions and depression and entry into therapy for children with behaviour problems. *British Journal of Clinical Psychology*, 41(2), 213-216.
- Cantwell, D.P., Lewinsohn, P.M. & Rohde, P. (1997) Correspondence between adolescent report and parent report of psychiatric diagnostic data. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(5), 610-619.
- Carr, A. (1998). The inclusion of fathers in family therapy: A research based perspective. *Contemporary Family Therapy*, 20 (3), 371-383.

- Chronis, A., Chacko, A., Fabiano, G., Wymbs, B., Pelham, W. (2004). Enhancements to the behavioral parent training paradigm for families of children with ADHD: Review and future directions. *Clinical Child & Family Psychology Review*, 7(1), 1-27.
- Conner, M. & Armitage, C. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28, 1429-1464.
- Conner & Sparks (1996). The theory of planned behavior and health behaviors. In M. Conner & P. Norman (Eds.). *Predicting health behaviour*. Buckingham: Open University Press.
- Coplin, J. & Houts, A. (1991). Father involvement in parent training for oppositional child behavior: Progress or stagnation? *Child and Family Behavior Therapy*, 13, 29-51.
- Corkum, P., Rimer, P., & Schachar, R. (1999). Parental knowledge of attention-deficit hyperactivity disorder and opinions of treatment options: Impact on enrolment and adherence to a 12-month treatment trial. *Canadian Journal of Psychiatry*, 44 (10), 1043-1048.
- Crawford, A.M. & Manassis, K. (2001). Familial predictors of treatment outcome in childhood anxiety disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(10), 1182-1189.
- Dakof, G.A., Tejada, M., & Liddle, H.A. (2001). Predictors of engagement in adolescent drug abuse treatment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(3), 274-281.

- Diamond, G.M., Diamond, G.S. & Liddle, H.A. (2000). The therapist-parent alliance in family-based therapy for adolescents. *Journal of Clinical Psychology*, 56(8), 1037-1050.
- Dillman, D. (2000). *Mail and internet surveys: the tailored design method (2nd Ed.)*. New York: Wiley.
- Downs, D. & Hausenblas, H. (2005). The theories of reasoned action and planned behavior applied to exercise: A meta-analytic review. *Journal of Physical Activity and Health*, 2(1), 76-97.
- Duhig, A.M., Phares, V., & Birkeland, R.W. (2002). Involvement of fathers in therapy: A survey of clinicians. *Professional Psychology: Research and Practice*, 33 (4), 389-395.
- Eagly, A. & Chaiken, S. (1993). *The psychology of attitudes*. Orlando, FL: Harcourt Brace Jovanovich College Publishers.
- Edwards, H., Nash, R., Najman, J., Yates, P., Fentiman, B., Dewar, A., Walsh, A., McDowell, J. & Skerman, H. (2001). Determinants of nurses' intention to administer opioids for pain relief. *Nursing and Health Sciences*, 3, 149-159.
- Elliott, M.A., Armitage, C.J., & Baughan, C.J. (2003). Drivers' compliance with speed limits: An application of the theory of planned behavior. *Journal of Applied Psychology*, 88 (5), 964-972.

- Epkins, C. (1996). Parent ratings of children's depression, anxiety, and aggression: A cross-sample analysis of agreement and differences with child and teacher ratings. *Journal of Clinical Psychology, 52*(6), 599-608.
- Farley, O.W., Peterson, K.D., & Spanos, G. (1975). Self-termination from a child guidance center. *Community Mental Health Journal, 11*(3), 325-334.
- Fazekas, A., Senn, C.Y. & Ledgerwood, D.M. (2001). Predictors of intention to use condoms among university women: An application and extension of the theory of planned behaviour. *Canadian Journal of Behavioural Science, 33* (2), 103-117.
- Ferrando, P. and Lorenzo-Seva, U. (2005). IRT related factor analytic procedures for testing the equivalence of paper-and-pencil and internet-administered questionnaires. *Psychological Methods, 10*(2), 193-205.
- Fields, S., Handelsman, J. B., Karver, M., & Bickman, L. (2004). Parental and child factors that affect the therapeutic alliance. Paper presentation at the 17th annual meeting of the Florida Mental Health Institute's A System of Care for Children's Mental Health: Expanding the Research Base, Tampa, FL.
- Fishbein, M. & Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. *Psychological Review, 81*(1), 59-74.
- Forehand, R., Lautenschlager, G., & Faust, J. (1986) Parent perceptions and parent-child interactions in clinic-referred children: A preliminary investigation of the effects of maternal depressive moods. *Behaviour Research & Therapy, 24*(1), 73-75.

