

NORTHWESTERN UNIVERSITY

Caregiver Cognitions Associated with Expectations for Child Psychotherapy and Subsequent
Treatment Engagement

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS

for the degree

DOCTOR OF PHILOSOPHY

Field of Clinical Psychology

By

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EVANSTON, ILLINOIS

June 2008

ABSTRACT

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Attendance among families in child psychotherapy is a significant issue in the delivery of mental health services, and a greater understanding of the factors contributing to attrition is needed before interventions can be developed, or modified, to improve engagement. The present study examined relationships between parent cognitions, which included treatment expectations, level of hope, and parental locus of control (LOC), negative affect, and two engagement variables: attendance and clinician-reported treatment status three months post-intake. First, demographic variables were examined in relation to hope, parental LOC, negative affect, treatment expectations, which included expectations about child improvement, parent involvement, treatment credibility, and parental effort, and engagement variables, both attendance and treatment status. Next, correlational relationships between hope, parental LOC, negative affect, and specific types of treatment expectations were examined. In order to determine whether hope, parental LOC, and negative affect influenced caregiver report of treatment expectations, linear and logistic regression analyses were subsequently computed. Lastly, hope, parental LOC, negative affect, and total expectations were entered in linear and logistic regression analyses to determine if these variables added predictive utility to

demographic variables in predicting attendance and treatment status. In summary, hope, parental LOC, and negative affect were significantly correlated, but these variables were largely unrelated to specific types of treatment expectations, with several notable exceptions. A higher level of caregiver-reported hope was associated with greater expectations about child improvement and total expectations, as well as with caregivers' beliefs about needing to change a large amount in order to help their children improve. This latter expectation was also associated with a more internal parental LOC. Hope, parental LOC, and negative affect did not, however, add predictive utility to demographic variables found to be predictive of specific treatment expectations. Although demographic variables appear to be better predictors of treatment engagement than parental LOC, negative affect, and total treatment expectations, the agency component of hope, which concerns an individual's perception of possessing the ability to achieve a desired outcome, was found to add predictive utility to demographic variables in determining a family's attendance in treatment, with less agency predictive of better attendance.

ACKNOWLEDGMENT

I would like to express my sincere gratitude to my academic advisor, Dr. John Lavigne, for his mentorship and generosity in time during the dissertation process, as well as during my graduate career.

I would also like to thank the Division of Psychology in the Feinberg School of Medicine at Northwestern University for the financial support they provided in order to make this study possible. In addition, I would like to extend a thank you to the clinicians and staff in the Department of Psychiatry at Children's Memorial Hospital who contributed their time and effort to help me implement this study.

Lastly, I would like to express my great appreciation to my family and friends who supported me in numerous ways throughout the dissertation process.

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CHAPTER 1

Introduction

Attendance and participation of families in child psychotherapy is a significant issue in the delivery of mental health services, with 40% to 60% of families who receive treatment terminating prematurely (Armbruster & Kazdin, 1994; Kazdin, Holland, & Crowley, 1997). Greater understanding of the factors contributing to attrition is needed before interventions can be developed, or modified, to improve attendance and engagement. Unfortunately, despite several meta-analyses examining factors associated with engagement in treatment (e.g., sex, race, age, education, SES, marital status), findings are difficult to generalize, especially given inconsistent findings between studies, methodological differences, and small differences between treatment completers and noncompleters (Baekeland & Lundwall, 1975; Garfield, 1986; Wierzbicki & Pekarik, 1993). Although there are no recent meta-analyses on psychotherapy dropout, the latest meta-analysis, which was conducted by Wierzbicki and Pekarik (1993), examined 125 adult and child psychotherapy studies and found that dropping out of treatment, was most consistently related to minority racial/ethnic status, lower education, and low SES, but with only a moderate effect size (.23 to .37). Variables related to dropout in adult psychotherapy, however, are not always related to treatment dropout in child psychotherapy (Pekarik, 1991; Pekarik & Stephenson, 1988; Wierzbicki & Pekarik, 1993). For example, in the meta-analysis by Wierzbicki and Pekarik (1993), age, marital status, and sex were related to dropout in adult samples but not in child samples. Pekarik and Stephenson (1988), in a study examining demographic, therapist, and treatment variables in relation to dropout, which was defined as those clients who left treatment against the recommendation of the therapist, found that the two

variables, therapist experience and referral source, significantly related to adult attrition were not related to child attrition from treatment. Similarly, in a later study Pekarik (1991) found that expected number of visits and client age were related to attrition among adults, but not among children. These authors stress that adult and child samples should be examined separately when studying variables related to attrition, and that greater attention should be given to studying variables that potentially impact attrition from child psychotherapy, such as parent variables (Pekarik, 1991; Pekarik & Stephenson, 1988).

Unfortunately, in studies solely examining engagement in child psychotherapy, consistent factors related to attrition have not been identified. Kazdin and colleagues found several variables that were related to attrition when examining families presenting for treatment in a university-based clinic specializing in cognitive and behavioral treatment for oppositional, aggressive, and antisocial behavior. These included younger parent age, single-parent family, minority status, lower SES (Kazdin, Mazurick, & Bass, 1993), and presenting symptom severity, with noncompleters exhibiting greater symptom severity at the beginning of treatment (Kazdin, Mazurick, & Siegel, 1994). In a similar program, McMahon, Forehand, Griest, and Wells (1981) also found lower SES to be related to drop out, as well as parental depression and number of negative parental commands. Kazdin and colleagues concluded that no one characteristic seemed to be sufficient or necessary for determining which families terminate treatment prematurely; rather, a combination of risk factors increases the likelihood of premature termination. Interestingly, in a cognitive - behavioral treatment program for phobic and anxiety disorders in youth, no significant differences were found between completers and noncompleters with regard to sociodemographic factors or symptom severity (Pina, Silverman, Weems, Kurtines, &

Goldman, 2003). Results from this latter study are more in line with findings from several studies examining premature termination in treatment as usual settings, which generally have not found consistent variables differentiating those who stay in treatment and those who drop out prematurely (Pekarik, and Stephenson, 1988; Weisz, Weiss, & Langmeyer, 1987), suggesting that variables related to attrition may also vary across treatment setting.

Kazdin and Mazurick (1994) further assessed whether differences in factors related to attrition existed between families who terminate prematurely in the early stages of treatment and those families who drop out later in treatment. Attrition early in treatment was associated with the following factors: younger parents, single parents, being from a minority group, greater reported parental stress, and greater reported child symptom severity. Fewer factors were found to be associated with premature termination in the later stages of treatment, and these included child history of antisocial behavior, lower intelligence, poor adaptive functioning at school, younger mother, and having a nonbiological head of household. With these differences in mind, Kazdin and Mazurick suggest that combining early and late dropouts and examining them as a single group may obscure results. For example, when the groups were examined together, parental stress, which was found to be a predictor of early termination, was no longer significantly associated with termination, and would have likely been missed as an important factor to assess with regard to early termination. Armbruster and Schwab-Stone (1994) further elaborate on differences in variables related to attrition with regard to the phase of treatment. In the same clinic used in studies by Kazdin and colleagues, these authors found that dropout at intake and during the evaluation phase was associated with minority status, single-parent status, public aid status, and urban residence. When examining families following the evaluation,

nonminority status, two-parent household, higher SES, and suburban residence were associated with dropout.

A review by Armbruster and Kazdin (1994) of factors related to attrition in child psychotherapy suggests that socioeconomic disadvantage and parental stress are the primary predictors of families dropping out of treatment in child psychotherapy. Pekarik and Stephenson (1998), in their study looking at variables related to premature termination among adults and children, split the child sample into developmental age groups. These authors found that coming from a larger family was related to premature termination in the preschool sub-sample, and lower social class was related to premature termination in the sub-sample of grade school children. No significant variables were found in relation to premature termination among the adolescent group.

Most often, demographic variables are examined as predictors of attrition because these variables are routinely collected and fairly easy to acquire for research purposes. Kazdin, Holland, and Crowley (1997) suggest that variables such as SES are too broad in scope and do not explain specific mechanisms contributing to dropout or significantly aid in the development of interventions to prevent families from dropping out of treatment. Wierzbicki and Pekarik (1993) also stress this latter point and note that none of the studies in their meta-analysis that related SES to attrition examined why variables concerning social class are associated with dropout. Consideration should be given to variables other than demographics that may likely affect a family's decision to remain in treatment. They assert, "Studies that have investigated more complex variables, such as clients' intentions and expectations and client-therapist

interactions, have found them to be far more powerfully related to dropout than simple client and therapist variables” (194).

Expectations

For several decades, the expectations a client has prior to beginning therapy have been of interest in psychotherapy, especially with regard to the influence these beliefs may have on an individual’s participation and improvement in treatment. Although in the adult literature the client’s expectations are generally studied in relation to participation and outcome, in child psychotherapy the parent’s expectations may likewise influence engagement and improvement, especially given that the parent generally decides to initiate treatment, and determines whether or not the child continues in therapy. With a greater number of treatments involving a parent component and practitioners in regular clinical practice identifying parent involvement as an important variable influencing therapeutic outcome (Kazdin, Siegel, & Bass, 1990), it appears that the parent’s impressions of therapy and expectations for treatment may be important in terms of why families both initiate treatment and engage once in treatment (Morrissey-Kane & Prinz, 1999). Examination of the thoughts and expectations of a parent prior to beginning treatment with their child may elucidate specific mechanisms contributing to dropout, especially given evidence from several studies by Kazdin and colleagues (Kazdin, Holland, & Crowley, 1997; Kazdin & Wassell, 1998) suggesting that parents’ perceptions of the difficulties of participating in treatment, which include stressors or obstacles associated with treatment, beliefs about the relevancy of therapy, and a poor relationship with the therapist, are influential in terms of determining which families drop out of therapy. Additionally, Miller and Prinz (2003) found that pretreatment parent motivational attributions that were external in nature, e.g., the parent felt

therapy would pertain more to the child than to the parent or family, related to premature termination. Several other studies additionally found that parents who expressed no desire to make changes in themselves were more likely to drop out of treatment (Frankel & Simmons, 1992; Gould, Shaffer, & Kaplan, 1985). Together, these studies suggest that parental perceptions and attitudes toward treatment may significantly influence treatment engagement.

Furthermore, parent cognitions regarding psychotherapy likely influence children's beliefs about the therapeutic process. In a study examining both parents' and children's expectations for treatment, which included expectations about treatment structure, resistance, outcome, and the therapist's, child's, and parent's role, Day and Reznikoff (1980b) found that the number of correct expectations held by the child was related to the number of correct expectations held by the parent, suggesting that parents may play an important role in the expectations a child has for treatment. Given evidence of an association between parents' impressions of treatment and engagement in treatment, further effort should be made toward understanding the types of expectations a parent may have regarding treatment for their child, as well as factors that may influence these expectations.

Treatment expectations represent a pretreatment client characteristic (Dew and Bickman, 2005) and refer to the beliefs with which a client approaches the treatment experience (Nock & Kazdin, 2001). Two primary types of expectations have been described in the psychotherapy literature: role and outcome expectancies. Role expectancies, are described by Arnkoff, Glass, and Shapiro (2002) as beliefs about the behavior deemed appropriate or expected of an individual in a particular position, or role. In therapy, clients may have role expectancies for both themselves and for the therapist. In the case of child psychotherapy, role expectancies may also

apply to the parent or parent. The parent, for example, may have expectations concerning his or her level of involvement in treatment or collaboration with the therapist. The second set of expectations, outcome expectancies, are defined by Arnkoff et al. (2002) as the beliefs about whether or not therapy will actually lead to change. Similar to role expectations in child psychotherapy, the parent likewise can have expectations about the child's improvement in treatment. This type of expectation can include a parent's expectations about whether his or her child may improve in therapy, whether therapy can help with the child's problems and, more specifically, whether a certain treatment modality will be beneficial for the child's behavior. Most often, the literature focuses on outcome expectations, e.g., whether or not the client expects therapy to be helpful for his or her problems. More recently, however, there has been increased interest in understanding what clients expect therapy to be like, such as ideas about the treatment process.

Substantial evidence has been found in the adult psychotherapy literature indicating that discrepancies between a client's expectations and the actual therapeutic process predict early termination in treatment. Adult patients who have expectations that are consistent with characteristics of treatment, such as treatment requirements and duration, and who believe that treatment may be beneficial, are more likely to remain in treatment and demonstrate greater therapeutic improvement than clients who do not begin treatment with similar expectancies (Pekarik, 1991; Pekarik & Wierzbicki, 1986; see Dew & Bickman, 2005; Frank & Frank, 1991; Garfield, 1994). In the child literature, however, expectations have rarely been studied with regard to symptomatic improvement. Most often, expectations are assessed with regard to

attrition, which is particularly relevant to child psychotherapy given the significant efforts to determine which families are likely to terminate from treatment.

Several studies in the child psychotherapy literature examining parent expectations for treatment focused on discrepancies between parent expectations and the actual therapy process, and results from these studies have been somewhat mixed. For example, Day and Reznikoff (1980b) found that when looking at parent responses to true/false questions about expectations regarding treatment structure, roles (e.g., therapist, child, and parent), and outcome, inappropriate expectations were unrelated to appointment keeping, but related to dropout. Conversely, in a study looking at role expectancies (e.g., therapist, child, parent) and expectations about persistence in treatment and confidentiality using a true/false questionnaire, Shuman and Shapiro (2002) found that accuracy of expectations was related to the number of appointments a family attended, but was unrelated to dropout. Plunkett (1984) examined the congruency between parent expectations and clinic actions with regard to treatment form, duration, and process, and found that congruent beliefs about treatment form and duration were related to parental acceptance of treatment recommendations and actual treatment duration.

Rather than examine discrepancies between expectations and reality, Nock and Kazdin (2001) looked at parent expectations for treatment in a continuous manner, and found that parent expectations about outcome, treatment credibility, and parent involvement were related to both treatment attendance and premature termination. Interestingly, these authors found a curvilinear relationship between expectations and treatment attendance and termination; parents who had very low or very high expectations came to the greatest number of therapy sessions and were the least likely to terminate treatment prematurely while parents with moderate expectations about

treatment were the most likely to terminate from treatment prematurely and attend the least number of treatment sessions. Nock, Ferriter, and Holmberg (2007) examined parent expectations about treatment effectiveness in relationship to attendance over eight sessions and found that greater expectations were related to shorter treatment attendance. Furthermore, these authors also found that greater expectations about treatment effectiveness were associated with better parent adherence to the treatment regimen outside of therapy, such as translating skills taught in treatment to the home environment. These latter authors suggest that parents with greater expectations about treatment effectiveness may be more motivated to incorporate techniques learned in treatment and thus show greater improvement sooner and require fewer treatment sessions. Overall, it is unclear how parent expectations about treatment may directly relate to treatment attendance and premature termination, but more recent studies using graded questions related to expectations appear to be more informative in elucidating this relationship.

Examination of expectations and how they may influence or predict which families remain in treatment, as well as those who demonstrate improvement, has significant implications for intervention research. If expectations truly are predictive of outcome, they represent a pretreatment variable that might be more susceptible to change or manipulation, and in a relatively short time, as opposed to static variables like gender or ethnicity, or variables less likely to change during the course of treatment, such as SES (Dew & Bickman, 2005). A number of studies examined the relationship between preparing individuals for therapy and their expectations prior to starting treatment and found that individuals who received preparation in some form of handout, oral instruction, or video reported more appropriate expectations post-intervention and improved attrition rates. Studies examining various interventions like this have

been conducted among adult psychotherapy clients (see Tinsley, Bowman, & Ray, 1988), and among both children and parents participating in child psychotherapy (Bonner & Everett, 1982, 1986; Day & Reznikoff, 1980a; Shuman & Shapiro, 2002).

