THE MILWAUKEE PSYCHOTHERAPY EXPECTATIONS QUESTIONNAIRE: A REPLICATION AND EXTENSION

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EXPECTATIONS QUESTIONNAIRE:

A REPLICATION AND

EXTENSION

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CHAPTER I

INTRODUCTION

There has been extensive research linking client variables to therapeutic outcome (Clarkin & Levy, 2004). Some of these variables include; sociodemographic variables such as age (Dubrin & Zastowny, 1988; Sledge, Moras, Hartley, & Levine, 1990), gender (Garfield, 1994; Petry, Tennen, & Affleck, 2000), ethnicity and culture (e.g., Gibbs, 1985; Griffith & Jones, 1979; Jenkins, 1997; Sue & Zane, 1987), intelligence (Haaga, DeRubeis, Stewart, & Beck, 1991), psychiatric comorbidity (AuBuchon & Malatesta, 1994; Jenike, Baer, Minichello, & Carey, 1986; McDermut & Zimmerman, 1998; Rossiter, Agras, Telch, & Schneider, 1993), and client expectations (Frank, 1973; Gaston, Marmar, Gallagher, & Thompson, 1989; Paul & Shannon, 1966).

Client expectations are generally considered to be part of the client's values, which also consist of their preferences and concerns (Institute of Medicine, 2001). However, the contribution of each of these elements to the more broad understanding of client values has not been defined. Therapeutic outcome is usually understood quantitatively and often reflects therapeutic alliance, attrition, and/or symptom reduction (Dozier, Cue, & Barnett, 1994; Tyrell, Dozier, Teague, & Fallot, 1999; Grilo et al., 1998; Lorr & McNair, 1964; Lennard & Bernstein, 1960; Meyer et al., 2002). The relationship between client values and treatment outcome, and all their sub-elements, is not fully understood at this time.

Further, some ambiguity regarding the relationship between client expectations and therapeutic outcome stems from the existence of several moderators and mediators between these two variables. For example, attachment style and maturity of client object relations, among others, are known to moderate or mediate the expectations-outcome relationship (Fonagy et al., 1996; Meyer, Pilkonis, Proietti, Heape, & Egan, 2001; Piper, de Carufel, & Szkrumelak, 1985; Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984; Piper, Joyce, Azim, & Rosie, 1994). Such ambiguities may partially stem from the lack of appropriate quantitative measures for the elements related to client values, including quantifying client expectations.

To address the paucity of appropriate measures for usage in research examining the relationship between expectations and treatment outcomes, researchers at the University of Wisconsin-Milwaukee (UWM) developed a self-report measure known as the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ). Thus far, they have gathered preliminary normative data from a college student population. At present, the UWM researchers are also collecting data within a clinical population being seen in their clinical psychology program's training clinic.

Exploratory analyses of data from the college student sample have revealed five components in the M-PEQ: expectations of self in therapy, expectations of improvement resulting from therapy, expectations of therapeutic activities, expected emotional/personal improvement, and expectations of the therapist/alliance (M. T. Hynan, personal communication, November 30, 2005). These five components consisted of 28 items on the M-PEQ and accounted for 68% of the variance in total scores. In addition, a second sample of undergraduate students demonstrated that internal

consistencies ($\alpha = 0.81$ to 0.89) and test-retest reliabilities ($r = 0.73$-0.85) were relatively high.

The proposed study will seek to replicate the normative data, factor structure, and test-retest reliabilities obtained from the UWM college student sample by obtaining data from undergraduates enrolled at Oklahoma State University. The research on this measure will be extended by generating normative data from new samples, including help-seeking individuals presenting to the Psychological Services Center (PSC) for an intake and adults with previous treatment exposure.

Secondarily, the proposed study will also attempt to accomplish several other goals. If an adequate sample size in the training clinic can be generated, a psychometric examination will attempt to define a cut score with good sensitivity and specificity for distinguishing between normal range expectancy scores versus scores in a range that is at risk for treatment attrition. In addition, the proposed study will utilize the M-PEQ to conduct preliminary exploratory analyses examining the relationship between expectations and the following variables: general self-efficacy, subjective well-being, hopefulness (state), and therapeutic alliance. Although these are only anticipated to be exploratory in nature, the analyses are considered important for outlining future research projects in this line of inquiry.

CHAPTER 2

REVIEW OF LITERATURE

The following literature review will address client variables broadly in order to clarify the known relationships between these variables and therapeutic outcome as a context for understanding the role of client values, the broad variable under which expectations is subsumed. Then, the discussion will focus more specifically on the historical development and current findings concerning the relationship between client expectations, specifically, and therapeutic outcome. Lastly, the review will discuss the goals, implications, and hypotheses of the current replication and extension study.

Client Variables and Treatment Outcome

Therapy outcome has long been associated with client variables/characteristics and environmental influences outside of therapy. In fact, it has been estimated that these variables may account for up to 40% of client improvement (Lambert, 1992). In the 1980's, client variables research focused on client diagnosis as related to therapy outcome (Clarkin & Levy, 2004). As interest in this line of research grew, a more nuanced understanding of client variables as broader than simple diagnosis emerged. This prompted the National Academy of Science's Institute of Medicine (IOM) to recommend investigations involving matching specific treatments to specific patients, with the hope that such research would result in better outcomes, increased cost-effectiveness, and improved utilization of available treatment resources (Institute of Medicine, 2001). However, such investigations often define, or operationalize, client

variables quite differently, resulting in inconsistent findings, which make it somewhat difficult to draw broad and general conclusions. At the broadest level, it appears that client variables such as age, gender, race, ethnicity and culture do not predictably or consistently affect treatment outcome (Clarkin & Levy, 2004). However, closer examination of the literature suggests that client expectations may differ somewhat among these patient groups. A review of each of the major categories of client variables illustrates this point.

Age and Gender

Concerning age, psychotherapy studies generally indicate that age is not strongly related to treatment retention or treatment outcome (Dubrin & Zastowny, 1988; Sledge, Moras, Hartley, & Levine, 1990). Younger individuals, however, appear to be more likely to have a history of mental health service utilization and report stronger intentions of using such services in the future (Smith, Peck, McGovern, & Rene, 2004). Similarly, research examining the relationship of gender and psychotherapy outcome generally reveals no differences (Garfield, 1994; Petry, Tennen, & Affleck, 2000), with the possible exception of those in treatment for depression (Thase, Frank, Kornstein, & Yonkers, 2000). However, the possibility exists that gender differences related to treatment expectations are exerting an influence in how treatment options are evaluated by clients, prior to actually initiating psychotherapy. For example, Smith, Peck, McGovern, & Rene (2004) observed that women were more likely to possess positive attitudes about help-seeking behavior. They also reported that women were more likely to have a history of utilizing mental health services and to report an intention of utilizing mental health services in the future, if needed.