- Garling, T. & Fujii, S. (2002). Structural equation modeling of determinants of planning. *Scandinavian Journal of Psychology*, 43(1), 1-8.
- Giles, M., McClenahan, C. & Cairns, E. (2004). An application of the Theory of Planned Behaviour to blood donation: The importance of self-efficacy. *Health Education Research*, 19(4), 380-391.
- Gillham, J.E., Reivich, K.J., Freres, D.R., Lascher, M., Litzinger, S., Shatte, A., Seligman, M.E. (2006). School-based prevention of depression and anxiety symptoms in early adolescence: A pilot of a parent intervention component. *School Psychology Quarterly*, 21(3), 323-348.
- Godin, G. & Kok, G. (1996). The theory of planned behavior: A review of its applications to health-related behaviors. *American Journal of Health Promotion*, 11(2), 87-98.
- Goodman, S., Hoven, C. & Narrow, W. (1998). Measurement of risk for mental disorders and competence in a psychiatric epidemiologic community survey: The National Institute of Mental Health Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) study. *Social Psychiatry*, 33(4), 162-173.
- Gosling, S., Vazire, S., Srivastava, S. & John, O. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59(2), 93-104.
- Gredig, D., Niderost, S., Parpan-Blaser, A. (2006) HIV-protection through condom use: Testing the theory of planned behaviour in a community sample of heterosexual men in a high-income country. *Psychology & Health*, 21(5), 541-555.

- Gustafson, K. E., McNamara, J. R., & Jensen, J. A. (1994). Parents' informed consent decisions regarding psychotherapy for their children: Consideration of therapeutic risks and benefits. *Professional Psychology: Research and Practice*, 25(1), 16-22.
- Horton, L. (1984). The father's role in behavioral parent training: A review. *Journal of Clinical Child Psychology*, 13(3), 274-279.
- Jaffee, S., Harrington, H., Cohen, P., & Moffitt, T. (2005). Cumulative prevalence of psychiatric disorder in youths. *Journal of the American Academy of Child Psychiatry*, 44(5), 406-407.
- Jemmott, L.S. & Jemmott, J.B. (1991). Applying the theory of reasoned action to AIDS risk behavior: Condom use among Black women. *Nursing Research*, 40(4), 228-234.
- Johnson, S. & Hall, A. (2005). The prediction of safe lifting behavior: An application of the theory of planned behavior. *Journal of Safety Research*, 36, 63-73.
- Johnson, H.C., Renaud, E.F., Schmidt, D.T & Stanek, E.J. (1998). Social workers' view of parents of children with mental and emotional disabilities. *Families in Society*, 79 (2), 173-187.
- Jones, L., Courneya, K., Fairey, A., & Mackey, J. (2005). Does the theory of planned behavior mediate the effects of an oncologist's recommendation to exercise in newly diagnosed breast cancer survivors? Results from a randomized control trial. *Health Psychology*, 24(2), 189-197.

- Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2005). A theoretical model of common process factors in youth and family therapy. *Mental Health Services Research, 7*(1), 35-52.
- Karver, M., Handelsman, J. B., Fields, S. & Bickman, L. (2006). Meta-analysis of common process factors in youth and family therapy: The evidence for different relationship variables in child and adolescent treatment outcome literature. *Clinical Psychology Review, 26*, 50-65.
- Kazdin, A.E. (1990). Premature termination from treatment among children referred for antisocial behavior. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 31*(3), 415-425.
- Kazdin, A. (1996). Dropping out of child psychotherapy: Issues for research and implications for practice. *Clinical Child Psychology & Psychiatry, 1*(1), 133-156.
- Kazdin, A. (2000). Perceived barriers to treatment participation and treatment acceptability among antisocial children and their families. *Journal of Child & Family Studies, 9*(2), 157-174.
- Kazdin, A. E., Mazurick, J. L., & Bass, D. (1993). Risk for attrition in treatment of antisocial children and families. *Journal of Clinical Child Psychology, 22*(1), 2-16.
- Kazdin, A. E. & Mazurick, J. L. (1994). Dropping out of child psychotherapy: Distinguishing early and late dropouts over the course of treatment. *Journal of Consulting & Clinical Psychology, 62*(5), 1069-1074.