Measuring expectations

Expectations prior to beginning treatment clearly represent an area in need of further study in child psychotherapy, especially given implications for family engagement in treatment. Currently, the measurement of expectations requires a great deal of refinement, especially with regard to the methods used to measure expectations which vary across studies. Aside from the study by Miller & Prinz (2003), which used open-ended questions (e.g., What do you hope to achieve from treatment?) to assess expectations, most studies used a questionnaire to measure expectations. Questionnaires were generally developed by the authors for the purpose of the study. Unfortunately, the psychometric properties for these scales are typically not adequately reported, and each scale may not measure the same type of expectations or include measurement of both role and outcome expectancies. For example, Shuman and Shapiro (2002) developed the Therapy Expectations Questionnaire (TEQ), but included limited psychometrics, with only the coefficient alpha being reported. The TEQ assesses expectations for the therapist's role, parent's role, child's role, importance of persistence, and confidentiality, but does not assess outcome expectations. Day and Reznikoff (1980b) reported better psychometrics (i.e., construct validity, test-retest reliability) for their expectations questionnaire, the Therapy Survey, and included items concerning expectations about treatment structure, therapist's role, child's role, parents' role resistance, and outcome, to which the parent responds in a true or false manner. The Parent Expectancies for Therapy Scale (PETS), which was developed by Kazdin & Holland (1991),

appears to report the best psychometrics and in addition to assessing outcome and role expectancies, includes expectations about treatment credibility.

Predictors of expectations

Given evidence suggesting that expectations impact treatment outcomes, including attrition, several studies have examined factors that may be predictive of expectations. Among these studies results are fairly mixed, and the several studies examining predictors of expectations assess different types of expectations which makes results difficult to generalize. Within a randomized controlled trial assessing the impact of client preparation on expectations for treatment, Shuman and Shapiro (2002) examined predictors of treatment expectations and failed to find any significant relationships between treatment expectations and parenting stress, child gender, child age, parent age, marital status, or previous participation in treatment. These authors, however, did find parent education level to be positively correlated with treatment expectations. In a randomized controlled trial for treatment of children with oppositional and disruptive behavior, Nock and Kazdin (2001) examined associations between specific types of expectations (e.g., child improvement, treatment credibility) and demographic variables and depression, and found lower SES, ethnic minority status, single-parent family status, and parental depression were associated with lower expectancies about treatment credibility, and parental stress and depression were associated with lower expectations for child improvement. Child characteristics, including age and symptom severity, were also related to expectations about outcome, such that parents of older children with more severe problems reported lower expectations for their improvement. When looking more specifically at predictive relationships, SES, ethnic minority status, and child age proved to be the strongest predictors of total

expectations. Bonner and Everett (1986), in a randomized controlled trial examining the influence of client preparation and problem severity on expectations for treatment, only examined child symptom severity in relation to parents' expectations for treatment and did not find a significant correlation between these variables. This relationship between severity and parents' expectations for child improvement may vary according to the type of symptoms the child exhibits. The sample of patients in the study by Nock and Kazdin focused specifically on children with oppositional, aggressive, and antisocial behavior, whereas the population in the study by Bonner and Everett was heterogeneous in terms of diagnosis. Although pre-treatment demographic variables have been examined with regard to their association with pre-treatment expectancies, rarely have pre-treatment cognitions been studied with regard to expectations for treatment. Given the importance of parent expectations in treatment, parent cognitions that may influence expectations may be equally important in distinguishing families that initiate and remain in treatment (Morrissey-Kane & Prinz, 1999).

Cognitions related to treatment expectations

Hope

Hope warrants examination as possibly influencing an individual's expectations. In a study by Irving et al. (2004) examining the relationship between hope and outcomes in psychotherapy among adults, the authors found that individuals with higher levels of hope reported greater confidence in the statement, "I believe that treatment will be helpful in overcoming my problems," thus suggesting that hope may predict an individual's expectations about treatment, or more specifically, the individual's improvement in treatment.

Patients presenting for psychotherapeutic treatment are hypothesized to be more demoralized (Frank & Frank, 1991). Demoralization is discussed with regard to a patient's presentation prior to beginning treatment, and is described as a patient's conscious awareness that an individual has failed to meet his or her expectations or is unable to cope with a problem. A feeling of powerlessness and hopelessness to resolve the problem or remove oneself from it has been associated with this state prior to beginning therapy. Remoralization and restoration of hope is thought to occur during the initial phase of therapy (Frank & Frank, 1991; Howard, Lueger, Maling, & Martinovich, 1993), and is considered to be critical for eventual symptom improvement (Howard et al., 1993). In the adult treatment literature, Asay & Lambert (1999) suggest that individuals with more severe mental health problems may have less hope, as well as less positive outcome expectancies, suggesting that hope may influence expectations for treatment.

Hope, which was originally conceptualized as a unidimensional construct, concerns an individual's perception that goals can be achieved, and was considered to influence goal-directed behavior (e.g., Frank, 1968; Frankl, 1963; Menninger, 1959). Although earlier conceptualizations assumed behavior was goal-directed, they did not account for specific cognitions related to the pursuit of goals. More recently, Snyder and colleagues (1991), attempted to expand on previous conceptualizations of hope and incorporate hope within a goal-oriented framework. These authors proposed two interrelated elements of hope: agency and pathway thoughts. As theorized within this framework, hope is first stimulated by an individual's perception that he or she possesses the capacity or determination to achieve a desired outcome. Snyder refers to these perceptions as agency thoughts. Snyder et al.

hypothesize that the agency cognition “refers to a sense of successful determination in meeting goals in the past, present, and future.” (570) Subsequently, hope is then influenced by pathway thoughts, which refer to an individual’s perception of being able to generate successful strategies for achieving goals. These authors define hope as “a cognitive set that is based on a reciprocally derived sense of successful (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals). The two components of hope are reciprocal, additive, and positively related, although they are not synonymous. ” (571) Although instances may occur in which one type of thought is present, e.g., goal-directed agency is present, but pathways for achieving the goal are not perceived, both types of cognitions are necessary, and neither one alone is sufficient for demonstrating hope. Modification of each of these thoughts reflects change in the other, and change in both continues throughout the stages of goal-directed behavior.

The model proposed by Snyder et al. (1991) suggests that hope is consistent both across situation and time. The authors consider that hope may be uniquely influenced by specific situations but that, for the most part, underlying agency and pathway cognitions are fairly consistent across situations. The authors parallel pathway and agency steps with outcome and efficacy expectancies, which have been largely discussed in motivational and personality research. As proposed by Bandura (1977, 1982), outcome expectancies refer to beliefs that a particular behavior will produce a particular outcome (pathways) and efficacy expectancies refer to an individual’s confidence in his or her ability to enact a particular behavior in order to achieve a desired outcome (agency). Given these parallels, it seems reasonable that hope would be associated with outcome and efficacy expectations related specifically to psychotherapy.

Hope and related constructs

Optimism. Although models examining optimism and self-efficacy as constructs also use the ideas of outcome and efficacy expectancies, these models differ significantly from Snyder's present model of hope. For example, Scheier and Carver (1985) conceptualize optimism as a more general expectancy that good things will happen, and suggest that this belief is not limited to a specific domain. These authors argue that although efficacy expectancies may influence outcome expectancies, the latter have the greatest impact on goal-directed behavior, whereas with hope, efficacy expectancies (agency) and outcome expectancies (pathways) interact reciprocally. Bryant & Cvigros (2004), in a study examining the conceptual differences between optimism and hope, suggest that optimism focuses more on one's expectancies for outcomes in general and hope more directly concerns expectations about attainment of specific goals. Hope, rather than optimism, would likely be of more interest when studying factors related to psychotherapy given the specificity of goals related to psychotherapy (e.g., engagement in treatment and symptom reduction). Magaletta and Oliver (1999) also found hope to be independent of optimism, with both contributing unique variance when examining these constructs as predictors of general well-being among university students.

Self-efficacy. Self-efficacy theory, which pertains to an individual's beliefs about his or her ability to perform a particular task in a particular setting (Bandura, 1977, 1982), also incorporates outcome and efficacy expectancies and acknowledges some degree of interaction between the two type of expectancies. In contrast to optimism, which relies more heavily on outcome expectancies as driving behavior, self-efficacy theory suggests that efficacy expectations are the more powerful of the expectancies driving goal-directed behavior. Self-efficacy theory is thought to pertain to specific evaluations of an individual's ability to perform a

particular task in a particular setting. Snyder and colleagues (1991) disagree with the emphasis each of these theories places on either type of expectancy, and suggest that neither one alone is sufficient to explain hope and that focusing on either one alone decreases the predictive impact that the two expectancies have together.

Depression. Decreased hope, or hopelessness, has also been discussed in association with outcome and efficacy expectancies related to depression, and has even been implicated as the cause of a subtype of depression, hopelessness depression. According to Abramson, Metalsky, and Alloy (1989), hopelessness depression develops as the result of two types of expectations: negative outcome expectancy and helplessness expectancy. The former refers to a negative expectation about the likelihood of a desired outcome and the latter reflects an individual's negative expectation about his or her ability to increase the likelihood of the desired outcome.

Within a clinical population, Snyder et al. (1991) found a moderate to strong correlation between hope and depression ($r = -.60$). These authors found a lower correlation between hope and depressive symptoms in a nonclinical population of college students ($r = -.40$). This latter finding was replicated by Chang and DeSimone (2001) among a similar student population ($r = -.37$; 2001). Prociuk, Breen, & Lussier (1976) found a significant correlation between hopelessness and depression in a sample of college-age students ($r = .35$). Snyder and colleagues (1991) assert that hope and depression should be moderately related and suggested that "Because higher hope people should be less prone to exhibit negative affect and self-deprecatory cognitions across goal-related situations, Hope Scale scores should exhibit significant negative correlations with indexes of negative affectivity" (p. 575). Although it is not entirely clear whether negative expectations associated with hopelessness precede symptoms of

depression or vice versa, a lack or absence of hope appears to be significantly related to symptoms of depression (e.g., Kuyken, 2004; Whisman, Miller, Norman, Keitner, 1995).

Hope and expectations

With the explanation of hope provided by Snyder and colleagues (1991) in mind, Dew and Bickman (2005) relate hope to expectations and suggest that hope is the expectation that the specific pathway chosen will be effective for obtaining one's goal. It therefore appears that a positive expectation is a requirement for hope. Therefore, these authors point out a subtle distinction between the two constructs, and suggest that expectations may exist within the absence of hope. For example, an individual can have the negative expectation that therapy will not be beneficial. This example represents a negative expectation in which hope is absent.

Dew and Bickman (2005) also propose another situation that differentiates hope from expectations "in which someone may *hope* that therapy will help her feel better, but may also not *expect* that therapy will help her feel better (my italics). In this scenario, the hope of improvement is accompanied by some expectation that therapy will be beneficial (after all, hope cannot exist without expecting that the path selected to the goal in question will be effective), but a competing expectation exists, that therapy will not be beneficial" (23). The authors assert that the distinction between expectations and hope may appear to be based largely on semantics, but that the best way to determine whether or not these two constructs are distinct is to measure both constructs empirically.

Although the idea, or construct, of hope has been discussed in the psychotherapy literature for the latter half of the past century, relatively few empirical studies have been conducted examining hope in relation to psychotherapy outcomes, or other factors related to

treatment, and none have been done looking at hope in relation to child psychotherapy. Hope, therefore, appears to be a meaningful cognition to study with regard to expectations, especially given how hope encompasses beliefs about one's ability to choose an appropriate path for goal attainment and remain on that path toward goal attainment. Several studies have shown that individuals reporting higher levels of hope demonstrate greater sustained effort to achieve goals, select a greater number of goals, and select more difficult goals, even in the face of obstacles (Elliott, Witty, Herrick, & Hoffman, 1991; Snyder et al., 1991).

Hope and psychotherapy

Previous research examining hope in relation to general behavior and, more specifically, psychotherapy lends credence to this construct as an important factor related to behavior and psychological functioning. Hope has been found to be a strong predictor of health promoting behaviors and positive health practices in the general population (Yarcheski, Mahon, Yarcheski, & Cannella, 2004). Additionally, in a survey of college students, greater hopefulness was found to be associated with greater psychosocial maturity (Brackney & Westman, 1992).

More specific to psychotherapy, hope has also been found to be one of the better predictors of treatment outcomes in several studies in the adult and adolescent literature. In psychotherapy research, however, most studies assess for levels of hopelessness in relation to treatment outcomes, which is generally done using the Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974). The BHS was originally developed to assess for suicide among severely depressed individuals, but has been used to measure hope in a number of studies. In psychotherapy treatment studies incorporating the BHS, hopelessness scores were consistently positive predictors of outcome. For example, Brent et al. (1998) found that higher levels of

hopelessness among adolescents prior to beginning treatment for depression predicted continued depression post-treatment. Additionally, in a study assessing outcomes for a combined treatment involving Beck's cognitive therapy and Lewinsohn's coping with depression treatment among depressed adults, pre-treatment hopelessness scores were found to be significantly higher in dropouts than in individuals who completed treatment while pre-treatment scores of dysfunctional attitudes and depressive symptomatology did not predict attrition (Westra, Dozois, & Boardman, 2002). This has been a consistent finding among studies examining pre-treatment hopelessness in relation to premature termination from cognitive therapy (Dahlsgaard, Beck, & Brown, 1998; Whisman, Miller, Norman, & Keitner, 1995). Similarly, in a cognitive-behavioral treatment study for patients with bulimia, those higher in hopelessness were more likely to not complete treatment (Steele et al., 2000). These results suggest that hope is an important predictor of engagement and outcome in treatment.

Although studies examining hopefulness, rather than hopelessness, are fewer in number, those that have included a measure of hopefulness demonstrate outcomes parallel to those of studies examining hopelessness. Parallel findings seem reasonable given that a correlation of -.74 was found between Irving's Hope Scale and the Beck Hopelessness Scale in a non-clinical undergraduate sample (Steed, 2001). Irving et al. (2004) in a recent study focusing on the relationship between hope and outcomes during several phases of psychotherapy found significant correlations between hope and a number of other measures at baseline and subsequent assessment points (sessions 1, 3, 6, and 11). Higher levels of reported hope were associated with superior coping and ability to regulate emotional distress, greater well-being and functioning,

and less symptomatology. Hope has not been examined among parents or children in relationship to outcomes in child psychotherapy.

Parental locus of control

An additional type of cognition that may influence expectations related to treatment and that has received moderate attention thus far in the psychotherapy literature concerns an individual's locus of control (LOC). The LOC construct was initially developed by the social learning theorist J.B. Rotter (1966) who posited that individual differences exist with regard to people's beliefs about the way their behavior impacts their control over life events. These beliefs refer to one's LOC. Essentially, LOC refers to the degree to which people expect that a reinforcement or outcome of their behavior is dependent on their behavior or personal characteristics or to chance, luck, fate, or the control of some external or unpredictable force (Rotter, 1966). Individuals with an internal locus of control are more likely to attribute reinforcement or outcomes as being due to factors specific to their own behavior or characteristics, whereas individuals with an external locus of control are more likely to assign responsibility for reinforcements and outcomes to external factors, or factors outside of their control. This construct arose from social learning theory, which suggests that in childhood individuals begin to form expectations about contingencies between certain behaviors and outcomes. The generalization of expectancies underlies one's sense of control, or LOC. This construct has implications for psychotherapy, given that one of the major objectives of treatment is to help empower the patient with a sense that he or she can exact change or have some degree of control over situations or events in his or her life that will subsequently help improve his or her condition.