Robertson and Fitzgerald (1992) provide further evidence of gender differences with respect to the initiation of psychological services. On average, men reported greater preference for the more structured service options, considering them to be less emotionally involving. In a more recent study (Blazina & Marks, 2001), men who endorsed traditional masculine gender roles were more likely to report a negative reaction when presented with treatment options, with the most pronounced negativity directed at unstructured group services (i.e., a men's support group). Although both of these studies were conducted with non-help seeking, male undergraduates, who may not be comparable to help seeking populations on the whole, NIMH has acknowledged that gender may play a significant role in treatment initiation and selection with their development of the *Real Men, Real Depression* marketing campaign (National Institute of Mental Health, 2003)

Ethnicity and Culture

Concerning ethnicity and culture, research suggests that the client-therapist alliance is especially salient when working with ethnic minority populations (e.g., Gibbs, 1985; Griffith & Jones, 1979; Jenkins, 1997; Sue & Zane, 1987). For example, literature in this field indicates that egalitarian attitudes by therapists may be particularly useful when working with low-income, African-American clients (Ross, 1983). Some research indicates that the biases and/or discomfort of the therapist when working with members of a different ethnicity may adversely impact treatment outcome (Garb, 1997; Whaley, 1998). However, other research suggests that the impact of therapist attitude may actually be related to SES status, rather than ethnic status (Lerner, 1972). Similarly, although a small body of research indicates that client and therapist ethnic fit may be

salient for Asian-Americans (Fujino, Okazaki, & Young, 1994), Latinos (Sue, et al., 1991), and Native Americans (Price & McNeill, 1992) such findings might be more reflective of attitude match (which might be another way of stating that their expectations for psychotherapy match) or potentially language match (Kline, Acosta, Austin, & Johnson, 1980), rather than actual ethnicity match. In addition, African Americans utilize mental health services less frequently and have less positive expectations and attitudes concerning the mental health system as compared to European Americans. They are also more likely to be focused on cultural or racial content in therapy sessions and may be more aware of therapist cultural competence (Banks, 2001).

Cultural variables and their influence on treatment outcome have also been examined empirically. Specifically, judgments pertaining to satisfaction in life may be influenced by the individual's subjective determination of needs and goals, which appear to be influenced by the individual's experience and understanding of culture and society (Diener & Richard, 2000). A relatively recent study examining Asian American college students found that the level of self-reported cultural identity was a significant moderator of credibility ratings for treatment rationales of both time-limited psychotherapy as well as cognitive therapy (Wong, Kim, & Zane, 2003). Other studies have noted that common constructs of psychotherapy (e.g., problem focused, encouragement of affective expression and self-disclosure), as conceptualized within the United States and other Western societies, might inherently conflict with conventional expectations in non-Western cultures (e.g., Leong, 1986), particularly in terms of emphasis on individualism versus collectivism (Duan & Wang, 2000).

Cultural differences are also likely to play a significant role in cases of immigration. A large-scale study of disability levels and health utilization in Australia found that individuals from non-English speaking backgrounds, particularly those born in Asia, Africa, or the Middle East, were less likely to utilize health services and, consequently, more likely to suffer from high levels of disability (Boufous, Silove, Bauman, & Steel, 2005). Thus, the importance of cultural differences should not be overlooked as their influence may be misinterpreted by clinicians as indicative of resistance (Reid, 1999) and, in turn, be linked to premature termination and unsuccessful courses of treatment (see Sue et al., 1994 for a review).

Intelligence

Lastly, there has also been ambiguity concerning the relationship between client variables such as intelligence and psychiatric comorbidity and treatment outcome. Concerning intelligence, general intellectual abilities are not typically thought to significantly relate to therapy outcome (Haaga, DeRubeis, Stewart, & Beck, 1991). Unfortunately, most studies reporting no differences include only a restricted range of cognitive abilities. While it may seem reasonable to expect that individuals' expectations regarding goal collaboration or therapist directiveness, for example, may co-vary with intellectual level, no relevant studies were found in the literature.

Psychiatric Comorbidity

Concerning psychiatric comorbidity, the existing treatment outcome literature suggests that fewer comorbid mental health problems lead to a better prognosis (AuBuchon & Malatesta, 1994; Jenike, Baer, Minichello, & Carey, 1986; McDermut & Zimmerman, 1998; Rossiter, Agras, Telch, & Schneider, 1993). While it may be

tempting to hypothesize that client expectations may differ according the absolute number of presenting diagnoses, this is overly simplistic. At present, a preponderance of psychotherapy research is centered on examining the efficacy of specific treatments in clinical populations with a singular diagnosis (for illustrative purposes, see Chambless et al., 1998). As such, a paucity of research is devoted to developing treatments for those with comorbid diagnoses. In general, it appears that the presence of one or more personality disorders is a specific risk for premature treatment discontinuation, with estimates ranging from 42% to 67% (Chiesa, Drahorad, & Longo, 2000; Gunderson et al., 1989; Shea et al., 1990; Skodol, Buckley, & Charles, 1983). Investigations into patient expectations as a function of personality disordered vs. non-personality disordered appear to be needed, but none can be found in the literature at this time.

The examination of broad symptom severity is another way of investigating this issue of multiple presenting problems, regardless of the specific diagnoses. It has been repeatedly demonstrated that higher levels of symptomatic distress are related to poorer treatment outcomes (e.g., Beckham, 1989; Elkin et al., 1995; Garfield, 1994; Lambert & Anderson, 1996; Luborsky, Crits-Christoph, Mintz, & Auerbach, 1988; McLellan, Luborsky, Woody, Druley, & O'Brien, 1983; McLellan et al., 1994; Shapiro et al., 1994).

Client Expectations and Treatment Outcome

Aside from drawing upon the literature regarding client variables, there is some literature that more overtly examines the specific role of client expectations. For the purpose of a common language, client expectations is used in this study in a manner consistent with the third clause of the Institute of Medicine's (2001) definition of evidence-based practice (EBP), which describes patient values as, "the unique

preferences, concerns, and expectations that each patient brings to a clinical encounter and that must be integrated into clinical decisions if they are to serve the patient" (p. 147). Although expectations are mentioned last in this widely-cited definition, it is important to note that the definition addresses a true integration of all three components without indicating that one is more important than the next. Because of their intertwined conceptualization, preferences, concerns, and expectations will all be overviewed briefly.