- Kazdin, A. E. & Wassell, G. (1998). Barriers to treatment participation and therapeutic change among children referred for conduct disorder. *Journal of Clinical Child Psychology*, 28(2), 160-172.
- Keijers, G., Schaap, C. & Hoogduin, C. (2000). The impact of interpersonal patient and therapist behavior on outcome in cognitive-behavioral therapy: A review of empirical studies. *Behavior Modification*, 24(2), 264-297.
- Kendall, P. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting & Clinical Psychology*, 62(1), 100-110.
- Kendall, P.C., Reber, M. & McLeer, S. (1990). Cognitive-behavioral treatment of conduct-disordered children. *Cognitive Therapy & Research*, 14(3), 279-297.
- Kendall, P.C. & Sugarman, A. (1997). Attrition in the treatment of childhood anxiety disorders. *Journal of Consulting & Clinical Psychology*, 65(5), 883-888.
- Kline, R. (1998). *Principles and practice of structural equation modeling*. New York: Guilford Press.
- Knox, L.S., Albano, A.M, & Barlow, D.H. (1996). Parental involvement in the treatment of childhood compulsive disorder: A multiple-baseline examination incorporating parents. *Behavior Therapy*, 27(1), 93-114.
- Kovacs, M. & Lohr, W.D. (1995). Research on psychotherapy with children and adolescents: An overview of evolving trends and current issues. *Journal of Abnormal Child Psychology*, 23(1), 11-30.

- Kramer, T., Phillips, S., & Hargis, M. (2004). Disagreement between parent and adolescent reports of functional impairment. *Journal of Child Psychology & Psychiatry*, 45(2), 248-259.
- Kroes, G. Veerman, J., & De Bruyn, E. (2003). Bias in parental reports? Maternal psychopathology and the reporting of problem behavior in clinic-referred children. *European Journal of Psychological Assessment*, 19(3), 195-203.
- Latimer, A. & Ginis, K. (2005). The importance of subjective norms for people who care what others think of them. *Psychology and Health*, 20(1), 53-62.
- Lawson, D. & Brossart, D. (2003). Link among therapist and parent relationship, working alliance, and therapy outcome. *Psychotherapy Research*, 13(3), 383-394.
- Lazar, A., Sagi, A., & Fraser, M. W. (1991). Involving fathers in social services. *Children & Youth Services Review*, 13(4), 287-300.
- Liddle, H., Dakof, G., & Diamond, G. (1991). Adolescent substance abuse: Multidimensional family therapy in action. In E. Kaufman & P. Kaufman (Eds.), *Family therapy approaches with drug and alcohol problems (2nd ed.)*. Needham Heights, MA: Allyn & Bacon.
- Liddle, H. & Hogue, A. (2000). A family-based, developmental-ecological preventive intervention for high-risk adolescents. *Journal of Marital and Family Therapy*, 26, 265-279.

- Maher, R., & Rickwood, D. (1997). The theory of planned behavior, domain specific self-efficacy and adolescent smoking. *Journal of Child & Adolescent Substance Abuse*, 6(3), 57-76.
- Manfred-Gilham, J., Sales, E. & Koeske, G. (2002). Therapist and case manager perceptions of client barriers to treatment participation and use of engagement strategies. *Community Mental Health Journal*, 38(3), 213-221.
- Martin, D. Garske, J. & Davis, M. (2000). Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. *Journal of Consulting & Clinical Psychology*, 68(3), 438-450.
- McCarty, M. Henrikus, D., Lando, H. & Vessey, J. (2001). Nurses attitudes concerning the delivery of brief cessation advice to hospitalized smokers. *Preventive Medicine: An International Journal Devoted to Practice and Theory*, 33(6), 674-681.
- Mendlowitz, S. L., Manassis, K., & Bradley, S. (1999). Cognitive-behavioral group treatments in childhood anxiety disorders: The role of parental involvement. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(10), 1223-1229.
- Millstein, S.G. (1996). Utility of the theories of reasoned action and planned behavior for predicting physician behavior: A prospective analysis. *Health Psychology*, 15 (5), 398-402.
- Minuchin, S. & Fishman, H. (1981). *Family Therapy Techniques*. Cambridge, MA: Harvard University Press.