Locus of control has been of interest in psychotherapy outcomes for several decades, but examination of this construct has been conducted primarily among adults. Studies examining LOC with regard to outcomes in adult psychotherapy suggest that LOC serves as a robust predictive and mediating factor. When studied as a predictor of treatment outcome, an internal LOC is consistently associated with greater symptom reduction post-treatment (Brown, Schulberg, & Prigerson, 2000; Hooke & Page, 2002; Kirtner & Cartwright, 1958; Nowicki & Duke, 1978). In addition to predictive power, change in LOC was shown to be related to post-treatment functioning following inpatient treatment (Gillis & Jessor, 1970), cognitive therapy for social phobia (Mattick & Peters, 1988; Mattick, Peters, & Clarke, 1989), and cognitive-behavioral therapy for anxiety and depression (Manning, Hooke, Tannenbaum, Blythe, & Clarke, 1994). Furthermore, premature termination from treatment was associated with higher levels of external LOC (Steele et al., 2000). Individuals who began treatment believing that they contributed to and bore some responsibility for their problems were likely to stay in treatment longer (Kirtner & Cartwright, 1958).

Locus of control appears to be an equally important construct in the child literature, especially with regard to the quality of parent-child interactions. For example, Bugental et al. (1993) found that mothers who reported lower perceived control over their caregiving failures reacted with greater defensive arousal and negative affect to unresponsive children than to responsive children. Additionally, parents with attributions of lower perceived control over their caregiving failures appear to have a lower threshold for child affective reactivity (Bugental, Blue, & Lewis, 1990). This evidence is important within the context of child psychotherapy given that noncompliance and greater affective reactivity are common characteristics of children

in a clinic population. This construct therefore appears to be an important area of assessment among parents presenting with children in psychiatric clinic settings. Evidence from the Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder (MTA) suggests that determining a mother's perception of control may be an important element of assessment given that mothers of children in the MTA had a more external general LOC than fathers (Hoza et al., 2000). Additionally, prior evidence suggests that mothers' general LOC is more consistently related to their children's characteristics than the LOC of fathers (Ollendick, 1979).

Within the treatment setting, parental LOC, which refers to a parent's locus of control as it relates to their parenting, appears to be both an important predictor of those who present in treatment, as well as of those who improve and stay in treatment. According to Campis, Lyman, and Prentice-Dunn (1986), parents who report a more external parental LOC believe fate or chance is more important in determining their child's behavior than their parenting, which they believe has a negligible impact. Campis et al., in a sample of community parents, administered the Parental Locus of Control Scale (PLOC), and found that parents who requested professional services for parenting problems and parents of children identified as having behavioral or emotional difficulties reported having a more external parental LOC than parents who reported no difficulties in the parenting role. Similarly, in another study examining parental LOC among community mothers, Morton (1997) found that maternal parental LOC was significantly correlated with total child behavior problems, with mothers of more problematic children reporting an external parental LOC. Furthermore, an external parental LOC has been associated

with higher levels of parenting stress and less parenting satisfaction among mothers of children with behavior problems who presented in a clinic setting (Mouton & Tuma, 1988).

With regard to the interaction parental LOC may have with treatment progress, several studies have found that changes in parental LOC parallel changes in behavior following treatment, although no one has specifically looked at a mediating relationship between parental LOC and symptom improvement. In several studies assessing effectiveness of parent-child interaction therapy, along with fewer and less severe behavior problems, more positive interactions with their child, and less parenting stress, mothers also reported a more internal parental LOC post-treatment (Eyberg, Boggs, & Algina, 1995; Hood & Eyberg, 2003; Schuhmann, Foote, Eyberg, Boggs, & Algina, 1998). A more internal parental LOC was also found among parents who successfully completed a parent training program (Roberts, Joe, & Rowe-Halbert, 1992). Peters, Calam, and Harrington (2005) examined parent attributions in relation to attendance in a parent management training program and found that mothers' understanding of their own role in managing the child's behavior was predictive of attendance. Moreover, in a study looking at parents in a clinic population, Watson (1986) found that the degree of parental sense of responsibility for his or her child's behavior was associated with chances of improvement in treatment.

LOC and hope

Given the underlying expectancy associated with an external LOC, i.e., outcomes are unpredictable or controlled by some external force, it seems reasonable that such a negative expectancy may be associated with a lack of hope. For example, using Snyder's theory of hope which incorporates agency and pathway thoughts, an individual who feels that the outcome of

his or her behavior is out of one's control may not have developed a powerful set of agency and pathway thoughts, such that the person may not experience a "sense of successful determination in meeting goals in the past, present, and future," (agency) or experience a "sense of being able to generate successful plans to meet goals" (pathway). In fact, several earlier studies have found a relationship between hopelessness and LOC. For example, among samples of college students, significant correlations were found between hopelessness and an external LOC (e.g., $r = .40$; Prociuk, Breen, & Lussier, 1976; Ward & Thomas, 1985). Brackney and Westman (1992) similarly found that, among university students, a lack of hopefulness was found to be associated with the perception that external factors control one's life.

Depression

In the child psychotherapy literature, parental depression has often been studied as a predictor of treatment outcomes. This variable has been found to be significantly associated with a parent's perception of his or her child's behavior (e.g., Griest, Forehand, Wells, & McMahon, 1980, Webster-Stratton & Hammond, 1990) and improvement in treatment, but it has not been linked to treatment engagement (Kazdin & Mazurick, 1994; Kazdin, Mazurick, & Bass, 1993). Several studies, however, suggest parental depression may help to predict which parents enter into therapy with their child (Calam, Bolton, & Roberts, 2002) and which parents are generally satisfied with treatment (Furey & Basili, 1988). Further study therefore appears necessary to determine whether parental depression has an indirect influence on treatment engagement and, if so, how it operates in conjunction with other variables to impact engagement.

In contrast to hope and LOC, parental depression has previously been examined in association with parental expectations for treatment. Nock and Kazdin (2001) found that

parental depression correlated with parent expectations about child improvement in treatment (-.14) and with expectations about the credibility of treatment (-.10). These authors hypothesize that because depression may be associated with pessimism and hopelessness, it is these latter constructs that play a role in parents' beliefs that therapy will not be effective. Although the authors believe replication of these findings is required before drawing any firm conclusions, they suggest that the relationship between depression and expectations may be informative in terms of understanding why interventions in child therapy that include a component to improve parental adjustment factors lead to better outcomes.

Aims of Present Study

The present study examined several types of expectancies parents have with regard to child psychotherapy (e.g., improvement, treatment credibility, involvement, and parental effort) and how these expectancies may be influenced by other parent variables, which included hope, specifically agency and pathway thoughts, parental locus of control, and level of depression. Expectations, agency and pathway thoughts of hope, parental locus of control, level of depression, and expectations were subsequently examined in relation to treatment engagement (see Figure 1).

Given their underlying constructs, hope and parental LOC were hypothesized to be significantly correlated, and these constructs were also hypothesized to be associated with parent-reported depression.

Evidence from the study by Nock and Kazdin (2001) suggests that several demographic factors may predict expectations. This study hypothesized that parental LOC, agency and pathway thoughts of hope, and depression would contribute additional predictive utility to

demographic factors when examining predictors of individual expectation types. Similarly, demographic variables have been associated with engagement in treatment, although somewhat inconsistently, and the present study hypothesized that parental LOC, agency and pathway thoughts of hope, depression, and total expectations would predict treatment engagement beyond that of demographic variables found to be significantly associated with engagement.

CHAPTER 2

Method

Setting

Participants in this study were recruited through the Department of Child and Adolescent Psychiatry at Children's Memorial Hospital. Within this setting, service is provided by child psychiatrists, psychologists, psychiatric social workers, and trainees in these disciplines. The children of families that receive services in the clinic present with a wide variety of disorders and symptoms. The type of treatment provided in the clinic varies by clinician and includes supportive, family, psychodynamic, behavioral, and cognitive behavioral orientations, with most therapists describing themselves as eclectic or integrative. When determined appropriate, treatment also involves a referral for medication.

Procedure

Once approval was obtained from the Institutional Review Board at Children's Memorial Hospital, caregivers who scheduled an intake for their child in the Department of Child and Adolescent Psychiatry between the summer of 2006 and the summer of 2007 were mailed a packet prior to their child's intake appointment. The packet included a letter explaining the study, two copies of the consent form (one copy for the caregiver to keep), study questionnaires, and a return envelope. The letter asked the primary caregiver if they were interested in participating in the study, and, if so, to complete the included questionnaires prior to their intake appointment. Forms were completed prior to intake in order to exclude any potential impact that meeting with the therapist may have on the caregivers' expectations for treatment. In the present clinic the length of the evaluation process ranges between one to three sessions and is determined

by the individual clinician. Some clinicians may not provide feedback until the evaluation is complete while others provide feedback to families beginning in the first session.

For families who agreed to participate, treatment attendance was monitored through the scheduling system in the Department of Child and Adolescent Psychiatry during the first three months of treatment.

Because the purpose of the study was to examine caregiver expectations for treatment, families referred to the clinic specifically for psychiatric assessment were not included in the study. This exclusion criterion included children with a diagnosis of autism or schizophrenia because these children are generally referred elsewhere for services following an evaluation. Measures used in the present study are written in English, and, therefore, non English-speaking caregivers were not recruited to participate in the study.

Participants

Among the 333 families who were approached by mail to participate, 105 (31.5%) agreed to be involved in the study. There were four families who agreed but did not meet inclusion criteria. No significant differences existed between those who declined and those who participated with regard to gender or age of the child. The groups, however, differed according to the percentage of people within each group receiving Medicaid assistance. A greater percentage of families receiving Medicaid assistance agreed to participate compared to families not receiving Medicaid assistance ($\chi^2(1) = 4.157, p = .041$).

Within the sub-sample of 105 families who agreed to participate, 63.8% of the families ($n = 67$) were seeking services for a male child and 36.2% of families ($n = 38$) were seeking treatment for a female child. The age of the children ranged from 1 to 17 years old ($M = 8.91$).

Thirty-eight percent of the sample self-identified as white ($n = 40$), 29.5% as African American ($n = 31$), 24.8% as Hispanic/white ($n = 26$), and 1.9% ($n = 2$) as African American/Hispanic. The remainder of the sample (5.8%) identified as “other” ($n = 6$). A little over half of the participating families received Medicaid assistance (57.1%, $n = 60$).

The age of participating caregivers was between 22 and 65 years old ($M = 38.9$), and approximately half of the primary caregivers were married ($n = 55$, 52.4%). Of those caregivers completing the study forms, 87.6% ($n = 92$) were mothers, 6.7 % ($n = 7$) were fathers, and 5.7 % ($n = 6$) were female guardians, e.g., grandmother, aunt. Among caregivers, level of education varied; 1% did not attend high school, 7.6% ($n = 8$) had completed some amount of high school, 19% ($n = 20$) had a high school diploma, 40% ($n = 42$) completed some college or vocational school, 20% ($n = 21$) had a college degree, and 12.4% ($n = 13$) had a graduate degree.

The primary diagnoses assigned by clinicians were as follows: Attention Deficit-Hyperactivity Disorder, $n = 43$; Oppositional Defiant Disorder, $n = 10$; depression, $n = 8$; anxiety, $n = 6$; Adjustment Disorder, $n = 8$; Pervasive Developmental Disorder, $n = 8$; Disruptive Behavior Disorder, $n = 9$; Conduct Disorder, $n = 1$. The remaining diagnoses included a conversion disorder, $n = 1$, language disorder, $n = 2$, and mental retardation, $n = 3$.

Attendance during a three-month treatment period varied among families with the number of visits completed ranging between 1 and 13 ($M = 4.361$, $SD = 3.095$).

Measures

Parental Locus of Control-Short Form (PLOC-SF). The original PLOC (Campis, Lyman, & Prentice-Dunn, 1986) is a 47-item Likert-type scale that assesses the degree to which a parent believes he or she has influence over the child’s behavior. Because an individual’s LOC

is thought to be somewhat situation-specific and global measures may not accurately capture expectancies about specific tasks or situations (Dixon, McKee, & McRae, 1976; Furnham & Steele, 1993), the PLOC was developed to specifically measure parent-child interactions. Adequate test-retest reliability, internal consistency, construct validity, and convergent and discriminant validity have been demonstrated for the PLOC (Campis et al., 1986; Roberts, Joe, & Rowe-Halbert, 1992; Werba et al., 2000). A 25-item short form (PLOC-SF) of the PLOC was developed by Werba et al. (2000), and has been reported to have a .92 correlation with the longer form and a Cronbach's alpha of .79, which is comparable to the Cronbach's alpha of .80 for the longer form. The PLOC-SF is rated using a 5-point Likert scale. The lower the score, the more parents feel in control, i.e., internal locus of parenting control. In the present study, the PLOC-SF demonstrated adequate internal consistency (Cronbach's alpha = .77).

Parent Expectancies for Therapy Scale (PETS). The PETS (Kazdin & Holland, 1991) is a 25-item parent report used to assess parent expectancies for their child's psychotherapy. The PETS is rated using a 5-point Likert scale. A principal component analysis by the investigators resulted in three intercorrelated components: credibility, child improvement, and parent involvement. Items from the resulting sub-scales concern specific expectations related to the credibility of treatment, the impact of treatment on the amount and rate of improvement, and the extent of parental involvement, respectively. Correlations between sub-scales ranged from .24 to .40, suggesting that these different types of expectation reflect separate, but related, beliefs about treatment. Lower scores reflect lower expectations about treatment. Adequate internal consistency reliability has been found for the PETS (alpha coefficient of .79 and Spearman-Brown coefficient of .84), as well as for each subscale.

Several of the items on the PETS directly pertain to the type of treatment administered in the clinic where the questionnaire was developed. Therefore, several of the items needed to be excluded or modified to fit a more general treatment setting. Individual scores were calculated for each expectation type (i.e., expectations about treatment credibility, child improvement, and parental involvement), as well as a total expectation score that was the sum of the three subscales. The alphas for the modified subscales and total scale were as follows: .46 for the credibility subscale, .76 for the child improvement subscale, .69 for the parental involvement subscale, and .78 for the total scale.

Additionally, three new items examining a different type of expectancy were included on the PETS. These items reflect parental expectations about the effort (PEE) that they will need to make to help their child improve in treatment. The three items assess parent expectations about a) his or her ability to make necessary changes to improve his or her child's behavior ("Do you believe you can make the necessary changes to improve your child's behavior?"), b) the amount of change the parent may need to make for his or her child's behavior to improve ("How much will you need to change to help your child improve his or her behavior?"), and c) the likelihood of treatment being effective if the parent is unable to change his or her behavior ("Do you believe treatment can be effective if you do not make changes?"). The parents were asked to respond to the items on a 5-point Likert scale.