Client Expectations

Personal preferences are known to influence treatment, including treatment selection, acceptance of treatment rationales, and expectations regarding decision making and delivery of feedback. For example, Chavira, Stein, and Bailey (2003) noted that when parents were asked to evaluate treatment options, they demonstrated favorable attitudes towards psychotherapy, but were more neutral about the usage of medication. Although preference for treatment options appears to be partially related to racial status, it is also likely that the preference was influenced by the age of the child being treated, duration of symptoms, and previous treatment encounters. Further, a large study examining preferences related to treatment options in Germany found that psychotherapy was the preferred treatment over medication (Riedel-Heller, Matschinger, & Angermeyer, 2005). What is also notable from this study is that it appears that research evidence may not be well known, or perhaps as influential, in guiding clients when faced with making treatment-related decisions. Instead, clients appeared to rely more heavily on their beliefs, expectations, and preferences in making treatment decisions.

Client preferences for how decisions are made during treatment also vary. A recent population-based survey of a representative sample examining decision-making in

medical settings found that most individuals (96%) expected to be offered treatment choices and have their opinion solicited in the decision making process (Levinson, Kao, & Kuby, 2005). Nevertheless, 44% of the respondents reported that they preferred to rely on their providers for information and not seek that information themselves, illustrating the importance of providers being fully up to date on the research evidence for available practice options. This point is further confirmed by the finding that more than half (52%) of the respondents identified that their preference is to leave the final treatment decisions up to the provider. Interestingly, this study also revealed group differences. Specifically, more active decision-making involvement was expected by females, people in good health, and those with more education. Up to the age of 45, an expectation for greater involvement was evident, though this preference subsequently declined. Regardless of age, individuals identifying themselves as African-American or Hispanic were more likely to state a preference for their provider to make treatment-related decisions.

Clients also may have differing expectations and preferences for communication exchanges, including how they disclose information and how those disclosures are responded to by the provider. Floyd, Lang, and McCord (2005) examined this issue in a primary care setting, and found that those clients that reported they would most likely share their concerns by simply describing their symptoms also indicated a preference that providers ask biomedical questions in response. In contrast, clients that indicated they would provide a "clue" to their underlying concern while sharing their symptoms noted no clear expectation and were equally comfortable with the provider responding by posing biomedical questions, exploring the clue, or simply facilitating further disclosure. Finally, those clients that indicated they would explicitly state their concern to the

provider preferred that the provider respond by, first, acknowledging the concern and, then, exploring the source of the concern.

Client differences in disclosure preferences have also been studied in medical settings with results indicating that previous treatment encounters with a provider may influence level of disclosure (Maguire, 1984; Passik, Kirsch, Donaghy, Holtsclaw, Theobald, & Cella, 2002). In fact, some clients reported that they withheld information because they considered the provider to be too busy to be bothered by their concerns (Maguire, 1984). Personality variables also appear to influence disclosure. For example, a fatalistic orientation in thinking style may moderate a client's willingness to disclose or solicit treatment related information (Aitken-Swan & Paterson, 1955). Similarly, patterns of interpersonal control may influence how and when a client makes a disclosure to his or her provider (Street, Krupat, Kravitz, & Haidet, 2003). Factors specific to the nature of the disclosure are also salient. Clients may be reluctant to disclose information to their providers for fear of appearing foolish or mentally unstable (Cornford, Morgan, & Ridsdale, 1993) and some expect to feel shameful or humiliated by such a disclosure (Lazare, 1987).

Finally, it is important to consider that clients may have preferences for how negative feedback is provided. To date, there are no studies examining this issue in the mental health literature. However, a recent study examined patients' preferences for receiving bad news from their physicians (Mast, Kindlimann, & Langewitz, 2005). Participants in this study were randomly assigned to watch and rate one of three commonly used communication styles for breaking bad news: patient-centered, disease-centered, and emotion-centered. The patient-centered communication style produced

higher ratings of perceived physician emotional expression, availability, and hopefulness. In addition, they were viewed as less domineering and more appropriate in conveying information. Overall, participants were more satisfied with the visit and reported less of an increase in negative emotions.

Treatment Outcome

Historically there has been much research concerning client expectations and therapy outcome. Beginning in the early 1960's, several studies have noted clients' positive expectations toward their therapist and treatment are positively and significantly related to treatment outcome (Frank, 1973; Gaston, Marmar, Gallagher, & Thompson, 1989; Paul & Shannon, 1966). Whitehorn (1959) first drew researchers' attention to the consideration of client expectations in treatment, declaring that successful treatment is initially marked by clients expecting to feel well. Similarly, Uhlenhuth and Duncan (1968) hypothesized that clients' expectations for relief were predictive of greater feelings of well-being and reduction of symptom distress. Finally, Bandura (1977) theorized that higher expectations lead to feelings of mastery and a greater likelihood of the client continuing to utilize his or her newfound, adaptive coping skills.

However, it wasn't until the 1980s that psychotherapy research began to study client characteristics with greater rigor and numerous small studies seemed to indicate that psychotherapy outcomes significantly interact with such characteristics (e.g., Berrigan & Garfield, 1981; Greenspan & Kulish, 1985; Griffith & Jones, 1979; Jenkins, Fuqua, & Blum, 1986; Turner, 1987). Interestingly, this relationship also applies to couples in family therapy. For example, Epstein and Eidelson (1981) found that clients' unrealistic beliefs concerning relationships were negatively associated with their probable

improvement in therapy. Since that time, research examining expectations has demonstrated that clients with more accurate expectations for treatment evidence better outcomes (e.g., Gaston, Marmar, Gallagher, & Thompson, 1989; Joyce & Piper, 1998). Conversely, clients that formulate a negative impression of their therapist, based on whatever subjective or idiosyncratic variables they consider salient, have been found to be more likely to drop out of treatment (Beckham, 1989); perhaps because these clients do not expect that such therapists will be able to effectively help them with their presenting concerns.