- Murgraff, V., McDermott, M., & Walsh, J. (2001) Exploring attitude and belief correlates of adhering to the new guidelines for low-risk single-occasion drinking: An application of the theory of planned behaviour. *Alcohol and Alcoholism*, 36(2), 135-140.
- Netemeyer, R., Andrews, J., & Durvasula, S. (1993). A comparison of three behavioral intention models: The case of Valentine's Day gift giving. *Advances in Consumer Research*, 20, 135-141.
- Nevas, D.B. & Farber, B.A. (2001). Parents' attitudes toward their child's therapist and therapy. *Professional Psychology: Research & Practice*, 32(2), 165-170.
- Nock, M. & Kazdin, A. (2001). Parent expectancies for child therapy: Assessment and relation to participation in treatment. *Journal of Child & Family Studies*, 10(2), 155-180.
- Orrell-Valente, J.K., Pinderhughes, E.E., Valente, E., & Laird, R.D. (1999). If it's offered, will they come? Influences on parents' participation in a community-based conduct problems prevention program. *American Journal of Community Psychology*, 27(6), 753-783.
- Oskamp, S. & Schultz, P. (2005) Attitudes and opinions (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Pekarik, G. & Stephenson, L.A. (1988). Adult and child client differences in therapy dropout research. *Journal of Clinical Child Psychology*, 17(4), 316-321.

- Pellino, T. (1997). Relationships between patient's attitudes, subjective norms, perceived control and analgesic use following elective orthopedic surgery. *Research in Nursing and Health*, 20, 97-105.
- Perkins, M., Jensen, P., Jaccard, J., Gollwitzer, P., Oettingen, G., Pappadopoulos, E., & Hoagwood, K. (2007). Applying theory-driven approaches to understanding and modifying clinicians' behavior: What do we know? *Psychiatric Services*, 58(3), 342-348.
- Petr, C.G. & Allen, R.I. (1997). Family-centered professional behavior: Frequency and importance to parents. *Journal of Emotional & Behavioral Disorders*, 5(4), 196-204.
- Phares, V. (1997). Psychological Adjustment, Maladjustment, and father-child relationships. In Michael Lamb (Ed.): *The role of fathers in child development (3rd Ed)*. Hoboken: John Wiley & Sons.
- Phares, V. & Lum, J. (1997). Clinically referred children and adolescents: Fathers, family constellations, and other demographic factors. *Journal of Clinical Child Psychology*, 26, 219-223.
- Prinz, R. & Miller, G. (1996) Parental engagement in interventions for children at risk for conduct disorder. In Peters, R. & McMahon, R. (Eds.): *Preventing childhood disorders, substance abuse, and delinquency*. Thousand Oaks: Sage Publications.
- Quine, L. & Rubin, R. (1997) Attitude, subjective norm and perceived behavioural control as predictors of women's intentions to take hormone replacement therapy. *British Journal of Health Psychology*, 2(3), 199-216.

- Renk, K. & Phares, V. (2004). Cross-informant ratings of social competence in children and adolescents. *Clinical Psychology Review*, 24(2), 239-254.
- Roberts, R., Roberts, C., & Xing, Y. (2007). Rates of DSM-IV psychiatric disorders among adolescents in a large metropolitan area. *Journal of Psychiatric Research*, 41(11), 959-967.
- Schifter, D. & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology*, 49, 843-851.
- Schlegel, R., d'Averna, J., Zanna, M., DeCourville, N. & Manske, S. (1990). *Problem drinking: A problem for the theory of reasoned action?* Unpublished manuscript. Department of Health Studies, University of Waterloo, Waterloo, Canada.
- Sheppard, B., Hartwick, J. & Warshaw, P. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15(3), 325-343.
- Shirk, S. R. & Karver, M. (2003). Prediction of treatment outcome from relationship variables in child and adolescent therapy: A meta-analytic review. *Journal of Consulting & Clinical Psychology*, 71(3), 452-464.
- Shochet, I.M., Dadds, M.R., Holland, D., Whiteford, K., Harnett, P.H., & Osgarby, S.M. (2001). The efficacy of a universal school-based program to prevent adolescent depression. *Journal of Clinical Child Psychology*, 30, 303-315.