Because the range of scores for the items added to the PETS concerning parental effort was restricted, the caregiver's responses were recoded. For the first item asking whether the caregiver can make necessary changes for improving his or her child's behavior, caregiver response of "do not believe," "doubt," and "somewhat believe" were combined into a "low

belief” group, and compared to those caregivers who responded with “believe” and to those caregivers who responded with “strongly believe” (high belief group). For item 2, which asked the caregiver how much he or she will need to change to help the child improve, the caregivers who responded “not at all,” “very little,” and “somewhat” were grouped into a “need little change” group and compared to caregivers who responded with “a fair amount” and with those who responded with “a great deal” (need large change group). For item 3, which asked the caregiver whether treatment can be effective if he or she does not make changes, the caregivers who responded with one category: “strongly believe,” “believe,” and “somewhat believe” were grouped into a “effortless change” group and compared to caregivers who responded with “doubt” and to caregivers who answered “do not believe” (effortful change group). Associations between the PEE items varied. Item 1 (belief in ability to change) and item 2 (amount of change needed) were significantly associated ($\chi^2(1) = 5.264, p = .022$), but item 3 (required effort) was not related to either Item 1 or 2 ($\chi^2(1) = 2.299, p = .129$; $\chi^2(1) = 2.685, p = .101$, respectively). These three items did not form a cohesive scale (Cronbach’s $\alpha = .135$), and they were therefore examined separately in subsequent analyses.

Hope Scale (HS). The HS is a 12-item self-report measure assessing agency and pathway thoughts from Snyder’s model of hope (Snyder et al., 1991). Four items reflect agency thoughts and four items reflect pathway thoughts. Four items are filler items. Items are rated on a 4-point Likert-type scale, with higher scores indicative of greater hope. The two-factor model of the HS was found among both men and women (Babyak, Snyder, & Yoshinobu, 1993) and across ethnic groups (Roesch & Vaughn, 2006). The HS has been found to have adequate internal consistency reliability, with Cronbach’s alphas ranging from .74 to .84 (Chang & DeSimone, 2001; Snyder et

al., 1991; Steed, 2002), adequate test-retest reliability ($r = .85$; Snyder et al., 1991), and strong evidence of discriminant and convergent validity (Snyder et al., 2001; Steed, 2002). In the present study, somewhat lower internal consistency was found when looking at the total score for the Hope Scale (Cronbach's $\alpha = .40$), but the Pathway and Agency subscales appeared to have adequate internal consistency (Cronbach's $\alpha = .73, .80$, respectively). Given the strength of these subscale alphas in comparison to the total scale, these subscales were examined separately in analyses looking at hope. Both the Pathway and Agency subscales correlated highly with the total score from the Hope Scale ($r = .867$ and $.893$, respectively). The two subscales, however, did not correlate as highly ($r = .550$), suggesting that they represent distinct components of the hope construct. This finding is in line with correlations found between the agency and pathway subscales in an outpatient sample ($r = .57$), inpatient sample ($r = .46$), and a non-clinical undergraduate population ($r = .38 - .46$; Snyder et al., 1991).

Beck Depression Inventory-II (BDI-II). The BDI-II is a 21-item self-report measure of depressive symptoms for adults (Beck, Steer, & Brown, 1996). Higher scores reflect greater depressive symptomatology. The BDI-II is a frequently used instrument to assess for depression, and appears to have adequate reliability and concurrent validity (Beck, Steer, Ball, & Ranieri, 1996). Cronbach's α for the BDI-II in the present study was .945.

Child Symptom Inventory (CSI). The parent version of the CSI (Gadow & Sprafkin, 1994) is a 97-item symptom checklist that is keyed to *DSM-IV*-based, childhood disorders, with scales assessing ADHD (combined type, hyperactive type, and inattentive type), Oppositional Defiant Disorder (ODD), Generalized Anxiety Disorder (GAD), Separation Anxiety Disorder (SAD), Social Phobia (SP), Major Depressive Disorder (MDD), and Dysthymia (DYS).

Standardized T-scores for each scale are available. The CSI has a form for early childhood, childhood, and adolescence. The CSI has been found to have adequate reliability (internal consistency and test-retest), validity (convergent, divergent, and discriminant), and clinical utility (Sprafkin, Gadow, Salisbury, Schneider, & Loney, 2002). In the present study a combined CSI score was used to examine symptom severity in relation to caregiver cognitions and affect, expectations, and engagement. The total severity score was a participant's mean CSI score derived from the scale scores of the common disorders seen in the clinic, i.e., ADHD combined type, which consisted of the sum of scales for the hyperactive-impulsive and inattentive subtypes, ODD, depression (major depression and dysthymia), and anxiety (generalized anxiety, separation anxiety, and social phobia) scales.

Demographics. Demographic information, which includes child's age, gender, race, caregiver's age, caregiver's education, marital status, and reception of Medicaid assistance, was obtained from caregiver report and hospital records.

Treatment engagement. Engagement has been defined in a number of ways in studies examining this outcome in child psychotherapy. For example, engagement has been defined as the number of treatment sessions a family attended (Nock, Ferriter, & Holmberg, 2007; Nock & Kazdin, 2001), the number of days until drop-out (Morrissey-Kane, 2000), the number of sessions kept and number cancelled (Miller & Prinz, 2003; Shuman & Shapiro, 2002), participation in at least five therapy sessions (Weisz, Weiss, & Langmeyer, 1987), and whether termination was agreed upon mutually between the family and therapist (Hardin, Subich, & Holvey, 1988). Previous reviews regarding drop out from psychotherapy suggest that multiple ways of measuring attrition should be incorporated within studies examining this variable as an

outcome. For example, Nock and Kazdin (2001) examined two variables: treatment attendance and premature termination. Treatment attendance was defined as the number of sessions a family remained in treatment. Premature termination was measured as a dichotomous variable and reflected whether the participant completed the full treatment regimen. Engagement was measured in the present study in a manner similar to that of Nock and Kazdin.

Given evidence suggesting that factors associated with drop-out vary according to time, or stage of treatment (cf Kazdin, Marurick, & Bass, 1993), the present study examined caregiver cognitions associated with engagement early in treatment. This period has been noted as being the time with the greatest percentage of drop-outs (Phillips, 1985). In a regular outpatient treatment setting, however, where families may attend treatment on an ongoing basis, engagement is more difficult to define than in a study examining a time-limited intervention. Therefore, attendance in the present study was monitored during the first three months of treatment and. In a study by Kazdin and Mazurick (1994) that looked at early and late dropouts in child psychotherapy, the authors found that early dropouts averaged two to three weeks of treatment and late dropouts averaged two to three months of treatment. Therefore, attendance in the present study was monitored during the first three months of treatment in order to capture the period of time in which the study of engagement may be most relevant. Treatment attendance was measured as a continuous variable dividing the number of sessions completed during the first three months of treatment by the total number of sessions attended and failed. Sessions cancelled in advance by the family were not included in the equation. Measuring treatment attendance as a proportion did not discount participants who attended treatment consistently, but who may have attended treatment less frequently because their symptoms were less severe or

because of time constraints. In addition, a sub-sample of families who attended three or more visits ($n = 72$) was also used as an outcome variable measuring engagement. The intent behind using this sub-sample was to look more specifically at families that completed the evaluation process and began treatment. This variable was examined in relation to demographic variables and symptom severity and analyzed as the dependent variable in regression analyses to determine if predictors of engagement were different within a group of families that demonstrated some degree of engagement in treatment by completing the evaluation process.

Additionally, in order to measure attrition, clinicians were surveyed at the end of the patient's three-month treatment period to determine whether or not the family was still in treatment. Clinicians were asked whether families 1) dropped out of treatment prematurely without the recommendation of the clinician, 2) agreed upon termination mutually with the clinician, 3) continued in treatment beyond the three-month period, 4) were referred elsewhere for services, 5) deferred treatment, or 6) never showed for the intake evaluation. The present study aimed to detect differences between those who engage in and complete treatment and those who drop out prematurely or never attend the intake appointment after pursuing mental health services. Therefore, treatment disposition after three months was analyzed as a dichotomous variable and grouped families that dropped out of treatment prematurely with families that never attended the intake appointment ($n = 17$) and families that agreed upon termination mutually with the clinician with families that continued in treatment beyond the three-month period ($n = 66$). These two groups represented those who engaged in treatment and those who did not when given the opportunity to receive treatment. Given that one of the primary aims of this study was to determine which variables were predictors of engagement, families who were referred

elsewhere, deferred treatment, or placed on the waiting list were excluded in an attempt to obtain a clearer picture of variables contributing to a family's decision to either engage or not engage in treatment when presented with the option to participate.

Statistical analysis

Pearson's correlations, t-tests, one-way analysis of variance, and chi-square analyses were conducted to examine whether associations exist between demographic factors (i.e., child gender, age, race, reception of Medicaid assistance, caregiver's age, caregiver's marital status) and symptom severity and the variables of interest, which included hope, the two components of hope – pathway and agency thoughts, parental LOC, depression, the three expectation types, the total expectations score, the PEE items, and engagement, which included both attendance and drop-out .

Next, Pearson's correlations were completed to determine the degree of association between caregiver-reported scores from the BDI, Hope Scale, Pathway and Agency subscales of the Hope Scale, and PLOC-SF. These variables were subsequently correlated with each expectation type to determine whether or not hope, which includes both agency and pathway components of hope, parental locus of control, and depressive symptoms are significantly associated with a caregiver's expectations for treatment. The three PEE items were also included in analyses looking at relationships between the above variables using t-test comparisons.

Last, regression equations were conducted to determine whether the pathway and agency components of hope, parental locus of control, and depressive symptoms added to the predictive utility of several demographic variables found to be related to treatment engagement.

CHAPTER 3

Results

Introductory analyses

Initially, bivariate relationships were examined between demographic variables and scores on the Hope Scale, pathway and agency subscales of the Hope Scale, PLOC-SF, BDI, total scale of the PETS, and subscales of the PETS (see Table 1).

Child gender

Child gender was not related to total hope, agency and pathway components of hope, parental LOC, depression, expectations about treatment credibility or child improvement, the total expectations score, nor to the PEE items. Gender was, however, associated with expectations for parent involvement, with caregivers of males reporting greater expectations for being involved in treatment ($t = 2.168$, $df = 103$, $p = .032$; caregiver of male $M = 24.71$, $SD = 3.25$, caregiver of female $M = 23.26$, $SD = 3.35$).

Child's age

The child's age was not found to be significantly associated with level of caregiver-reported depression, PLOC, level of hope, or pathway and agency components of hope. When examining expectation types in relation to the child's age, there was a significant correlation between the age of the child and a caregiver's expectation for the child to improve in treatment ($r = -.207$, $p = .05$), as well as between the child's age and the caregiver's expectation about his or her involvement in treatment ($r = -.197$, $p = .05$). Child age was also significantly correlated with the total expectations score ($r = -.245$, $p = .05$). Child's age was not related to expectations about treatment credibility. These results indicate that caregivers of younger children had higher

expectations about treatment in general and, more specifically, about their children improving in treatment and being involved in their children's treatment. Of the PEE items, child age was only related to Item 1 (belief in ability to change). Caregivers of younger children reported stronger beliefs about his or her ability to make changes ($t = 2.600$, $df = 103$, $p = .011$; low belief group $M = 11.00$, $SD = 3.354$, high belief group $M = 8.51$, $SD = 3.658$). With regard to engagement, child age was significantly associated with attendance ($r = -.256$, $p = .01$), with caregivers of younger children attending more sessions.

Child symptom severity

Significant relationships were found between child symptom severity and caregiver self-report of depressive symptomatology ($r = .250$, $p = .05$) and between child symptom severity and parental locus of control ($r = .282$, $p = .05$), with caregivers reporting a greater level of depressive symptoms and a more external parental locus of control reporting a greater degree of symptom severity for their children. No significant associations were found between total hope, the pathway and agency components of hope, parental locus of control, expectation types, the total expectations score, and the PEE items and level of symptom severity of the child.

Race/ethnicity

Because the sample sizes were small for some race/ethnicity groups, race/ethnicity was examined as a dichotomous variable (i.e., minority and non-minority). Sixty-two percent ($n = 65$) of the sample was categorized as minority members and 38% ($n = 40$) was categorized as non-minority members. A significant relationship existed between minority status and caregiver-reported level of depressive symptoms, with caregivers self-identifying as a minority member reporting a greater level of depressive symptoms ($t = -2.076$, $df = 103$, $p = .041$; minority $M =$

15.02, $SD = 12.56$, non-minority $M = 10.48$, $SD = 9.75$). Additionally, the agency component of hope was related to race/ethnicity, with caregivers identifying as a minority member reporting a lower level of agency ($t = 2.039$, $df = 103$, $p = .044$; minority $M = 11.61$, $SD = 2.45$, non-minority $M = 12.58$, $SD = 2.15$). Total hope and the pathway component of hope, however, were not significantly related to race/ethnicity ($t = 1.602$, $df = 103$, $p = .112$, $t = .725$, $df = 103$, $p = .470$, respectively). The relationship between minority status and expectations for involvement approached significance, with caregivers identifying as a minority reporting greater expectations about being involved in treatment ($t = -1.915$, $df = 103$, $p = .058$, minority $M = 24.67$, $SD = 3.19$, non-minority $M = 23.40$, $SD = 3.48$). With regard to the PEE items, race/ethnicity was only significant associated with Item 2 (amount of change needed). A larger percentage of minority members (57%, 37 of 65) reported greater expectations about the amount they would need to change to help their child improve than non-minority members (20%, 8 of 40; chi-square(1) = 13.785, $p = .000$). Race/ethnicity was additionally associated with attendance and premature termination, with caregivers identifying as members of a minority exhibiting worse attendance ($t = 2.818$, $df = 103$, $p = .006$; minority $M = .779$, $SD = .292$, non-minority $M = .911$, $SD = .187$) and a greater likelihood of terminating prematurely (chi-square(1) = 4.806, $p = .028$; percentage of minority members dropping out, 40% (14 of 35); percentage of non-minority members dropping out, 9.6% (3 of 31)). Minority status was not related to expectations about treatment credibility, child improvement, or the total expectations score.

Medicaid assistance

Examination of Medicaid assistance yielded a significant association with level of caregiver-reported depression, with those caregivers receiving Medicaid assistance reporting a

higher level of depressive symptomatology ($t = -3.31$, $df = 103$, $p = .001$; without Medicaid assistance $M = 9.29$, $SD = 8.92$, with Medicaid assistance $M = 16.29$, $SD = 12.72$). The relationship between the total hope score and reception of Medicaid approached significance, with caregivers who receive Medicaid assistance reporting a lower level of hope ($t = 1.942$, $df = 103$, $p = .055$; without Medicaid assistance $M = 25.22$, $SD = 4.19$, with Medicaid assistance $M = 23.72$, $SD = 3.73$). The same was true when looking at the agency component of hope ($t = 1.920$, $df = 103$, $p = .058$; without Medicaid assistance $M = 12.49$, $SD = 2.42$, with Medicaid assistance $M = 11.60$, $SD = 2.29$). The pathway component of hope did not approach significance ($t = 1.465$, $df = 103$, $p = .146$). When examining PEE items, reception of Medicaid assistance was related to item 2 (amount of change needed) item 3 (required effort). A larger percentage of families receiving Medicaid assistance (53%; 32 of 60) reported greater expectations about the amount they would need to change to help their child improve than families not receiving Medicaid assistance (29%, 13 of 45; chi-square(1) = 6.274, $p = .012$), but a greater percentage of families not receiving Medicaid status (82%; 37 of 45) reported not believing treatment could be effective if they did not make changes compared to families receiving Medicaid assistance (58%, 35 of 60; chi-square(1) = 6.809, $p = .009$). Medicaid assistance was unrelated to PEE item 1 (belief in ability to change), parental locus of control, expectation types, and the total expectations score. Although Medicaid assistance was not related to attendance within the whole sample or to premature termination, in a sub-sample of families who attended three or more visits whether or not a family received Medicaid assistance was related to attendance. Those families not receiving Medicaid assistance exhibited a greater level of attendance compared to

families receiving Medicaid assistance ($t = 3.219$, $df = 70$, $p = .002$; not receiving Medicaid assistance $M = .957$, $SD = .081$, receiving Medicaid assistance $M = .873$, $SD = .140$).