There have more recently been publications presenting an inconsistent relationship between client expectations and client outcome (Beutler, Wakefield, & Williams, 1994; Joyce & Piper, 1998). Several difficulties leading to this inconsistency include general design flaws such as small sample sizes, correlation based studies, and a limited time allotted for the implementation of sufficient treatment (Smith & Sechrest, 1991). In addition, the therapist's reaction to pre-treatment client variables inconsistently determines, and thus changes, the relationship between client variables such as expectations and treatment outcome (Stiles, Honos-Webb, & Surko, 1998). Lastly, client variables can influence treatment outcome in various ways and it is still unclear whether these variables act as moderators or mediators (Clarkin & Levy, 2004).

Obviously, it is of great importance to explore the relationship between client variables such as client pre-therapy expectations and treatment outcome. In order to do so, one must decide whether the client variables act as moderators to separate independent variables to affect treatment outcome, mediators that determine the

relationship between the predictor and criterion, both a moderator and a mediator, or can be singled out as the primary independent variable affecting treatment outcome.

Mediators and Moderators

Evidence suggests that client expectations is the mediator between treatment outcome and both attachment style and maturity of client object relations (Fonagy et al., 1996; Meyer, Pilkonis, Proietti, Heape, & Egan, 2001; Piper, de Carufel, & Szkrumelak, 1985; Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984; Piper, Joyce, Azim, & Rosie, 1994). Client expectations may fulfill this role by being the primary link between extra-therapeutic relational factors and their influence on therapeutic outcome (Meyer et al., 2001.) For example, clients that have a more secure attachment may be more apt to have positive expectations of the therapist due to prior successes in relationships (Bartholomew, 1997; Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994) and vice-versa (Dozier, 1990). However, the mechanism by which client expectations actually affect treatment outcome is still not completely clear and further studies are needed. In addition to the complex relationship that mediators and moderators play concerning client expectations and therapeutic outcome, one must also take into account the fact that client expectations are just one component in the definition of client values. In addition, client values have been historically important in studies attempting to improve therapy outcome.

Client Values

Overall, clients' preferences, concerns, and expectations come together to describe their values, which can be used to improve psychological care. After all, the Institute of Medicine's (2001) definition of evidence-based practice requires that the

individual's unique values be integrated into clinical decision making. Research examining the relations between values and psychotherapy outcome has demonstrated that some values may be more (e.g., Jensen & Bergin, 1988; Strupp, 1980), or less (e.g., Furnham & Bochner, 1986), facilitative of patients' subjective well-being. Subjective well-being, in turn, is thought to contribute to positive psychotherapy outcome (Barkham, Rees, Stiles, Shapiro, Hardy, & Reynolds, 1996; Callahan, Swift, & Hynan, 2006; Howard, Lueger, Maling, & Martinovich, 1993; Kopta, Howard, Lowry, & Beutler, 1994; Lueger, Tan, & Howard, 1993; Mintz, Mintz, Arruda, & Hwang, 1992). In addition, there is some evidence to suggest that when an individual's values are incompatible with those of an environment they may experience internal conflict (Schwartz, 1992; Tetlock, 1986) and a decline in subjective well-being (Oles, 1991; Sagiv & Schwartz, 2000). Given the demonstrated importance of subjective well-being to successful psychotherapy, it is important for practitioners to be mindful of client values and their congruence with the treatment environment, as they will be pertinent to therapeutic outcome. However, client values, and more specifically client expectations, may affect therapeutic outcome in several ways.

Expectations as Related to Therapeutic Alliance, Premature Termination, and Symptom Reduction

Client expectations may affect therapeutic outcome via therapeutic alliance, premature termination, and symptom reduction, since each of these variables can all be used to quantitatively define treatment outcome. First, therapeutic alliance is related to the perceived differences between the client and the therapist. Dissimilarities between client and therapist not only lead to poorer therapeutic alliance but also to poorer

treatment outcome (Dozier, Cue, & Barnett, 1994; Tyrell, Dozier, Teague, & Fallot, 1999). A client's expectations may lead them to be more involved in therapy, which also leads to better treatment outcomes (O'Malley, Suh, & Strupp, 1983). Therefore, the ability to form such an alliance can act as a predictor of treatment outcome (Horowitz et al., 1984; Marziali, Marmar, & Krupnick, 1981; Krupnick et al., 1996; Windholz & Silberschatz, 1988). In addition, a client's negative expectations toward treatment result in a more "difficult" client, which may then lead to a perceived poorer performance on the part of the therapist (Foley, O'Malley, Rounsaville, Prusoff, & Weissman, 1987).

Secondly, studies regarding psychotherapy attrition (a.k.a. "premature termination") demonstrate that a client's negative attitude toward treatment is associated with early termination of therapy (Grilo et al., 1998) and expectations have also been correlated with treatment duration in general (Lorr & McNair, 1964). One contributing factor that has been identified as predictive of which individuals may experience negative initial outcome is disconfirmed expectations (Joyce & Piper, 1998; Lennard & Bernstein, 1960; Lorr & McNair, 1964, Overall & Aronson, 1963). A study performed by Overall and Aronson (1963) demonstrated that high disparity between initial pre-interview expectations and the client's interpretation of the interview led to greater rates of attrition.

Lastly, symptom reduction is the most unambiguous of the three measures of treatment outcome, and just as important as the previous two measures already mentioned. Client expectations of the role of the therapist and the patient in therapy are related to treatment outcome in general, which takes into account symptom reduction (Lennard & Bernstein, 1960). In addition, clients with positive expectations toward treatment will also be more active during their treatment, leading to greater symptom

reduction (Meyer et al., 2002). Although these studies have proven to be beneficial on several accounts, there remains much to be learned about the role of expectations in psychotherapy process and outcome, which has made this issue the focus of a current psychological investigation.

Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ)

There is currently a study being conducted at the University of Wisconsin-Milwaukee (UWM) to develop a standardized measure of psychotherapy expectations for use in clinical and research settings. The Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) was initially developed, beginning in 2001, to measure expectations related to outcome, personal characteristics of the therapist, the therapeutic alliance, characteristic therapeutic activities, and expected areas of change. Using a 57-item measure pool, data was gathered from 599 undergraduate students enrolled at UWM. A principal axis factor analysis with oblique rotation (promax with Kaiser normalization) revealed five underlying constructs: expectations of self in therapy, expectations of improvement after therapy, expectations of therapeutic activities, expected emotional/personal improvement, and expectations of the therapist/alliance (M. T. Hynan, personal communication, November 30, 2005). These five components were composed of 28 items on the M-PEQ and accounted for 68% of the variance in total scores. In addition, a second sample of undergraduate students (N = 219) demonstrated that internal consistencies (α = 0.81- 0.89) and test-retest reliabilities (r = 0.73-0.85) on these 28-items within the 57-item measure pool were relatively high. Data collection is ongoing at UWM with current recruitment centered on psychology training clinic clients.