- Silverman, W., Ginsburg, G. & Kurtines, W. (1995). Clinical issues in treating children with anxiety and phobic disorders. *Cognitive & Behavioral Practice*, 2(1), 93-117.
- Singh, H., Janes, C.L. & Schechtman, J.M. (1982). Problem children's treatment attrition and parents' perception of the diagnostic evaluation. *Journal of Psychiatric Treatment & Evaluation*, 4(3), 257-263.
- Singh, I. (2003). Boys will be boys: Fathers' perspectives on ADHD symptoms, diagnosis, and drug treatment. *Harvard Review of Psychiatry*, 11(6), 308-316.
- Sonuga-Barke, E.J.S., Daley, D., & Thompson, M. (2002). Does maternal ADHD reduce the effectiveness of parent training for preschool children's ADHD? *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(6), 696-702.
- Southam-Gerow, M., Kendall, P., & Weersing, V. (2001). Examining outcome variability: Correlates of treatment response in a child and adolescent anxiety clinic. *Journal of Clinical Child Psychology*, 30(3), 422-436.
- Sparks, P., Guthrie, C., & Shephard, R. (1997). The dimensional structure of the 'perceived behavioral control' construct. *Journal of Applied Psychology*, 27, 418-438.
- Sparks, P., Shepherd, R., Wieringa, N., & Zimmermans, N. (1995). Perceived behavioral control, unrealistic optimism and dietary change: An exploratory study. *Appetite*, 24, 243-255.
- Spence, S.H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training-based, cognitive-

behavioural intervention, with and without parental involvement. ; *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 41(6), 713-726.

Surgeon General (1999). *Mental Health: A report of the Surgeon General*. Washington, DC. Department of Health and Human Services, US Public Health Service.

Sutton, S., McVey, D., & Glanz, A. (1999). A comparative test of the theory of reasoned action and the theory of planned behavior in the prediction of condom use intentions in a national sample of English young people. *Health Psychology*, 18(1), 72-81.

Terry, D. & Hogg, M. (1996). Group norms and the attitude-behaviour relationship: A role for group identification. *Personality and Social Psychology Bulletin*, 22, 776-793.

Van Furth, E.F., Van Strien, D.C., & Martina, L.M.L. (1996). Expressed emotion and the prediction of outcome in adolescent eating disorders. *International Journal of Eating Disorders*, 20(1), 19-31.

Walker, A., Grimshaw, J. & Armstrong, E. (2004). Salient beliefs and intentions to prescribe antibiotics for patients with a sore throat. *British Journal of Health Psychology*, 6(4), 347-360.

Walker, A., Watson, M., Grimshaw, J., & Bond, C. (2004). Applying the theory of planned behavior to pharmacists' beliefs and intentions about the treatment of vaginal candidiasis with non-prescription medicines. *Family Practice*, 21 (6), 670-676.

Walters, J., Tasker, F., & Bichard, S. (2001) 'Too busy'? Fathers' attendance for family appointments. *Journal of Family Therapy*, 23(1), 3-20.

- Webster-Stratton, C. (1985). The effects of father-involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry*, 26, 801-810.
- Weissman, M.M., Feder, A., & Pilowsky, D.J. (2004). Depressed mothers coming to primary care: Maternal reports of problems with their children. *Journal of Affective Disorders*, 78(2), 93-100.
- White, K., Terry, D., & Hogg, M. (1994). Safer sex behavior: The role of attitudes, norms, and control factors. *Journal of Applied Social Psychology*, 24, 2164-2192.
- Wierzbicki, M. & Pekarik, G. (1993). A meta-analysis of psychotherapy dropout. *Professional Psychology: Research & Practice*, 24(2), 190-195.
- Yeh, M. & Weisz, J. (2001). Why are we here at the clinic? Parent-child (dis)agreement on referral problems at outpatient treatment entry. *Journal of Consulting and Clinical Psychology*, 69(6), 1018-1025.
- Zimmerman, R., Khoury, E. & Vega, W. (1995) Teacher and parent perceptions of behavior problems among a sample of African American, Hispanic, and non-Hispanic White students. *American Journal of Community Psychology*, 23(2), 181-197.

Appendices

Appendix A: Pilot TPB Questionnaire

Instructions

Many questions in this survey make use of rating scales with 7 options; you are to circle the number that best describes your opinion. For example, if you were asked to rate "The Weather in Tampa" on such a scale, the 7 options should be interpreted as follows:

The Weather in Tampa is:

bad: 1 : 2 : 3 : 4 : 5 : 6 : 7 : good
extremely quite slightly neither slightly quite extremely
bad bad bad good good good

In your ratings, please remember the following:

- Be sure to answer all items – please do not omit any
- Never select more than one number on a single scale
- Please only answer questions for cases related to a child younger than 18 years

Actual Behavior:

1. In what percentage (%) of child and adolescent cases have you included the following people in therapy sessions in the past month?