Caregiver's marital status

Caregiver's marital status was related to reports of depressive symptomatology on the BDI-II. Unmarried caregivers reported a higher level of depressive symptoms ($t = 2.045$, $df = 103$, $p = .04$; not married $M = 15.73$, $SD = 12.65$, married $M = 11.07$, $SD = 10.45$). Although total hope was not related to a caregiver's marital status ($t = -1.804$, $df = 103$, $p = .069$, the agency component of hope was found to have a significant association, with married caregivers reporting higher levels of agency than unmarried caregivers ($t = -2.444$, $df = 103$, $p = .016$; married caregivers $M = 12.51$, $SD = 2.44$, unmarried caregivers $M = 11.40$, $SD = 2.19$). The pathway component of hope, however, was not related to a caregiver's marital status ($t = -.731$, $df = 103$, $p = .466$). Marital status was only related to item 2 (amount of change needed) of the PEE items, with a larger percentage of unmarried caregivers (60%, 30 of 50) reporting needing to change a fair amount to a great deal to help their child improve compared to married caregivers (27%, 15 of 55; chi-square(1) = 11.455, $p = .001$). Marital status of the caregiver was also found to be significantly associated with attendance and premature termination, with unmarried caregivers showing worse attendance in treatment ($t = -2.627$, $df = 90$, $p = .010$; not married $M = .759$, $SD = .293$, married $M = .893$, $SD = .218$), and a greater likelihood of terminating prematurely (chi-square(1) = 5.299, $p = .021$; 46% (12 of 26) of unmarried caregivers dropped out prematurely; 12.5% (5 of 40) of married caregivers dropped out prematurely). There were no significant relationships between a caregiver's marital status and parental LOC, expectation types, or total expectations score.

Caregiver's age

Caregiver age was associated with report of depressive symptoms on the BDI-II ($r = -.252, p = .05$), with younger caregivers reporting higher levels of depressive symptoms.

Caregiver age was unrelated to parental locus of control, level of total hope, or the agency and pathway components of hope. Caregiver age was not related to any of the expectation types, total expectations score, or PEE items.

Caregiver's level of education

Examination of the level of education of primary caregivers in relation to their level of reported depressive symptoms, parental locus of control, total hope all yielded significant results ($F(5,99) = 6.148, p = .000, F(5,99) = 2.466, p = .039, F(5,99) = 3.596, p = .005$, respectively), with more educated caregivers reporting lower levels of depressive symptoms, a more internal parental locus of control, and a higher level of hope. Additionally, the agency component of hope was also significantly related to the caregiver's level of education ($F(5,99) = 4.106, p = .002$), but the pathway component of hope was not ($F(5,99) = 1.824, p = .115$). There were no significant relationships between level of education among primary caregivers and expectation types, the total expectations score, and PEE item 1 (belief in ability to change) and item 2 (amount of change needed). Level of caregivers' education was significantly associated with PEE item 3 (required effort), with more educated caregivers reporting a stronger belief about treatment being ineffective if he or she does not make changes ($\chi^2(5) = 14.332, p = .014$). A caregiver's level of education was not significantly related to attendance or drop-out.

Primary analyses

The main focus of the study was to examine relationships between caregiver-reported hope, parental locus of control, depressive symptoms, and expectations for treatment and to determine how these variables may contribute to understanding of engagement above and beyond demographic variables.

Bivariate correlations between the BDI-II, Hope Scale, and PLOC-SF

Correlations were examined between hope and depression, hope and parental LOC, and parental LOC and depression. Moderate and significant correlations existed between hope and parental LOC ($r = -.424, p = .01$) and between parental LOC and depression ($r = .439, p = .01$), suggesting that these are related yet distinct constructs. These correlations show that greater hope, as well as fewer reported depressive symptoms, are associated with a more internal parental locus of control. A significant, and larger, correlation existed between hope and depression ($r = -.646, p = .01$), suggesting that these constructs may overlap to some degree and that greater hope is associated with fewer reported depressive symptoms. A partial correlation examining the relationship between hope and parental LOC while controlling for depression showed that a significant relationship exists between these variables independent of hope ($r = -.205, p = .037$). This finding also emphasizes that hope and depression are related but distinct constructs. The two components of hope described by Snyder (include reference), pathway and agency thoughts, were also examined in relation to scores from the BDI-II and PLOC-SF. The pathway subscale correlated significantly with scores from both the BDI-II ($r = -.424, p = .01$) and the PLOC-SF ($r = -.251, p = .01$), as did the agency subscale with scores from the BDI-II ($r = -.699, p = .01$) and PLOC-SF ($r = -.483, p = .01$). These correlations again showed that a

greater report of hope, in terms of both agency and pathway thoughts, are associated with less depressive symptomatology and a more internal locus of control.

Correlations between expectation types and associations with PEE items

Initial correlation analyses also examined the degree of association between the three types of expectations (i.e., treatment credibility, child improvement, and parent involvement). The associations between expectations for treatment credibility, child improvement, and parent involvement were analyzed previously by Nock and Kazdin (2001), who found correlations between expectation types to range from .24 to .40. Significant positive correlations of similar magnitude were found in the present study (See Table 2). Correlations between the various expectations were moderate in size, which suggests that although these types of expectations are related, they assess different beliefs about the treatment process, roles in treatment, and its effectiveness.

The three PEE items from the revised PETS were also examined in relation to expectations about child improvement in treatment, parent involvement in treatment, and treatment credibility using t-test comparisons. Interestingly, each PEE item was significantly associated with at least one of the three types of treatment expectations. Item 1 (belief in ability to change) was related to caregiver expectations about child improvement and involvement, as well as total expectations, with caregivers who believed they could make necessary changes reporting greater expectations about their child improving in treatment ($t = -4.540$, $df = 103$, $p = .000$; low belief group $M = 18.76$, $SD = 3.31$, high belief group $M = 22.92$, $SD = 3.48$), being more involved in treatment, ($t = -2.107$, $df = 103$, $p = .038$; low belief group $M = 22.65$, $SD = 4.14$, high belief group $M = 24.48$, $SD = 3.11$), and greater expectations about treatment overall

($t = -3.876$, $df = 103$, $p = .000$; low belief group $M = 68.63$, $SD = 7.77$, high belief group $M = 76.10$, $SD = 7.18$). Item 2 (amount of change needed) was also significantly associated with caregiver expectations about child improvement, their involvement in treatment, and total expectations for treatment, with caregivers reporting needing to make a fair amount to a great deal of change also reporting greater expectations about their child improving in treatment ($t = -2.122$, $df = 103$, $p = .036$; need little change group $M = 21.58$, $SD = 3.36$, need large change group $M = 23.13$, $SD = 4.13$), being more involved in treatment, ($t = -2.839$, $df = 103$, $p = .005$; need little change group $M = 23.41$, $SD = 3.07$, need large change group $M = 25.22$, $SD = 3.45$), and greater expectations about treatment overall ($t = -2.351$, $df = 103$, $p = .021$; need little change group $M = 73.38$, $SD = 6.73$, need large change group $M = 76.90$, $SD = 8.60$). Lastly, item 3 (required effort) was only found to be related to caregiver expectations about treatment credibility, with caregivers believing treatment could not be effective if he or she does not make changes reporting greater expectations about the credibility of the treatment ($t = -2.077$, $df = 103$, $p = .040$; effortless change group $M = 27.53$, $SD = 3.23$, effortful change group $M = 28.88$, $SD = 3.03$).

Relationships between the BDI-II, Hope Scale, Agency and Pathway subscales of the Hope Scale, PLOC-SF and expectation types and PEE items

Correlation analyses were done to examine associations between scores from the PETS and its subscales and caregiver report of hope, parental locus of control, and depressive symptoms (see Table 3). Overall, it appeared that caregivers' expectations about treatment for their child are generally unrelated to their parental LOC or level of depressive symptoms, but they did show a relationship to hope. The total hope score was significantly and positively

correlated with caregivers' expectations for their children to improve in treatment ($r = .250, p = .05$), and the pathway and agency subscales of the Hope Scale were of course similarly correlated ($r = .218, .223$, respectively, $p = .05$). Total hope also significantly and positively correlated with the total expectations score ($r = .194, p = .05$). Neither the pathway nor agency subscales, however, correlated with the total expectations score. No other significant associations were found between caregiver expectations and scores from the BDI-II, Hope Scale, and PLOC-SF.

The three PEE items were also examined in relation to the BDI-II, Hope Scale, Pathway and Agency subscales, and PLOC-SF using t-test comparisons. Interestingly, only item 2 (amount of change needed) was significantly associated with any of the former variables. Caregivers reporting they needed to make a fair amount to a great deal of change reported a more external parental locus of control ($t = -2.246, df = 103, p = .027$; need little change group $M = 73.38, SD = 6.73$, need large change group $M = 76.90, SD = 8.60$), but less amount of agency ($t = 2.208, df = 81, p = .036$; need little change group $M = 12.42, SD = 2.08$, need large change group $M = 11.40, SD = 2.64$).

Regression analyses examining the BDI-II, Pathway and Agency subscales of the Hope Scale, and PLOC-SF as predictors of expectation.

Given the number of correlations conducted between the BDI-II, Pathway and Agency subscales of the Hope Scale, PLOC-SF, expectation types, and PEE items and the potential for finding significant associations by chance, regression analyses were conducted looking at the BDI-II, Pathway and Agency subscales of the Hope Scale, and PLOC-SF as predictors of the expectation types and PEE items to correct for chance findings. In the linear regression equations

examining predictors of each expectation type demographic variables significantly associated with each expectation type (see Table 1) were entered in the first step (model 1) and scores from the BDI-II, PLOC-SF, and the Pathway and Agency subscales of the Hope scale were entered in the second step (model 2). The Pathway and Agency subscales were used in place of the total score from the Hope scale because these scales were found to have greater internal consistency than the total score.

Predictors of the expectation for child improvement. In the regression equation examining expectations about improvement as the dependent variable, only age, which was the single demographic variable associated with expectations for improvement, was a significant predictor of this type of expectation. This variable was significant in both model 1 of the regression equation ($t = -2.146, p = .034$) and model 2 ($t = -2.231, p = .028$), with neither the BDI-II, Agency and Pathway subscales, and PLOC-SF contributing additional predictive utility (see Table 4).

Predictors of the expectation for parent involvement in treatment. In the regression equation looking at expectations about parent involvement in treatment, age and gender were entered in model 1 as demographic variables and were found to be related to expectations about parent involvement in preliminary correlation and t-test analyses, but neither of these variables were significant predictors of this type of expectations in either model 1 or model 2. Again, scores from the BDI-II, Agency and Pathway subscales, and PLOC-SF did not add predictive utility (see Table 5).

Predictors of the expectation for treatment credibility. The regression equation examining caregiver expectations about treatment credibility also did not yield any significant

predictors. Because none of the demographic variables were significantly associated with this type of expectation, only scores from the BDI-II, Agency and Pathway subscales, and PLOC-SF were entered in model 1 of the equation. Again, no significant predictors of expectations about treatment credibility were found (see Table 6).

Predictors of total expectations. The total expectations score was also included as a dependent variable in a regression equation. In this equation age was included in model 1 and model 2 because this variable was significantly associated with the total expectations score. Age was significant in both model 1 of the regression equation ($t = -2.559, p = .012$) and model 2 ($t = -2.571, p = .012$), with neither the BDI-II, Agency and Pathway subscales, and PLOC-SF contributing additional predictive utility (see Table 7).

Predictors of PEE items. Logistic regression equations examined the BDI-II, Pathway and Agency subscales of the Hope Scale, and PLOC-SF as predictors of the PEE items. In the logistic regression equation examining item 1 (belief in ability to change), the first step of the equation included age because this variable was significantly associated with item 1 (belief in ability to change) and the second step again included age with the addition of scores from the BDI-II, agency and pathway subscales of the Hope Scale, and PLOC-SF. In this equation, only age was a significant predictor, both in step 1 ($B = -.187, p = .014, OR = 1.206$) and step 2 ($B = -.191, p = .014, OR = 1.210$; see Table 8). In the next equation looking at item 2 (amount of change needed), Medicaid assistance, minority status, and marital status were included in the first step and again in the second step with the BDI-II, agency and pathway subscales, and PLOC-SF. Minority status was the only significant predictor in this equation, both in step 1 ($B = 1.278, p = .011, OR = 3.590$) and step 2 ($B = 1.397, p = .009, OR = 4.045$; see Table 9). The last

equation examining item 3 (required effort) included Medicaid assistance and caregiver education level in the first step and again in the second step with BDI-II, agency and pathway subscales, and PLOC-SF. There were no significant predictors of item 3 (required effort) of the PEE items (see Table 10).

Associations between the BDI-II, Hope Scale, Agency and Pathway subscales of the Hope Scale, PLOC-SF, expectation types, PEE items and engagement

Correlations were examined between the continuous attendance variable, which was calculated by dividing the number of visits attended by the number of visits attended and failed, expectation types, total expectations score, and scores on the Hope Scale, Pathway and Agency subscales, PLOC-SF, BDI-II, and the three PEE items. No significant correlations were found between attendance and scores from these measures. When looking at these variables in relation to attendance among the sub-sample of families who attended three or more visits, only item 1 (belief in ability to change) was found to be associated with attendance, with caregivers in the high belief group demonstrating better attendance in treatment than caregivers in the low belief group ($t = -2.750$, $df = 70$, $p = .008$; low belief group $M = .826$, $SD = .039$, high belief group $M = .925$, $SD = .015$).

Clinician-reported treatment status three months following the child's intake was also examined in relation to caregiver cognitions, affect, expectation types, and PEE items among a sub-set of participants who were either described by clinicians as in treatment/completed treatment or terminated prematurely/never showed for intake. Examination of differences between these groups in relation to expectations types, total expectation score, and scores on the BDI-II, Hope Scale, Pathway and Agency subscales, and PLOC-SF, and PEE items yielded one

significant association. Caregivers' expectations about their child improving in treatment were significantly associated with their treatment status at three months, with, families that terminated prematurely or never showed for intake reporting greater expectations about their children improving in treatment ($t = -2.055$, $df = 61$, $p = .044$; terminated premature/never showed for intake $M = 17.50$, $SD = 3.54$, in treatment/completed treatment $M = 22.25$, $SD = 3.21$).