Hypotheses

Based on the broad literature and the findings related to the M-PEQ, the following primary hypotheses were proposed:

1. Principal Axis Factor Analysis of data gathered from OSU undergraduates will replicate the factor structure obtained from the UWM undergraduate sample.
2. Internal consistency, test-retest reliability, and normative analyses (mean and standard deviation) of data gathered from OSU undergraduates will replicate the psychometric findings obtained from the UWM undergraduate sample and inform standardization of the measure. The undergraduate sample from OSU will replicate the M-PEQ normative data from that obtained in the UWM undergraduate sample.
3. Because there should be a difference in the expectations between the clinical and normative populations, the M-PEQ descriptive statistics will differ among the three OSU samples including: (a) the help-seeking individuals presenting to the Psychological Services Center (PSC) for an intake, (b) the OSU undergraduates with previous treatment exposure, and (c) the undergraduate normative sample.

In addition, several secondary hypotheses were proposed:

1. Using the help-seeking and previous treatment exposure samples, Bayesian analyses will evidence good sensitivity and specificity of the M-PEQ for identifying those individuals at-risk of attrition.
2. Scores on the M-PEQ will be significantly correlated with measures of general self-efficacy, subjective well-being, hopefulness (state), and another expectations measure in each of the three data sets.

3. There will be a gender difference in client expectations, such that women will have greater expectations of psychotherapy, as previously noted by Smith, Peck, MocGovern, and Rene (2004).

CHAPTER III.

METHODOLOGY

Participants

Data were gathered from the following: (1) a convenience sample of undergraduates registered with the OSU Experimetrix system (N = 521), of which 14.40% participated in repeat measurement for the reliability analyses; (2) OSU undergraduates, registered with the Experimetrix system, that previously participated in psychotherapy services (N = 199); and (3) a clinical population drawn from help-seeking individuals presenting to the Psychological Services Center (PSC) for an intake (N = 70).

Class credit was awarded to all undergraduate participants recruited via the Experimetrix system for this study. Appendix A contains a copy of the informed consent narrative that was presented prior to survey completion. All participants and their data were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychiatric Association, 2002) and the Oklahoma State University's Institutional Review Board (See Appendix D for a copy of protocol approval).

Materials

Participants completed a survey entitled, "Expectations Related to Psychotherapy" as either an online survey hosted by Oklahoma State University or as a paper-and-pencil survey. The survey was comprised of several non-randomized measures. Each survey began by requesting basic demographic information about

the participants so that each sample could be characterized. The 28 items in the M-PEQ were presented in order to confirm the original five-factor structure assessed by Hynan et al. In addition, the 24-item Psychotherapy Expectancy Inventory-Revised (PEI-R) was used to assess the client's role expectations concerning their therapist and psychotherapy (Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001). The 10-item General Self-Efficacy Scale (GSE; Luszczynska, Scholz, & Schwarzer, 2005) was used to measure perceived self-efficacy. This scale was originally established to predict coping skills used after the experience of traumatic life events. The 6-item State Hope Scale was used to measure one's current state of hope (Snyder et al., 1996). Lastly, four items derived from Howard et al. (1993) were presented to measure current subjective well-being.

Procedure

Undergraduate participants registered with the Experimetrix system were provided with a link to an online questionnaire. Help-seeking individuals presenting to the PSC for intake services were provided with a paper-and-pencil version of the survey. The informed consent script for all surveys reminded participants of the minimum age requirement of 18 years, described the purpose of the project, the time commitment required to participate, possible risks and benefits, the confidentiality of each submission, and provided participants with additional resources concerning their rights. Participants were not required to submit any personally identifying information and were informed that they could discontinue their participation or skip questions that may have been uncomfortable to them at any time.

For web-based participants, no data was submitted until the participant engaged the "submit" button. Participants were able to discontinue participation at any time by closing their browser without selecting the "submit" button. Alternatively, participants could have chosen to answer only selected questions and submitted only part of the survey by selecting the submit button.

Undergraduates being recruited for the replication analyses were asked to submit a unique identifier, of their own choosing, so that their data could be linked in the test-retest reliability analyses. However, no personal identifiers were solicited. Contact information registered in the Experimetrix system was used to send emails to all registered participants in this group asking that they return to the survey site and complete the retest phase. They were prompted upon their return to again enter their unique identifier so that their data could be linked in analyses.

Submitted Internet data was stamped with the IP address, time, and date of completion so that duplicate responses (from selecting the submit button multiple times in rapid sequence) could be identified and removed from analyses. Data submitted from the World Wide Web by participants was stored in a private data spreadsheet under the faculty advisor's control. Paper-and-pencil data was entered into an electronic database and stored on a secured computer in the research lab.

Measures

Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ)

As described earlier, the M-PEQ is a 28-item measure with good internal consistency (α = 0.81-0.89) and two-week test-retest reliability (r = 0.73-0.85). It was originally designed to measure client expectations and their relationship with outcome,

personal characteristics of the therapist, therapeutic alliance, characteristic therapeutic activities, and expected change. Exploratory principal axis factor analysis performed on the original data revealed a five-factor model as shown in Table 1 (M.T. Hynan, personal communication, November 30, 2005).

Table 1

Items for Each Factor of the Milwaukee Psychotherapy Expectations Questionnaire from the University of Wisconsin-Milwaukee.

Factor	Items Contributing to Factor
Expectations of Therapeutic Activities	1, 2, 3, 4, 5, 6, 7, 8, 11
Expectations of Self in Therapy	9, 10, 16, 17, 18, 23, 24
Expectations of Improvement after Therapy	25, 26, 27, 28
Expectations of the Therapist/Alliance	12, 13, 14, 15
Expectations of Personal Improvement	19, 20, 21, 22

Note. Items 1, 12, 19, and 23, cross-load on several factors, but only their primary factor loadings were listed here.

Items 1-24 were scored using a Likert-type scale ranging from 0 (not at all) to 10 (very much so), while responses to items 25-27, which measure frequency of expectations, were along a percentage rating scale from 0% to 100%. Finally, item 28 was scored using a Likert-type rating scale ranging from 0 (I expect to feel worse) to 10 (I expect to feel completely better). An example of an item measuring expectations of self in therapy is "I will be able to express my true thoughts and feelings;" an example of an item measuring expectations of improvement after therapy is "At the end of the therapy period, how much improvement in your problem(s) do you think will occur?;" an example of an item measuring expectations of therapeutic activities is "I will be taught new skills in therapy;" an example of an item measuring expected emotional/personal improvement is "After therapy, I will have the strength needed to avoid feelings of distress in the future;" and an example of an item measuring expectations of the therapist/alliance is "My therapist will be interested in what I have to say." See Table 2 for a complete list of items and factor loadings.