- A. Parents _____
B. Siblings _____
C. Target Child/Adolescent _____

2. Overall, how often do you include the following people in treatment related to children and adolescents? Rate on the following scale: 1. Never, 2. A few times, 3. A lot but less than halftime, 4. About halftime, 5. Most times, and 6. Always.

- A. Parents _____
B. Siblings _____
C. Target Child/Adolescent _____

Behavioral Intention:

- I intend to include parents in child-related treatment in the next month
extremely unlikely : 1 : 2 : 3 : 4 : 5 : 6 : 7 : extremely likely
- I will try to include parents in treatment in the next month
definitely true : 1 : 2 : 3 : 4 : 5 : 6 : 7 : definitely false
- I plan to include parents in treatment in the next month
strongly disagree : 1 : 2 : 3 : 4 : 5 : 6 : 7 : strongly agree

Appendix A: Continued

Attitude:

For me to include parents in treatment sessions is
harmful : 1 : 2 : 3 : 4 : 5 : 6 : 7 : beneficial
pleasant: 1 : 2 : 3 : 4 : 5 : 6 : 7 : unpleasant
good: 1 : 2 : 3 : 4 : 5 : 6 : 7 : bad
worthless: 1 : 2 : 3 : 4 : 5 : 6 : 7 : valuable
enjoyable: 1 : 2 : 3 : 4 : 5 : 6 : 7 : unenjoyable

Subjective Norm:

- Most people who are important to me think that
I should: 1 : 2 : 3 : 4 : 5 : 6 : 7 : I should not
include parents in treatment sessions
- It is expected of me that I include parents in child-related treatment sessions
extremely likely: 1 : 2 : 3 : 4 : 5 : 6 : 7 : extremely unlikely
 - Colleagues in my life who's opinion I value would
approve: 1 : 2 : 3 : 4 : 5 : 6 : 7 : disapprove
of my including parents in treatment
 - Colleagues in my life who's opinion I value
include: 1 : 2 : 3 : 4 : 5 : 6 : 7 : do not include
parents in treatment sessions
- Most people who are important to me include parents in child-related treatment
completely true: 1 : 2 : 3 : 4 : 5 : 6 : 7 : completely false

Appendix A: Continued

Perceived Behavioral Control:

- For me to include parents in treatment would be impossible : 1 : 2 : 3 : 4 : 5 : 6 : 7 : possible
- If I wanted to I could include parents in treatment definitely true : 1 : 2 : 3 : 4 : 5 : 6 : 7 : definitely false
- How much control do you believe you have over including parents in treatment?
no control : 1 : 2 : 3 : 4 : 5 : 6 : 7 : complete control
 - It is mostly up to me whether or not I include parents in treatment.
strongly agree : 1 : 2 : 3 : 4 : 5 : 6 : 7 : strongly disagree

Appendix B: Revised TPB Questionnaire

Instructions

Many questions in this survey make use of rating scales with 7 places; you are to circle the number that best describes your opinion. For example, if you were asked to rate "The Weather in your town" on such a scale, the 7 places should be interpreted as follows: The Weather in your town is:

bad: __1__: __2__: __3__: __4__: __5__: __6__: __7__: good
extremely quite slightly neither slightly quite extremely

In your ratings, please remember the following:

- Be sure to answer all items - please do not omit any
- Never select more than one number on a single scale
- Please only answer questions for cases related to a child **11 years or younger**
- **Treatment refers to sessions following intake**

1. For me to include parents in child-related treatment sessions would be

harmful : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : beneficial

2. Professional peers who are important to me think that

I should: __1__: __2__: __3__: __4__: __5__: __6__: __7__: I should not
include parents in child-related treatment sessions

3. Professional peers who are important to me include parents in child-related treatment

completely true: __1__: __2__: __3__: __4__: __5__: __6__: __7__: completely false

4. For me to include parents in child-related treatment would be

impossible : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : possible

5. It is mostly up to me whether or not I include parents in child-related treatment

strongly agree : __1__: __2__: __3__: __4__: __5__: __6__: __7__: strongly disagree

6. I intend to include parents in child-related treatment in the next 6 months

extremely unlikely : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : extremely likely

7. Colleagues in my life whose opinions I value

approve: __1__: __2__: __3__: __4__: __5__: __6__: __7__: disapprove
of my including parents in child-related treatment