Regression analyses examining the BDI-II, Pathway and Agency subscales of the Hope Scale, PLOC-SF, and expectations as predictors of attendance

In order to determine if scores from the BDI-II, PLOC-SF, and Pathway and Agency subscales of the Hope Scale contributed any additional predictive utility to demographic variables with regard to attendance, these variables were included with demographic variables related to attendance in regression equations. The first equation included the demographic variables significantly associated with treatment attendance, i.e., marital status, minority status, and child age, in the first step and the total expectations score, BDI-II, PLOC-SF, and the Pathway and Agency subscales of the Hope scale in the second step. Once again, the Pathway and Agency subscales were used in place of the total score from the Hope scale because these scales were found to have greater internal consistency than the total score. The total expectations score was used in this equation given concern about the small sample size and the restricted number of variables that could be included in the equation to ensure adequate power to detect predictors. In model 1 of the regression equation the three demographic variables were significant predictors of treatment attendance (marital status $t = 1.963$, $p = .052$; minority status $t = -2.153$, $p = .034$, child age $t = -3.314$, $p = .001$). In model 2 only one variable added additional predictive utility to the demographic variables and this was the agency component of hope ($t = -$

1.932, $p = .056$; see Table 11). This equation was then repeated with the sub-sample of families who attended three or more visits in the clinic, but included different demographic variables. As mentioned previously, within this sub-sample Medicaid assistance was found to be significantly associated with attendance and therefore this variable replaced marital status, minority status, and child age in the regression equations. In model 1, Medicaid assistance was a significant predictor ($t = -2.876$, $p = .005$), but in model 2, the BDI-II, PLOC-SF, pathway and agency components of hope, and total expectations score did not add any additional predictive utility (see Table 12).

Regression analyses examining the BDI-II, Hope Scale, PLOC-SF, and expectations as predictors of disposition status

Logistic regression analyses were then conducted examining disposition status as the outcome variable of interest. The same equation used to examine attendance was used to analyze disposition status, but included marital status and minority status as potential demographic predictors given their significant association with this outcome variable. Furthermore, logistic regression was used to analyze a dichotomized outcome variable such as disposition status. The first step of the equation included marital status and minority status and the second step again included these variables along with scores from the BDI-II, PLOC-SF, agency and pathway subscales of the Hope Scale, and the total expectations score. Although marital status and minority status were not significant in the first step, they were significant in the second step, and they were the only significant predictors in this step ($B = -1.680$, $p = .036$, $OR = 5.376$, $B = 1.501$, $p = .033$, $OR = 4.484$, respectively; see Table 13).

CHAPTER 4

Discussion

The present study examined several types of expectancies parents have with regard to child psychotherapy (e.g., improvement, treatment credibility, involvement, and parental effort) and how these expectancies may be influenced by other parent variables, which included hope, including agency and pathway thoughts, as well as parental locus of control, and level of depression. Subsequently, these parental variables were examined in relation to treatment engagement during the three-month period following the intake and clinician-reported disposition status at three months.

Demography

Preliminary analyses examining associations between demographic factors and symptom severity, parent variables, engagement and disposition status resulted in a number of significant relationships. With regard to child characteristics, caregivers of males expect to be more involved in their children's treatment. Caregivers of younger children also have greater expectations about being involved in treatment, as well as greater expectations about their children improving in treatment and greater expectations about treatment overall. Caregivers of younger children also report stronger beliefs about their ability to make changes to help improve their children's behavior and demonstrate better attendance. Higher levels of child symptom severity were associated with a more external LOC and greater endorsement of symptoms of parental depression. This is consistent with previous evidence indicating that caregivers who report a more external LOC (Morton, 1997), as well as a higher level of depressive symptoms

(Briggs-Gowan, Carter, & Schwab-Stone, 1996), report greater symptom severity for their children.

Examination of family characteristics, such as minority status and Medicaid assistance, yielded several interesting relationships. Caregivers who self-identified as a member of a minority group reported more symptoms of depression, less agency hope, and stronger beliefs about the amount of change they would need to make to help their children improve. They also exhibited poorer attendance and a greater likelihood of terminating prematurely. Receiving Medicaid assistance was associated with higher levels of depressive symptoms. Caregivers in families receiving Medicaid assistance reported greater expectations about the amount of change they would need to make to help their children improve in treatment, but these caregivers also reported believing treatment could be effective even if they did not make changes. Within a subsample of families who attended three or more visits, reception of Medicaid assistance was related to poorer attendance.

Caregiver characteristics, such as marital status, age, and education level, were also examined in relation to their reported level of hope, parental LOC, depression, and expectations. Unmarried caregivers reported a higher level of depressive symptoms, lower levels of agency, and believed they would need to make greater changes to help their children improve. Families in which the caregiver was not married also demonstrated worse attendance in treatment and a greater likelihood of terminating prematurely. Younger caregivers reported higher levels of depressive symptoms. More educated caregivers reported lower levels of depressive symptoms, a more internal parental LOC, a higher level of total hope and agency, and a stronger belief about treatment being ineffective if they do not make changes.

As mentioned previously, demographic variables have most often been studied in relation to engagement in treatment. Minority group status, reception of Medicaid assistance, and single-parent status have previously been found to be significantly associated with premature dropout and attrition (Armbruster and Schwab-Stone, 1994; Kazdin & Mazurick, 1994; Kazdin, Mazurick, & Bass, 1993), and were likewise found to be related to poor engagement in the present study. Although child age was not previously found to be related to engagement (Kazdin, Mazurick, & Bass, 1993), results from the present study indicated that families with older children demonstrated significantly worse attendance than families with younger children. This latter result is difficult to untangle because data regarding whether or not the parent participated in treatment with the child was not collected. Often older children may be responsible for attending treatment on their own or may be more resistant to attending treatment, which may explain their poorer attendance. This study, however, extends prior findings associating premature termination with demographic characteristics by elaborating on relationships between these characteristics and parent cognitions and affect that may indirectly influence treatment engagement. While caregiver-reported hope and parental LOC have not generally been studied in relation to child, parent, and family characteristics, the present study indicates that hope and parental LOC may be especially important to assess among those demographic groups that report lower levels of total hope and a more external parental LOC, which include caregivers who identify as being members of a minority, unmarried, or less educated, or who report greater symptom severity among their children. Additionally, higher rates of self-reported depressive symptoms were found among caregivers who were younger, unmarried, a member of a minority group, and receiving Medicaid assistance. Given prior evidence indicating that caregiver

depression can have a significant impact on presence of child psychiatric symptoms (Biederman et al., 2001; Swartz et al., 2005) and treatment outcome (Weissman et al., 2006), results from this study highlight the importance of assessing depressive symptoms among specific demographic groups in which the individuals may be at greater risk for developing depression.

The relationship between treatment expectations and demographic characteristics has not been studied extensively, but the limited data that does exist is generally consistent with findings from the present study. Nock, Ferriter, and Holmberg (2007) examined demographic characteristics in relation to expectations about treatment credibility and improvement in treatment and found that these types of treatment expectations were generally unrelated to child age or gender, caregiver age, ethnic/minority status, and reception of public aid. The same was true in the present study with the exception of child age; caregivers of younger children reported greater expectations about improvement in treatment. Unfortunately, Nock et al. did not examine demographic variables in relation to caregiver expectations about involvement in treatment, but the present study found that this expectation was higher among caregivers of male children. Further research should focus on delineating relationships between demographic variables and treatment expectations, particularly with regard to testing potential moderating effects that may exist between treatment expectations and subsequent engagement.

Of interest were parental expectations about effort in treatment, which have not been studied previously, but were associated with a number of demographic characteristics. In particular, the PEE item reflecting the amount of change the caregiver felt he or she needed to make to help improve his or her child's behavior was associated with several parent and family characteristics, with caregivers who reported needing to make a greater amount of change also

identifying as a member of a minority group, receiving Medicaid assistance, and not being married. These demographic characteristics were similarly associated with poorer treatment engagement suggesting that the PEE item reflecting the caregiver's belief about the amount of change he or she needs to make in order to help their child improve his or her behavior may be an important screen among families presenting with these demographic characteristics. In total, the results from analyses of demographic variables in the present study suggest that greater clinical attention should be given to particular child, parent, and family characteristics that are associated with negative beliefs about treatment, caregivers' motivation to change, and depressive symptoms.

Caregiver-reported hope, parental LOC, and depression

Next, analyses were conducted examining relationships between hope, parental LOC, and depression. Consistent with the first hypothesis, significant correlations were found between hope, agency, pathway, parental LOC, and depressive symptoms. A higher level of total hope was associated with fewer symptoms of depression ($r = -.646$). This finding was comparable to the association found between these variables within an adult clinical population ($r = -.60$; Snyder et al., 1991), indicating that caregivers in the present study endorsed a similar degree of hope and depressive symptoms as adults in a clinical sample. Furthermore, an external parental LOC was associated with greater report of depressive symptoms in the present study ($r = .439$), which is similar to the association found between parental LOC and negative affect among mothers in a normal sample ($r = .43$; Lovejoy, Verda, & Hays, 1997), as well as between general locus of control and depression among parents of children with autism ($r = .55$) and Down's Syndrome ($r = .58$; Hamlyn-Wright, Draghi-Lorenz, & Ellis, 2007). This latter comparison with

the literature, however, is somewhat less straightforward because parental LOC and general LOC appear to be significantly related, but not identical constructs ($r = .33$; Campis, Lyman, & Prentice-Dunn, 1986). As hypothesized, greater hope was associated with a more internal parental LOC ($r = -.424$). Although the relationship between hope and parental LOC has not been examined previously, this finding is similar to studies that found a significant correlation between hopelessness and general LOC (e.g., $r = .40$; Prociuk, Breen, & Lussier, 1976; Ward & Thomas, 1985). Again, this comparison should be interpreted somewhat cautiously because parental LOC and general LOC are not identical constructs.

To determine if total hope made a contribution to parental LOC independent of depression, a partial correlation was conducted between total hope and parental LOC while controlling for depression. A significant relationship was still found between total hope and parental LOC, suggesting that depression and hope are related, but still partially distinct from one another, which strengthens the argument for hope and depression being distinct constructs.

Following the pattern for the total hope score, the components of hope, agency and pathway thoughts were also significantly correlated with parental LOC and depression. The separate components of hope have not been previously examined in relation to parental LOC and depressive symptoms. Interestingly, a larger correlation was found between the agency component of hope and depressive symptoms than between the pathway component of hope and depressive symptoms, which suggests that depressive symptoms may be more closely related to agency thoughts, i.e., individual's perception of his or her ability to achieve a desired outcome, than pathway thoughts, i.e., individual's perception of being able to generate successful strategies for achieving the desired outcome. The larger correlation between agency thoughts and

symptoms of depression may support the theory behind hopelessness depression (Abramson, Metalsky, & Alloy, 1989), which is thought to develop as the result of both negative outcome expectancy and helplessness expectancy. As discussed previously, the former refers to a negative expectation about the likelihood of a desired outcome and the latter reflects an individual's negative expectation about his or her ability to increase the likelihood of the desired outcome. The helplessness expectancy may overlap with the agency construct, with both types of thoughts reflecting the individual's perception of his or her ability to achieve a desired outcome. As hypothesized, agency and pathway thoughts were also related to caregivers' sense of control over their parenting. Caregivers who feel that the outcome of their attempts to manage their child's behavior is out of their control do not appear to have developed a powerful set of agency and pathway thoughts. This seems realistic given that agency and pathway thoughts have to do with the individual's perception of his or her ability to achieve goals. Caregivers who believe that their children's behavior is impacted more by external factors than by their own attempts to parent may not have experienced a "sense of successful determination in meeting goals in the past, present, and future," (agency) or experience a "sense of being able to generate successful plans to meet goals" (pathway) within the parenting realm.

Expectations about treatment and parental effort

Significant and low- to medium-sized correlations (.284 to .453) were found between expectation types from the PETS, which included expectations about child improvement, parent involvement, and treatment credibility. These results suggest that expectation types are related but that each measures a different sets of beliefs about their children's treatment. The magnitudes of these correlations were similar to those found by Nock and Kazdin (2001) when they

developed the PETS. Although not previously studied, the PEE items, which ask specifically about effortful change on the part of the caregiver, were in line with expectation types from the PETS, with each of the three PEE items significantly associated with at least one expectation type. Caregivers who believed they could make the necessary changes to improve their children's behavior reported greater expectations about their children improving in treatment and being more involved in treatment. Caregivers who believed they needed to make at least a fair amount of change also reported greater expectations about their child improving in treatment and being more involved in treatment. Lastly, caregivers who believed treatment could not be effective if they did not make changes reported greater expectations about the credibility of the treatment their child would receive. Given their brevity and association with other expectation types, the PEE items may be an ideal, and brief, screen for therapists to use early in treatment in order to assess parent's motivation and related expectations for treatment.

Expectations about treatment and parental effort, hope, parental LOC, and depression

Although the relationship between expectations and hope and parental LOC had not been studied previously, fewer than anticipated correlations were found between hope, parental LOC, and expectations. In general, bivariate analyses demonstrated that level of hope and parental LOC were largely unrelated to caregivers' expectations about treatment for their children, with the exception of significant, but small, correlations between hope and expectations about child improvement and total expectations. Caregivers who reported a greater level of total hope also reported greater expectations about their children improving in treatment. Agency and pathway thoughts were equally associated with this expectation, indicating that this expectation is both associated with a parent's belief about their ability to achieve a desired goal and their ability to

generate a strategy to successfully obtain this goal. Caregivers may feel that if they have the ability to successfully obtain a goal, e.g., change their children's behavior, and choose a successful strategy, e.g., mental health treatment, their children will improve and benefit from treatment. Total hope, but not agency and pathway thoughts, was also significantly and positively correlated with the total expectations score. Parent-reported hope and parental LOC were not associated with expectations about parent involvement in treatment and credibility of treatment. These expectations may reflect caregivers' knowledge of, or previous experience with, psychotherapy and the process it entails and may not necessarily reflect caregivers' hopes or parental LOC.

Depression was not significantly related to expectations in the present study, contrary to Nock and Kazdin (2001), which found depression to be significantly correlated with expectations about treatment credibility and child improvement. The reasoning behind this discrepancy is unclear, but differences in sample composition and timing of assessment may account for this discrepancy. Caregivers of children in the study by Nock and Kazdin were seeking treatment specifically for oppositional, aggressive, and antisocial behavior at a clinic recognized for treating this type of behavior. Additionally, in the study by Nock and Kazdin treatment expectations were assessed following the assessment, which was different from the present study in which treatment expectations were assessed prior to the evaluation. Caregivers in the study by Nock and Kazdin may have had more knowledge of the therapy process and chances for their children to improve in treatment following the assessment. Furthermore, as mentioned previously, the PETS was modified in the present study and these modifications may have

influenced the relationships between depression and expectations regarding treatment credibility and child improvement.

The present study was the first to examine hope, parental LOC, and symptoms of depression in relation to caregivers' expectations about the effort they needed to make in order to help their children improve in treatment. Of the three items measuring this type of expectation, however, only the PEE item asking parents about the amount of change they will need to make to improve their children's behavior was related to the former variables, specifically parental LOC and the agency component of hope. Parents who believed they needed to make at least a fair amount of change reported a more external parental LOC, but weaker agency beliefs, suggesting that parents who feel they have little control over their child's behavior (external parental LOC) acknowledge that their behavior has to change for their child to improve, but lack a core belief that they possess the ability to achieve their desired outcome (less agency). These parents may be particularly important to target in treatment because they report an external parental LOC and low agency, but are aware of needing to make changes and may be more motivated to do so.