Psychotherapy Expectancy Inventory-Revised (PEI-R)

The PEI-R was originally created to assess a client's expectations concerning counseling behavior, but it has since been used to describe expectations concerning psychotherapy (Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001). The original measure was 30 items due to the fact that six were fillers, but only the 24 measured items were presented here. There are four constructs within the 24 items that were originally established via factor analysis and subsequently confirmed in replication analyses (Rickers-Ovsiankina, Berzins, Geller, & Rogers, 1971; Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001). However, current studies have shown that a

five-factor model is a significantly better fit (Four-factor Model, CFI 0.87, Five-factor Model, CFI = 0.99; Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001). Therefore, the five-factor solution was used in the current study. A five-factor conceptualization of the PEI-R yields the following constructs: approval seeking, advice-seeking, audience-seeking, relationship-seeking and impression-seeking.

The measure was scored using a Likert-type scale ranging from 1 (not at all) to 7 (very strongly). An example of an item to measure approval is "How strongly do you expect your therapist to say whatever comes into his/her mind;" an example of an item measuring advice is "How strongly do you expect to get definite advice from your therapist;" an example of an item measuring audience is "How strongly do you expect to feel like opening up without any help from your therapist;" an example of an item measuring relationship is "How strongly do you expect to say whatever comes to mind," and an example of an item measuring impression is "How strongly do you expect to be concerned with the impression you make on your therapist" (Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001).

Due to the more recent acceptance of the five-factor model, there is a lack of reliability analyses conducted using this model. However, the internal consistency (ranging from $\alpha = 0.75$ to $\alpha = 0.87$) and test-retest reliability (ranging from $r = 0.54$ to $r = 0.68$ for an interval of one week and from $r = 0.56$ to $r = 0.76$ for an interval of four weeks) for each subscale in the original four-factor model were relatively high (Bleyen, Vertommen, Vander Steene, & Van Audenhove, 2001). In addition, reliability was also tested using an electronic Gulitan item-analysis program (item analysis of reliability used instead of coefficient α) that resulted in λ_2 values of 0.67 for Approval, 0.85 for Advice,

0.89 for Audience, 0.89 for Relationship and 0.76 for Impression. Overall, this measure is sufficiently reliable and valid when used in the contexts described above.

General Self-Efficacy Scale (GSE)

The General Self-Efficacy Scale (GSE) is a 10-item questionnaire that measures one's perceived general self-efficacy. The GES was originally created in Germany to predict coping in everyday life and adaptation after stressful life events (Luszczynska, Scholz, & Schwarzer, 2005). It has since been translated into 28 different languages and studied cross-culturally (Schwarzer & Jerusalem, 1995). An example of a common item is, "I can handle whatever comes my way" and participants respond using a Likert-type scale ranging from 1 (not at all true) to 4 (exactly true; Luszczynska, Scholz, & Schwarzer, 2005). Previous studies have demonstrated that the GES scale has good reliability, stability, and construct validity (Leganger, Kraft, and Roysamb, 2000; Schwarzer, Mueller, & Greenglass, 1999). In addition, prior studies have confirmed that the scale is configurally equivalent in 28 nations and consists of only one global dimension (Leganger et al., 2002; Scholz et al., 2002).

A more recent study performed by Luszczynska, Scholz, and Schwarzer (2005) has reaffirmed the good psychometric properties of the GSE. Concerning reliability, several populations were studied including; a clinical sample in Germany of patients with cardiovascular diseases ($\alpha = 0.94$), Cancer patients in Germany ($\alpha = 0.89$), a normative sample of students in Poland ($\alpha = 0.90$), a clinical sample in Poland of patients with gastrointestinal diseases ($\alpha = 0.87$), a normative sample of swimmers in Poland ($\alpha = 0.87$), and a normative sample in South Korea ($\alpha = 0.86$; Luszczynska, Scholz, & Schwarzer, 2005). Overall, this study demonstrated that the relationship between the

GSE and other social-cognitive variables such as goal intentions, implementation intentions, outcome expectations (as related to physical health), self-regulation, and domain-specific self-efficacy is seen in a similar manner across cultures (Luszczynska, Scholz, & Schwarzer, 2005). However, the authors also note that the cross-cultural replication is limited because the countries sampled were similar in their social, economic, and cultural background.

State Hope Scale

The State Hope Scale measures one's current state of hope via three agency and three pathways items (Snyder et al., 1996). Snyder et al. specifically defined hope as "a goal-directed thinking process in which people believe that they can produce the routes to desired goals (pathways thought), along with motivations to use those routes (agency thought)" (Snyder, Berg, Woodward, Gum, Rand, Wrobleski, Brown, & Hackman, 2005, p. 289). For this measure, participants are asked to rate statements on a Likert-type scale ranging from 1 (definitely false) to 8 (definitely true). An example of an item that contributes to the agency subscale is "At the present time, I am energetically pursuing my goals" and an example of an item that contributes to the pathway subscale is "There are lots of ways around any problem that I am facing now" (Snyder, 2002). In the end, ratings were summed to provide a total state hope score.

The State Hope Scale has demonstrated good (a) internal reliability, (α = 0.90-0.95 overall, $\alpha \geq 0.90$ for agency and pathways subscales), (b) concurrent validity (State Self-Esteem Scale, $r(118) = 0.49$, $p < 0.001$; State Positive Affect Schedule, $r(118) = 0.48$, $p < 0.001$; Negative Affect Schedule, $r(118) = -0.37$, $p < 0.001$), (c) discriminant validity, (d) convergent construct validity (Positive Affect Scale at day 1 and day 29,

r's(166) = 0.65 and 0.55, *p's* < 0.01; negative affectivity at day 1 and day 29, *r's* = -0.47 and -0.50, *p's* < 0.10) and (e) factor structure, but less strong temporal reliability (test-retest for 2 days = 0.93 to 30 days = 0.48; Feldman & Snyder, 2000; Snyder et al., 1996). In addition, this measure has been given to several normative and clinical populations. Gender differences in scores on the State Hope Scale are nearly significant ($F(1, 132) = 3.75$, $p < 0.06$; Snyder et al., 1996). However, due to the large variety of contexts and subsequent scores, no mean score has been standardized for this measure (Snyder, 2002).