Appendix B: Continued

8. It is expected of me that I include parents in child-related treatment sessions
extremely likely: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : extremely unlikely
9. I plan to include parents in child-related treatment in the next 6 months
strongly disagree : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : strongly agree
10. I will try to include parents in child-related treatment in the next 6 months
definitely true : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : definitely false
11. If I wanted to, I could include parents in child-related treatment
definitely true : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : definitely false
12. For me to include parents in child-related treatment sessions would be
worthless: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : valuable
13. Colleagues in my life whose opinions I value
include: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : do not include
parents in child-related treatment sessions
14. For me to include parents in child-related treatment sessions would be
good: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : bad
15. How much control do you believe you have over including parents in child-related treatment?
no control : __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : complete control
16. Overall, how often do you include the following people in treatment (post-intake) related to children 11 years and younger? Rate on the following scale:
1. Never, 2. A few times, 3. A lot but less than halftime, 4. About halftime, 5. Most times, and 6. Always.
- A. Parents
B. Siblings
C. Target Child

Appendix B: Continued

17. Of cases begun in the past year with children 11 years and younger+, in what percentage (%) of sessions (post-intake) have you included the following people in child-related therapy sessions in the past 6 months?

- A. Parents
- B. Siblings
- C. Target Child

18. For me to include parents in child-related treatment sessions would be

pleasant: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : unpleasant

19. For me to include parents in child-related treatment sessions would be

enjoyable: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : unenjoyable

Note: TPB Scales are composed of the following items

Attitude: 1, 12, 14, 18, 19

Subjective Norm: 2, 3, 7, 8, 13

Perceived Behavioral Control: 4,5,15

Intention: 5, 6, 9, 10

Behavior: 16, 17

Appendix C: Demographics Questionnaire

Demographic Information (circle all that apply)

1. Your discipline
 - a. Social worker
 - b. Family therapist
 - c. Mental Health Counselor
 - d. Psychiatrist
 - e. Psychologist
 - f. Clergy
 - g. Vocational rehabilitation counselor
 - h. School guidance counselor
 - i. Special education teacher
 - j. Teacher
 - k. Neuropsychologist
 - l. Medical Doctor
 - m. Nurse
 - n. Other

2. Practice Setting (if more than one, please check your primary setting)
 - a. Academic
 - b. School
 - c. Health care facility
 - d. Services to the elderly
 - e. Adult mental health (outpatient)
 - f. Adult mental health (inpatient)
 - g. Child/teen mental health (outpatient)
 - h. Child/teen mental health (inpatient)
 - i. Family services or child welfare
 - j. Substance abuse treatment (outpatient)
 - k. Substance abuse treatment (inpatient)
 - l. Residential school
 - m. Probation department
 - n. Criminal justice facility
 - o. Private practice
 - p. Community Mental Health Center
 - q. Other

3. Number of Years in Practice with children, adolescents, and/or families: _____

4. Range in age of current client: _____ to _____

5. Average age of clientele currently: _____

6. Predominant Therapeutic Orientation
 - a. Psychodynamic/ego psychological/interpersonal
 - b. Family systems
 - c. Cognitive/behavioral
 - d. Cognitive
 - e. Behavioral
 - f. Neuropsychological
 - g. Existential/humanistic
 - h. Eclectic
 - i. Other

7. Your age: _____

Appendix C: Continued

8. Your race/ethnicity
- a. African American
 - b. Asian
 - c. Latino/Latina
 - d. Native American
 - e. Caucasian
 - f. Other
9. Your gender
- a. Male
 - b. Female
10. How many children under the age of 18 do you have in your own family (if any)?
- A. Biological Children _____
 - B. Stepchildren _____
 - C. Foster children _____
 - D. Adoptive children _____
11. How many children 18 and older do you have (if any)?
- A. Biological Children _____
 - B. Stepchildren _____
 - C. Foster children _____
 - D. Adoptive children _____
12. Your education
- A. 1-3 years college
 - B. Bachelor's degree
 - C. Master's degree
 - D. Doctorate
 - E. Other
13. Current romantic partner status
- A. Living with partner/married
 - B. Have a partner but not live in
 - C. No partner currently
 - D. Other
14. How many family therapy courses (if any) did you complete during your graduate training (including internship)? _____
15. How many family-related continuing education seminars or training sessions have you taken in the past 12 months? _____
16. How many family-related books and journal articles have you read in the past 12 months?