Predictors of treatment expectations

Regression analyses were conducted to test the second hypothesis which proposes that agency and pathway components of hope, parental LOC, and symptoms of depression would contribute additional predictive utility to demographic variables that had been found to be related to expectations types and the total expectations score. Contrary to the hypothesis, analyses showed that the former variables were not found to be predictive of any of the expectation types or total expectations score. The same was true when looking at hope, parental LOC, and symptoms of depression as predictors of parental effort expectations. Overall, hope, parental

LOC, and depression were not predictive of expectations about treatment and parental effort. It appeared that the only significant predictor of treatment expectations was age, with parents of older children reporting lower expectations about child improvement, total treatment expectations, and expectation about whether or not the parent can make the necessary changes to help his or her child improve. Although Nock and Kazdin (2001) only examined predictors of the total expectations score, and not predictors of specific expectation types, older child age was similarly associated with a lower total expectations score in their study. These authors also found lower SES and ethnic minority status to be predictive of lower total expectations, which was not the case in the present study when looking at the total expectations score. In the present study, however, minority status was a significant predictor of parental expectations about effort, specifically about the amount of change the parent believes he or she will need to make to help his or her child improve, with parents identifying as members of a minority believing they need to make greater amounts of change to help their children improve.

Treatment engagement and hope, parental LOC, depression, and expectations

Few associations were found between hope, parental LOC, depression, and expectations and engagement, which included analysis of both attendance and clinician-reported treatment status three months post-intake. Correlation and t-test analyses were conducted to determine whether the former variables were related to attendance, which included examination of attendance within the whole sample and within a sub-sample of families who attended three or more visits in order to determine if variables related to attendance varied among families who engaged in treatment beyond the intake evaluation.

Expectations were not generally associated with engagement, although results from the present study hint at a potential relationship between expectations and engagement, both within the context of attendance among families who attend three or more visits and treatment status three months post-intake. The PEE item asking parents whether they believed they could make the necessary changes to improve their children's behavior was significantly associated with attendance, and this association was found when looking at the sub-sample of families who attended three or more visits. Within this group, caregiver report of either "believing" or "strongly believing" they could make changes was associated with better attendance beyond the child's evaluation. It appears that among parents who commit to the evaluation those who feel they can make necessary changes are more motivated to stay in treatment. In analyses examining treatment status as reported by the clinician three months post-intake, only caregiver expectations about child improvement were associated with this outcome variable, with parents who never showed for the intake session with their child or who dropped out of treatment prematurely reporting greater expectations about their children improving in treatment. An explanation for this finding is not clear and several hypotheses seem reasonable. Perhaps parents with higher expectations about their child improving in treatment are more likely to see improvement in their children's symptoms and feel that therapy is then unnecessary, demonstrated by either not showing for the intake or dropping out of treatment early. This expectation was also positively correlated with the agency component of hope. Those with greater expectations for improvement also report greater agency and thus may feel more hopeful about their own ability to help their child improve and not feel they need to stay in treatment. Or, rather, parents with higher expectations about their child improving in treatment are more easily

disappointed by the slower progression of symptom improvement in treatment and drop out more quickly.

Total hope, the agency and pathway components of hope, and parental LOC were not significantly associated with attendance, either in the whole sample or in the sample of families who attended three or more visits, or with treatment status three months post-intake. Hope has not been studied previously in relation to engagement in child psychotherapy and therefore this study suggests that hope may not be directly associated with attendance or treatment status in the early stages of treatment. Despite evidence suggesting that caregivers' understanding of their own role in managing their children's behavior is associated with attendance (Peters, Calam, & Harrington, 2005), caregivers' sense of control over their children's behavior (parental LOC) was not directly associated with either attendance or treatment status in the present study. Parent-reported depression has not been consistently linked to treatment engagement in the literature (Kazdin, Mazurick, & Bass, 1993), and in the present study this variable was not related to attendance or treatment status three months post-evaluation.

Predictors of treatment engagement

Regression analyses did not support the study's third hypothesis that proposed that the pathway component of hope, parental LOC, symptoms of depression, and total expectations contribute additional predictive utility to demographic variables with regard to attendance and treatment status three months post-intake. Only one variable of interest added predictive utility to demographic variables predictive of attendance. In linear regression equations attempting to identify predictors of attendance within the whole sample, the agency component of hope was found to be a significant predictor in addition to demographic variables, which included marital

status, minority status, and child age, and suggested that caregivers who report less agency attend more sessions. This finding is interesting in the context of the relationship between agency and parents' expectations about the amount of change they believe they need to make in order to help their children improve. Parents who reported less agency also reported needing to make greater changes to help their child improve. This may be an important group to identify early in treatment because although they believe they need to make changes and come to treatment, they lack a sense of agency or belief that they could be successful. Agency being predictive of attendance is also interesting in the context of the relationship between agency and parental LOC. Less agency was associated with a more external parental LOC, suggesting that perhaps those caregivers who feel they have not been successful in their *own* attempts to manage their children's behavior are more likely to depend on treatment, or feel treatment is beneficial, than parents who report greater agency, and perhaps a more internal parental LOC. Parents who report greater agency may benefit more from the early stage of treatment and once equipped with knowledge about their children's behavior are more likely to feel they can implement the skills learned in treatment for managing their children's symptoms on their own. Caregivers reporting greater agency likely experienced success in the past with regard to obtaining goals and may feel that they are better able to tackle problems or situations independently.

Only reception of Medicaid assistance was a significant predictor of attendance when looking at the sample of families who attended three or more visits. In logistic regression equations examining treatment status three months after the intake date among those who either completed treatment or were in treatment and those who never engaged in treatment (i.e., did not show for intake) or dropped out prematurely, only demographic variables, which included

marital status and minority status, were predictive of this outcome. Marital status of the caregiver, minority group status, reception of Medicaid assistance, and child age were significant predictors of engagement, which is generally in line with the literature suggesting that variables associated with SES are the most consistent predictors of treatment engagement when looking at demographic variables (Kazdin, Mazurick, & Bass, 1993; McMahon, Forehand, Griest, & Wells, 1981; Wierzbicki & Pekarik, 1993). Contrary to results found by Nock and Kazdin (2001) that suggested that treatment expectations were predictive of treatment attendance and premature termination, a similar association was not found in the present study. Nock and Kazdin, however, examined a curvilinear relationship between treatment expectations and engagement within a population of families presenting with similar concerns, which may account for the differences in findings in the present study. Overall, these demographic characteristics were better predictors of engagement than parent-reported expectations about treatment, agency and pathway components of hope, parental LOC, and symptoms of depression.

Implications

Results from the present study examining relationships between hope, parental LOC, depression, expectations for treatment and parent effort, and engagement bear both research and clinical implications. First, evidence that the agency component of hope is associated with the majority of variables related to SES, such as reception of Medicaid assistance, race/ethnicity, marital status, and caregiver's level of education, supports further study of agency thoughts. Continued examination of this variable may contribute to greater understanding of why variables representing lower SES are often associated with worse engagement and outcome. Furthermore, evidence of agency being a potential predictor of engagement warrants exploration of this

variable as a potential mechanism of treatment engagement, as well as outcome. Agency may be a predictor of engagement because changes in agency earlier in treatment reflect greater investment in treatment and application of skills or, simply, greater belief in being able to accomplish the task at hand. Change in parental LOC has been shown to be associated with better outcomes (Gillis & Jessor, 1970; Manning, Hooke, Tannenbaum, Blythe, & Clarke, 1994; Mattick & Peters, 1988; Mattick, Peters, & Clarke, 1989) and given that parental LOC and agency are moderately correlated, perhaps change in agency also influences outcome. In studies of symptom response patterns in adult psychotherapy, Howard and colleagues (Howard, Lueger, Maling, & Martinovich, 1993) suggest that change in hope early in treatment proceeds symptom improvement. It may be the initial influence of agency, and change in agency, that subsequently influences a caregiver's perception of the severity of his or her child's symptoms. Additionally, given the large correlation between agency and caregiver report of depressive symptoms and evidence suggesting that higher levels of depressive symptoms reported by the caregiver is associated with poor outcomes in child psychotherapy, agency may be an important construct to target with caregivers early in treatment, especially if this latter variable influences symptoms of depression.

Although most relationships between engagement and treatment expectations, parental LOC, and total hope were not significant, several expectations appear to be somewhat useful in determining a family's potential for treatment engagement, such as parents' expectations about their children improving in treatment and caregivers' expectations that they would be able to make changes necessary for improving their children's behavior. Although these relationships were only associated with engagement and not predictive of it, these may be important

expectations for clinicians to address early in treatment in order to discuss with caregivers either more realistic expectations about their child improving and the necessity for effortful change on the part of the caregiver to prevent premature termination or to support and encourage caregivers who report being able to make changes in order to help with their child's improvement.

Furthermore, although expectations were not predictors of engagement in the present study, recent evidence indicates that treatment expectations about improvement and credibility significantly predict subsequent adherence to treatment procedures above and beyond demographic variables and parent motivation for treatment (Nock, Ferriter, & Holmberg, 2007). This finding, in conjunction with results from the present study, suggests that caregiver expectations about treatment may be better suited for study in the context of adherence to treatment principles and subsequent treatment outcome than in the context of engagement. For example, in the present study caregivers who believed they needed to make at least a fair amount of change reported a more external parental LOC and weaker agency beliefs. These caregivers may be particularly important to target in treatment because although they are aware of needing to make changes, an external parental LOC and low sense of agency may make it difficult for them to utilize and adhere to the treatment principles outside of the treatment session. If expectations prove not to be strong predictors of engagement, examination of expectations as a predictor of subsequent caregiver adherence to, and implementation of, treatment strategies outside of therapy may yield better results and have the potential to inform the field's understanding of variables contributing to improvement in treatment.

Furthermore, analyses examining how symptom improvement during treatment impacts engagement would also be of interest. For example, perhaps caregivers whose children

experience early gains in treatment feel confident that they would be able to continue working with their children on their own and drop out of treatment prematurely, or, rather, caregivers whose children do not exhibit early gains in treatment become frustrated and drop out prematurely. Given recent evidence suggesting that half of children in a treatment as usual setting exhibit significant gains early in treatment (Cromley & Lavigne, 2008), it would seem reasonable and worthwhile to examine how early symptom improvement influences a family's engagement in treatment.

Demographic variables appear to be better predictors of treatment engagement in child psychotherapy. Future research attempting to elucidate the relationship between these variables and engagement should also incorporate variables that may indirectly influence this relationship, such as differences in expectations, hope, parental LOC, and depression that exist between demographic groups. These latter variables should be examined as potential moderators in relationships between demographic variables and engagement and be included in analyses looking at potential interaction effects between these variables. Overall, variables related to SES appear to be the better predictors of engagement in child psychotherapy. Although this finding appears to be consistent throughout the literature, this relationship has rarely been explored further, and it is therefore difficult to determine exactly how variables related to lower SES, e.g., minority status, caregiver education, and marital status, predict a family's engagement in treatment. In practical terms, engagement along lower SES families may be influenced by the additional stressors these families encounter, such as accessing and obtaining services, affording transportation, and scheduling times when both caregiver and child can attend treatment, which can be especially problematic if the caregiver is single and working full-time. Furthermore,

McLoyd (1998) notes how children from lower SES families experience a greater number of negative life events and chronic stressors, such as perinatal complications, less home-based cognitive stimulation, more harsh and inconsistent caregiving, and adverse housing and neighborhood conditions, which appear to significantly impact their mental health. Low-income children exposed to stressors have higher levels of internalizing symptoms and behavior problems. Thus, in psychological terms, children and caregivers from lower SES families may report either greater impairment in general or impairment in a greater number of domains which weekly outpatient therapy may be unable to address and which may consequently lead to poorer engagement. Further research elaborating on how these variables specifically impact a family's attendance in, and completion of, treatment must be conducted in order to inform intervention development that targets this population and addresses the barriers these families experience. Until these types of services are more readily available, therapists who work with families from lower SES in clinic settings may need to make a greater effort to address these concerns related to attendance early in treatment and identify potential resources to aid in the family's attendance.

Limitations

There are several notable limitations in the present study. First, it is unclear if parent expectations about treatment and effort, pathway thoughts, parental LOC, depression are simply not associated with treatment engagement, or if they impact engagement indirectly. Further research is needed to determine whether expectations, pathway thoughts, parental LOC, or depression interact with other variables, such as therapy process variables, to influence a family's engagement in treatment. A family's engagement in treatment is likely not solely determined by pretreatment variables; rather, treatment process variables, such as therapeutic

alliance, may also influence a family's engagement and should be incorporated, along with pretreatment variables, such as parent cognitions, into a model that identifies how variables interact to either directly or indirectly impact engagement. Furthermore, this study focused on baseline assessment of parent cognitions and depressive symptoms related to engagement. This study did not examine how change in these variables over time may impact outcome variables such as engagement or symptom improvement, and therefore further study of these variables as mechanisms of change may be warranted. For example, it would be interesting to determine whether treatment expectations change significantly between the points of entering treatment and completing the evaluation. Perhaps a caregivers' initial contact with a therapist or early provision of psychoeducation regarding their child's diagnosis and treatment significantly changes their expectations about their child's treatment and subsequently their engagement in treatment.

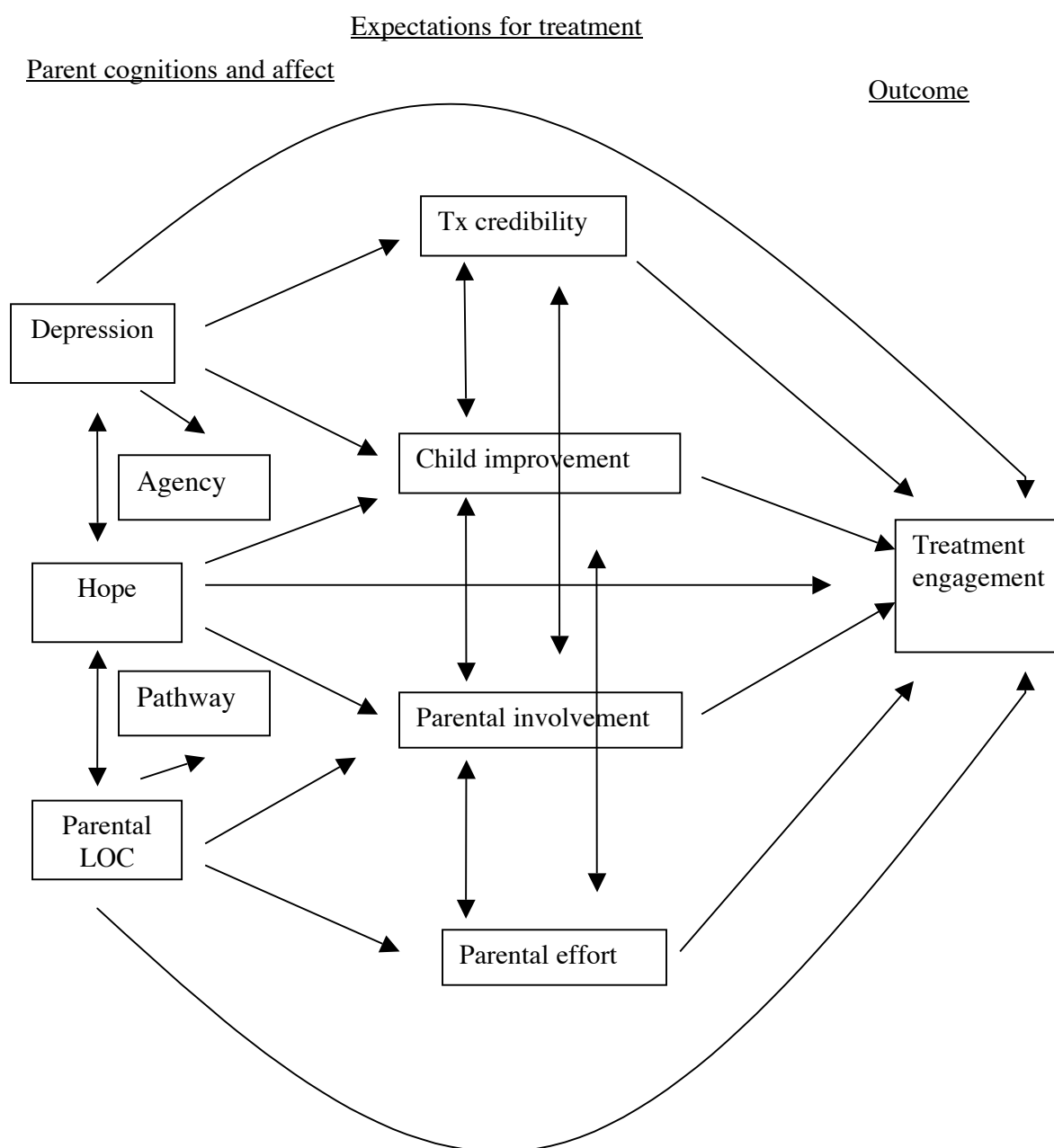
Additionally, this study did not examine diagnosis or specific types of symptoms (e.g., externalizing, internalizing) in relation to expectations. Given that Nock and Kazdin (2001) found that treatment expectations were related to engagement in a symptom-specific population and this finding was not replicated in the present treatment as usual sample, further study should determine whether expectations vary according to the type of behavior caregivers identify as problematic and how these differences influence engagement.