Subjective Well-Being

The subjective well-being measure is a four-item measure expanded from the two items used in Howard et al.'s (1993) phase model and measures current subjective well-being. Howard et al. (1993) have demonstrated good construct validity ($r = 0.79$) with their well-being scale and the General Well Being Scale (Dupuy, 1977). Also, these two items correlated with positive and negative affect on Watson and Tellegen's (1985) 10-item scale (0.51, -0.71). In addition, there was a strong correlation ($r = -0.65$) between the subjective well-being items and the measure of disability in the 36-item Medical Outcomes Study (Stewart, Hays, & Ware, 1988). The four-item measure presented here was used in the training clinic at the University of Wisconsin-Milwaukee (UWM; n = 99) and demonstrated good reliability ($\alpha = 0.71$, $p < 0.01$; and test-retest after one week = 0.63, $p < 0.01$; Callahan, Swift, & Hynan, 2006).

CHAPTER IV

RESULTS

Preliminary Analyses

Participant Demographics

There were three samples of participants. First, the undergraduate sample with no previous treatment exposure consisted of 521 students currently enrolled at Oklahoma State University. The average participant age was 20.17 years ranging from 18 years to 42 years of age with a modal age of 19 years. The majority of participants endorsed being female (61.0%), of Caucasian ethnicity (78.9%), and middle class (61.2%). Other ethnicities represented in this sample included Native American (7.1%), African American (4.6%), Hispanic American (1.9%), Bi/Multi-Racial (1.9%), Asian American (1.7%), and International residing in the U.S. (3.8%). According to Meyer and Bean's (1968) method for computing socio-economic status (SES), 9.0% of participants were in Levels 1-2 (High SES), 61.2% of participants were in Level 3 (Middling SES), and 20.4% of participants were in Levels 4-5 (Low SES).

Secondly, the undergraduates with previous treatment exposure consisted of 199 students currently enrolled at Oklahoma State University. The average participant age was 20.85 years, ranging from 18 years to 50 years of age, with a modal age of 19 years. The majority of participants endorsed being female (71.4%), of Caucasian ethnicity

(86.9%), and middle class (57.8%). Other ethnicities represented in this sample include Native American (6.0%), African American (3.0%), Hispanic American (1.0%), Bi/Multi-Racial (1.5%), Asian American (0.5%), and International residing in the U.S. (0.5%). According to Meyer and Bean's (1968) method for computing socio-economic status (SES), 11.6% of participants were in Levels 1-2 (High SES), 57.8% of participants were in Level 3 (Middling SES), and 21.6% of participants were in Levels 4-5 (Low SES).

There was no statistically significant difference between undergraduates with previous treatment exposure versus those without in terms of ethnicity distribution [χ^2 (6) = 10.196, p = 0.117] or SES level [χ^2 (4) = 3.655, p = 0.455].

Lastly, the clinical population of clients seeking treatment from the Psychological Services Center at Oklahoma State University included 69 individuals. The average participant age was 26.96 years ranging from 18 years to 58 years of age with a modal age of 21 years. Slightly over half of the participants endorsed being female (52.17%). The questionnaires given to the PSC client participants did not ask about SES or ethnicity. However, the average income of this sample was $18, 562 annually with a mode of $10,000 annually, which is considered below middle class or working class. Therefore, this sample seems to be less financially sound than the two previously reported. However, the two undergraduate samples also had SES values that were calculated using their parent's income, so a direct and accurate comparison is infeasible. A comparison of this sample and the other two undergraduate samples was conducted to examine whether there were significant differences in age and gender distribution across the three samples.

The results suggested that there was a statistically significant difference in gender distribution between the three groups [χ^2 (2) = 10.271, p = 0.006] with the undergraduates with previous treatment exposure having the largest proportion of female participants, followed by the undergraduates without previous treatment exposure, and the PSC clinical sample. The effect size (*Cramer's V* = 0.114, p = 0.006) of this relationship was also fairly large. There was also a statistically significant difference among the undergraduates without previous treatment exposure (M = 20.17, SD = 2.51), undergraduates with previous treatment exposure (M = 20.85, SD = 4.46), and PSC clinical sample (M = 26.96, SD = 9.21) in terms of age [F(2,786) = 84.91, p < 0.001, η^2 = 0.002]. Specifically, there is 0.2% variability in age among groups. Overall, this effect size is small. A follow-up test with alpha adjustment of $\alpha = 0.05/3 = 0.0167$ evidenced that the PSC clinical sample age was statistically significantly larger than the other two undergraduate samples (p < 0.001). 95% confidence intervals with separate error terms (due to the violation of the homogeneity of variance assumption) were constructed around means such that $C.I._{0.95}$ for the undergraduates without previous treatment exposure was $19.95 \leq \mu \leq 20.39$ with high precision, for the undergraduates with previous treatment exposure was $20.69 \leq \mu \leq 21.01$ with high precision, and for the PSC clinical sample was $24.78 \leq \mu \leq 29.14$ with middling precision.

Primary Analyses

Analyses for Hypothesis 1

The first hypothesis stated that novel M-PEQ data from OSU undergraduates would replicate the factor structure of the UWM normative undergraduate sample. Although there were a few differences in the factor structures between the undergraduate

sample from UWM and the undergraduate sample with no previous treatment exposure from OSU, overall the two factor structures are very similar.

Using the Statistical Package for the Social Sciences (SPSS), and consistent with the analytic approach from UWM, a principal axis factor analysis with oblique rotation (promax with Kaiser normalization) was conducted on the OSU undergraduate sample with no previous treatment exposure. When forcing a five-factor conceptualization, the factors accounted for 69.0% (70.51% for the 28-item measure in UWM sample) of the variance of the 28 items. Table 2 contains the factor loadings for the items on the 5 factors.

Table 2

Factor Loadings of the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ).