17. Do you offer evening appointments?
- A. Yes
 - B. No
18. Do you offer weekend appointments?
- A. Yes
 - B. No
19. How many hours per week do you spend seeing child clients? _____

Appendix C: Continued

20. How many hours per week do you spend seeing adult clients? _____

21. Does your clinic support the inclusion of parents in child-related therapy sessions?

A. Yes

B. No

C. Depends

22. In your estimation, what percentage of professionals who conduct therapy include parents in child related therapy sessions (post-intake)? _____

Appendix D: Invitation Letter

Dear Colleague,

I am writing to invite you to participate in a survey of clinicians who conduct therapy with children and/or adolescents. Please only reply if you see child clients 11 years old and younger. The purpose of this research study is to better understand the practices of child and adolescent clinicians in community settings. You are being asked to answer a brief survey about your beliefs and background. The entire task should take approximately 5 to 10 minutes. Each participant will choose one of three charities to which one dollar will be donated up to a maximum of \$100 per charity.

This project has been approved by the University of South Florida Institutional Review Board and all information will remain confidential and anonymous. Participation in this study is completely voluntary and you would have the freedom to withdraw at any time. To complete the survey, you will need to access the following website: **cliniciansurvey.cas.usf.edu**.

If you have any questions about this research study, contact Sherecce Fields, MA, Department of Psychology, University of South Florida, 4202 E. Fowler Ave., PCD 4118G, Tampa, FL 33620, 813-974-9222, fieldss@mail.usf.edu.

Sincerely,
Sherecce Fields, MA

Appendix E. Informed Consent



Information for People Who Take Part in Research Studies

The following information is being presented to help you decide whether or not you want to take part in a minimal risk research study. Please read this letter carefully. If you do not understand anything, please contact the person in charge of the study (Sherecce Fields, 813-974-9222; fieldss@mail.usf.edu).

Title of Study: Youth Treatment Survey

Principal Investigators: Sherecce Fields, M.A. and Vicky Phares, PhD

Study Location(s): University of South Florida via the internet

You are being asked to participate because you are a clinician who conducts therapy with children or adolescents. Please only participate if you see child clients 11 years and younger.

General Information about the Research Study

The purpose of this research study is to better understand the practices of child and adolescent clinicians in community settings.

Plan of Study

You are being asked to do the following: Complete a survey about your beliefs and background. The entire study takes approximately 5 to 10 minutes.

Payment for Participation

All participants (even those who wish to discontinue their participation) will be allowed to choose one of the three charities to which one dollar will be donated per participant (for a maximum of \$100 per charity). The charities are: Habitat for Humanity, Give Kids the World, and Shriner's Hospitals for Children.

Benefits of Being a Part of this Research Study

By taking part in this research study, you may enjoy reflecting on your own practice of therapy with children and adolescents in the community. You will also be contributing to the understanding of clinicians' practices in the community.

Appendix E: Continued

Risks of Being a Part of this Research Study

There are no known risks for taking part in this study.

Confidentiality of Your Records

Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, employees of the Department of Health and Human Services, and the USF Institutional Review Board may inspect the records from this research project.

The results of this study may be published. However, the data obtained from you will be combined with data from others in the publication. The published results will not include your name or any other information that would personally identify you in any way.

All records will be identified by numbers and your identity will not be placed on any of the completed forms. Access to the data will be restricted to relevant students and faculty of the Psychology Department at the University of South Florida.

Volunteering to Be Part of this Research Study

Your decision to participate in this research study is completely voluntary. You are free to participate in this research study or to withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in the study.

Questions and Contacts

If you have any questions about this research study, contact Sherecce Fields, Department of Psychology, University of South Florida, 4202 E. Fowler Ave. PCD 4118G, Tampa, FL 33620, 813-974-9222; fieldss@mail.usf.edu.

Click [HERE](#) to begin the survey.

About the Author

Sherecce Fields received Bachelor's Degrees in Chemistry and Psychology from Duke University in 1998 and a M.A. in Clinical Psychology from the University of South Florida in 2004. Prior to entering the clinical psychology doctoral program at the University of South Florida in 2001, Dr. Fields worked on several research projects in the Comprehensive Cancer Center at the Duke University Medical Center.

While in the Ph.D. program at the University of South Florida, Ms. Fields was active in the USF Psychological Services Center and also provided clinical services at several local community agencies. Ms. Fields has co-authored several publications and made several paper and poster presentations at national meetings of the American Psychological Association, Society for Research in Child Development, and the Association for the Advancement of Cognitive and Behavioral Therapy. Ms. Fields is in the process of completing a one-year clinical internship in child psychology at Saint John's Child and Family Development Center in Santa Monica, CA.