Second, results may also be impacted by methodological issues related to measure modification, low alphas, restricted range in attendance. As mentioned previously, the original PETS developed by Nock and Kazdin (2001) for a specific disorder and intervention was modified in the present study to suit a general clinic setting providing treatment as usual. Although the alphas were fairly comparable, the difference in results between this study and the

study by Nock and Kazdin examining predictors of treatment expectations and treatment expectations as a predictor of engagement may be partially due to the modification of this measure. Additionally, the alpha for the Hope Scale (Chang & DeSimone, 2001; Snyder et al., 1991; Steed, 2002) was lower in the present study, and therefore the two sub-scales of hope (agency and pathway), which had higher alphas, were generally analyzed in place of the total score for the Hope Scale. This lower alpha may have impacted the potential for hope to predict expectations and engagement. Furthermore, given higher correlations between hope, agency and pathway, and depression, multicollinearity may have influenced relationships and should be tested further in subsequent studies. Lastly, the range in attendance among families in the present sample was somewhat skewed, with most families demonstrating good attendance. This skew may have also impacted the ability to detect weaker predictors of attendance, such as parent-reported expectations, parental LOC, or symptoms of depression.

This study is one of the first to attempt to identify associations between parent cognitions, such as expectations for treatment, hope, and parental locus of control, and how these variables relate to engagement in child psychotherapy. Further studies examining variables related to parents participating in treatment with their children are necessary, and further studies replicating the findings are essential.

Figure 1. Model of expected associations between parent cognitions and affect, parent expectations for treatment, and treatment engagement



CHAPTER 5

References

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Table 1. Significant associations between demographic variables and symptom severity and parent-report measures

	Child gender	Child's age	Child symptom severity	Race/ethnicity	Medicaid assistance	Marital status	Caregiver age	Caregiver education
Hope total	ns	ns	ns	ns	Lower among caregivers with Medicaid assist ($t = 1.942, df = 103, p = .055$)	ns	ns	Lower among less educated caregivers ($F(5,99) = 3.596, p = .005$)
Hope pathway	ns	ns	ns	ns	ns	ns	ns	ns
Hope agency	ns	ns	ns	Lower among minority members ($t = 2.039, df = 103, p = .044$)	Lower among caregivers with Medicaid assist ($t = 1.920, df = 103, p = .058$)	Lower among unmarried caregivers ($t = -2.444, df = 103, p = .016$)	ns	Lower among less educated caregivers ($F(5,99) = 4.106, p = .002$)

PLOC-SF	ns	ns	More external among caregivers reporting greater child symptom severity ($r = .282, p = .05$)	ns	ns	ns	ns	More external among less educated caregivers ($F(5,99) = 2.466, p = .039$)
BDI-II	ns	ns	Higher among caregivers reporting greater child symptom severity ($r = .250, p = .05$)	Higher among minority members ($t = -2.076, df = 103, p = .041$)	Higher among caregivers with Medicaid assist ($t = -3.31, df = 103, p = .001$)	Higher among unmarried caregivers ($t = 2.045, df = 103, p = .04$)	Higher among younger caregivers ($r = -.252, p = .05$)	Higher among less educated caregivers ($F(5,99) = 6.148, p = .000$)

Expectations total	ns	Higher among caregivers of younger children ($r = -.245, p = .05$)	ns	ns	ns	ns	ns	ns
Expectations about Treatment Credibility	ns	ns	ns	ns	ns	ns	ns	ns
Expectations about Child Improvement	ns	Higher among caregivers of younger children ($r = -.207, p = .05$)	ns	ns	ns	ns	ns	ns
Expectations about Caregiver Involvement	Higher for caregivers of males ($t = 2.168, df = 103, p = .032$)	Higher among caregivers of younger children ($r = -.197, p = .05$)		Higher among minority members ($t = -1.915, df = 103, p = .058$)				

PEE Item 1 ¹		Higher for caregivers of younger children ($t = 2.60, df = 103, p = .011$)						
PEE Item 2 ²				Higher among minority members (chi-square(1) = 13.785, $p = .00$)	Higher among caregivers with Medicaid assist (chi-square(1) = 6.274, $p = .012$)	Higher among unmarried caregivers (chi-square(1) = 11.455, $p = .001$)		
PEE Item 3 ³					Higher among caregivers with Medicaid assist (chi-square(1) = 6.809, $p = .009$)			Higher among less educated caregivers (chi-square(5) = 14.332, $p = .014$)

¹ PEE Item 1: Do you believe you can make the necessary changes to improve your child's behavior?

² PEE Item 2: How much will you need to change to help your child improve his or her behavior?

³ PEE Item 3: Do you believe treatment can be effective if you do not make changes?

Attendance (whole sample)		Higher among caregivers of younger children (r $= -.256, p =$.01)		Lower among minority members (t $= 2.818, df$ $= 103, p =$.006)		Lower among unmarried caregivers (t $= -2.627, df$ $= 90, p =$.010)		
Attendance (3 or more visits)					Lower among caregivers with Medicaid assistance (t $= 3.219, df$ $= 70, p =$.002)			
Premature termination				Higher among minority members (chi- square(1) = 4.806, $p =$.028)		Higher among unmarried caregivers (chi- square(1) = 5.299, $p =$.021)		

Table 2. Associations between subscales of the modified PETS

	Treatment credibility	Child improvement	Caregiver involvement	Total expectations	PEE Item 1 ⁴	PEE Item 2 ⁵	PEE Item 3 ⁶
Treatment credibility		$r = .453, p = .01$	$r = .284, p = .01$	$r = .748, p = .01$	ns	ns	$t = -2.077, df = 103, p = .040$ (negatively related)
Child improvement			$r = .322, p = .01$	$r = .809, p = .01$	$t = -4.540, df = 103, p = .000$ (positively related)	$t = -2.122, df = 103, p = .036$ (positively related)	ns
Caregiver involvement				$r = .703, p = .01$	$t = -2.017, df = 103, p = .038$ (positively related)	$t = -2.839, df = 103, p = .005$ (positively related)	ns
Total expectations					$t = -3.876, df = 103, p = .000$ (positively related)	$t = -2.351, df = 103, p = .021$ (positively related)	ns
PEE Item 1						chi-square(1) = 5.264, $p = .022$ (positively related)	ns
PEE Item 2							ns
PEE Item 3							

⁴ PEE Item 1: Do you believe you can make the necessary changes to improve your child's behavior?

⁵ PEE Item 2: How much will you need to change to help your child improve his or her behavior?

⁶ PEE Item 3: Do you believe treatment can be effective if you do not make changes?

Table 3. Associations between the BDI-II, Hope Scale, PLOC-SF and expectation types and PEE items

	Child improvement	Caregiver involvement	Treatment credibility	Total expectations	PEE Item 1 ⁷	PEE Item 2 ⁸	PEE Item 3 ⁹
Hope total	Greater expectation about child improving associated with more hope ($r = .250, p = .05$)	ns	ns	Greater total expectations associated with more hope ($r = .194, p = .05$)	ns	ns	ns
Hope agency	Greater expectation about child improving associated with more agency thoughts ($r = .223, p = .05$)	ns	ns	ns	ns	Greater belief in need to change a large amount associated with less agency thoughts ($t = 2.208, df = 81, p = .036$)	ns
Hope pathway	Greater expectation about child improving associated with more pathway thoughts ($r = .218, p = .05$)	ns	ns	ns	ns	ns	ns
PLOC-SF	ns	ns	ns	ns	ns	Greater belief in need to change a large amount associated with more external PLOC ($t = -2.246, df = 103, p = .027$)	ns
BDI-II	ns	ns	ns	ns	ns	ns	ns

⁷ PEE Item 1: Do you believe you can make the necessary changes to improve your child's behavior?

⁸ PEE Item 2: How much will you need to change to help your child improve his or her behavior?

⁹ PEE Item 3: Do you believe treatment can be effective if you do not make changes?

Table 4. Summary of Linear Regression Analysis for Variables Predicting Expectations for Improvement ($n = 105$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
Age	-.210	.098	-.207	-2.146	.034
Step 2					
Age	-.2140	.096	-.211	-2.231	.028
BDI-II	.052	.043	.163	1.221	.225
Hope agency	.346	.235	.219	1.472	.144
Hope pathway	.245	.199	.140	1.235	.220
PLOC-SF	-.027	.033	-.090	-.824	.412

Table 5. Summary of Linear Regression Analysis for Variables Predicting Expectations for Involvement ($n = 105$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
Age	-.142	.088	-.158	-1.608	.111
Gender	-1.199	.680	-.173	-1.763	.081
Step 2					
Age	-.135	.090	-.149	-1.497	.138
Gender	-1.182	.697	-.171	-1.697	.093
BDI-II	-.017	.039	-.059	-.430	.668
Hope agency	-.085	.215	-.060	-.395	.694
Hope pathway	.167	.182	.107	.922	.359
PLOC-SF	.023	.030	.084	.745	.458

Table 6. Summary of Linear Regression Analysis for Variables Predicting Expectations about Treatment Credibility ($n = 105$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
BDI-II	.042	.037	.156	1.126	.263
Hope agency	.316	.204	.239	1.549	.124
Hope pathway	-.003	.172	-.002	-.018	.986
PLOC-SF	-.021	.029	-.085	1.549	.124

Table 7. Summary of Linear Regression Analysis for Variables Predicting Expectations about Total Expectations ($n = 105$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
Age	-.511	.200	-.245	-2.559	.012
Step 2					
Age	-.514	.200	-.246	-2.571	.012
BDI-II	.070	.089	.106	.781	.437
Hope agency	.555	.489	.170	1.135	.259
Hope pathway	.378	.413	.105	.916	.362
PLOC-SF	-.026	.069	-.042	-.381	.704

Table 8. Summary of Linear Regression Analysis for Variables Predicting PEE Item 1 ($n = 105$)

Variable	B	SE	Sig.	OR
Block 1				
Age	-.187	.076	.014	1.206
Block 2				
Age	-.191	.078	.014	1.211
BDI-II	.000	.034	.990	1.000
Hope agency	.205	.183	.263	1.227
Hope pathway	-.176	.162	.277	1.193
PLOC-SF	-.002	.027	.953	1.002

Table 9. Summary of Linear Regression Analysis for Variables Predicting PEE Item 2 ($n = 105$)

Variable	B	SE	Sig.	OR
Block 1				
Medicaid assistance	.288	.500	.564	1.334
Minority status	1.278	.502	.011	3.590
Marital status	-.873	.487	.073	2.398
Block 2				
Medicaid assistance	.121	.536	.821	1.129
Minority status	1.397	.532	.009	4.045
Marital status	-.883	.506	.081	2.415
BDI-II	-.004	.027	.878	1.004
Hope agency	-.068	.155	.660	1.071
Hope pathway	.067	.131	.608	1.070
PLOC-SF	.038	.022	.082	1.039

Table 10. Summary of Linear Regression Analysis for Variables Predicting PEE Item 3 ($n = 105$)

Variable	B	SE	Sig.	OR
Block 1				
Medicaid assistance	-.828	.514	.107	2.288
Caregiver education	.396	.228	.083	1.486
Block 2				
Medicaid assistance	-.819	.524	.118	2.268
Caregiver education	.376	.233	.107	1.456
BDI-II	-.003	.028	.900	1.003
Hope agency	-.016	.152	.915	1.016
Hope pathway	.118	.122	.335	1.125
PLOC-SF	.007	.020	.746	1.007

Table 11. Summary of Linear Regression Analysis for Variables Predicting Attendance ($n = 105$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
Marital status	.101	.052	.193	1.963	.052
Age	-.021	.006	-.302	-3.314	.001
Minority status	-.115	.054	-.213	-2.153	.034
Step 2					
Marital status	.120	.053	.229	2.287	.024
Age	-.020	.007	-.276	-2.932	.004
Minority status	-.132	.055	-.245	-2.417	.018
BDI-II	-.002	.003	-.089	-.694	.490
PLOC-SF	.000	.002	-.022	-.204	.839
Hope pathway	.013	.013	.109	1.004	.318
Hope agency	-.031	.016	-.282	-1.932	.056
Total expectations	.004	.003	.130	1.354	.179

Table 12. Summary of Linear Regression Analysis for Variables Predicting Attendance (3 or more visits; $n = 72$)

Variable	B	SE B	Beta	t	Sig.
Step 1					
Medicaid	-.084	.029	-.325	-2.876	.005
Step 2					
Medicaid	-.082	.030	-.319	-2.726	.008
BDI-II	-.004	.002	-.349	-1.814	.074
PLOC-SF	.002	.001	.222	1.582	.118
Hope pathway	-.001	.008	-.024	-.172	.864
Hope agency	-.008	.010	-.156	-.784	.436
Total expectations	.003	.002	.154	1.343	.184

Table 13. Summary of Logistic Regression Analysis for Variables Predicting Disposition Status ($n = 83$)

Variable	B	SE	Sig.	OR
Block 1				
Minority status	-1.076	.718	.134	2.933
Marital status	.982	.621	.114	2.671
Block 2				
Minority status	-1.680	.800	.036	5.376
Marital status	1.501	.703	.033	4.484
BDI-II	.049	.045	.268	1.051
PLOC-SF	-.013	.034	.696	1.013
Hope pathway	.293	.174	.093	1.341
Hope agency	-.315	.234	.178	1.370
Total expectations	.066	.043	.123	1.068