	Expectations				
M-PEQ Items	Therapeutic Activities	Self in Therapy	Improve after Therapy	Therapist/ Alliance	Personal Improvement
therapist will provide support	**0.729***	0.002	0.037	0.148	-0.176
therapy will provide understanding	**0.775***	0.087	0.062	-0.123	0.039
taught new skills in therapy	**0.607***	-0.221	-0.036	0.039	0.353
learn to use skills to solve problems	**0.668***	0.016	-0.086	0.029	0.078
therapist will provide feedback	**0.555***	0.139	0.053	0.12	-0.154
discover different ways to alter behavior	**0.583***	-0.045	0.03	-0.031	0.284
given new information about myself	0.438	-0.063	-0.153	-0.068	**0.541***
work on my own goals in therapy	**0.424***	0.174	0.023	-0.007	0.201
express true thoughts/feelings	0.134	**0.770***	-0.048	-0.162	0.052
feel comfortable with my therapist	-0.091	**0.831***	-0.049	0.035	0.11
learn more about myself	0.258	0.196	0.013	-0.006	**0.418***
therapist will be sincere	0.089	0.315	-0.015	**0.575***	-0.075
therapist will be interested in what I say	0.016	0.19	0.052	**0.665***	0.044

table continues

M-PEQ Items	Therapeutic Activities	Self in Therapy	Improve after Therapy	Therapist/ Alliance	Personal Improvement
therapist will be sympathetic	0.045	-0.172	-0.074	**0.991***	0.099
therapist will be nurturing	-0.032	-0.005	0.026	**0.833***	0.05
willing to talk about myself	-0.076	**0.882***	-0.155	0.003	0.034
will come to appointments	0.14	**0.594***	0.105	-0.003	-0.116
willing to trust therapist	-0.1	**0.750***	0.077	0.11	0.01
increased level of self-respect	0.035	0.198	0.032	0.121	**0.500***
strength needed to avoid distress	0.003	0.089	0.242	0.111	**0.505***
a better person	-0.046	0.04	0.214	0.03	**0.653***
a much more optimistic person	0.028	-0.035	0.26	0.065	**0.547***
work hard to address problems	0.313	**0.405***	0.201	-0.039	-0.007
tell my therapist of concerns	0.206	**0.323***	0.102	0.033	0.002
how much improvement do you think?	0.046	-0.102	**0.933***	-0.031	0.014
how much improvement do you feel?	-0.11	-0.053	**0.948***	-0.014	0.054
how satisfied do you expect to be with results?	0.061	0.001	**0.840***	-0.016	-0.001
results of treatment?	0.07	0.134	**0.588***	0.021	0.106

Note. The bold font and asterisk (*) mark the largest factor loadings for each item.

The first factor accounted for the most variance at 50.6% (50.37% for the 28-item measure in UWM sample). The only discrepancies between the two models (as seen in Table 3) were that items 7 and 11 loaded on the Expectations of Therapeutic Activities, or first factor, in the original UWM sample and instead loaded on the Expectations of Personal Improvement, or fifth factor, in the replicated OSU sample.

Table 3

Items for Each Factor of the Milwaukee Psychotherapy Expectations Questionnaire.

Factor	UWM Factor Items	OSU Factor Items
Expectations of Therapeutic Activities	1, 2, 3, 4, 5, 6, **7**, 8, **11**	1, 2, 3, 4, 5, 6, 8,
Expectations of Self in Therapy	9, 10, 16, 17, 18, 23, 24	9, 10, 16, 17, 18, 23, 24
Expectations to Improve after Therapy	25, 26, 27, 28	25, 26, 27, 28
Expectations of the Therapist/Alliance	12, 13, 14, 15	12, 13, 14, 15
Expectations of Personal Improvement	19, 20, 21, 22	**7**, **11**, 19, 20, 21, 22

Note. The two items that loaded differently on the separate factor structures are listed in bold. Items 7 and 11 state respectively, "I will be given new information about myself" and "I will learn more about myself."

Due to the large, statistically significant intercorrelations between factors (see Table 4), the aforementioned percentages reflect those based on the initial eigenvalues rather than those from the sums of squared loadings. Table 4 also demonstrates that the intercorrelations between factors on the replicated 28-item sample are large and statistically significant.

Table 4

Intercorrelations for the Five Factors of the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ).

Factors	Intercorrelations for OSU	Intercorrelations for OSU
1 & 2	0.73**	0.72**
1 & 3	0.68**	0.59**
1 & 4	0.62**	0.68**
1 & 5	0.75**	0.72**
2 & 3	0.68**	0.57**
2 & 4	0.69**	0.70**
2 & 5	0.70**	0.71**
3 & 4	0.59**	0.54**
3 & 5	0.76**	0.66**
4 & 5	0.65**	0.63**

* p (two-tailed) < 0.05
** p (two-tailed) < 0.01

Due to the large intercorrelations between factors and the fact that items 7 and 11 loaded very similarly on factors one and five in the OSU normative undergraduate sample, the distinction between factors will not be present in any of the following analyses and the item structure will be that of the original UWM factor conceptualization (as seen in Table 1).

Analyses for Hypothesis 2

It was stated that additional normative data would be generated to assist with the measure's standardization. Table 5 provides the mean and standard deviations for each of the samples gathered in this study, as well as the mean and standard deviations reported by the UWM researchers, for the M-PEQ total and subscale scores.

Table 5

Descriptive Statistics of the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) from all three OSU samples and the UWM sample.

OSU normative undergraduates	OSU previous treatment undergraduates	PSC clinical sample	UWM normative undergraduates
M-PEQ Total	**M-PEQ Total**	**M-PEQ Total**	**M-PEQ Total**
M = 180.43 *SD* = 48.98	*M* = 197.22 *SD* = 56.30	*M* = 212.42 *SD* = 42.42	*M* = 385.96 *SD* = 83.56
Factor 1	**Factor 1**	**Factor 1**	**Factor 1**
M = 57.91 *SD* = 16.25	*M* = 63.38 *SD* = 18.97	*M* = 69.89 *SD* = 15.00	*M* = 68.76 *SD* = 12.43
Factor 2	**Factor 2**	**Factor 2**	**Factor 2**
M = 47.73 *SD* = 13.92	*M* = 50.93 *SD* = 16.47	*M* = 57.34 *SD* = 10.03	*M* = 53.97 *SD* = 11.93
Factor 3	**Factor 3**	**Factor 3**	**Factor 3**
M = 24.48 *SD* = 8.00	*M* = 26.83 *SD* = 8.13	*M* = 25.29 *SD* = 8.77	*M* = 202.87 *SD* = 58.87
Factor 4	**Factor 4**	**Factor 4**	**Factor 4**
M = 26.48 *SD* = 9.15	*M* = 29.54 *SD* = 9.25	*M* = 30.85 *SD* = 8.16	*M* = 30.63 *SD* = 7.21
Factor 5	**Factor 5**	**Factor 5)**	**Factor 5**
M = 23.67 *SD* = 8.47	*M* = 26.85 *SD* = 9.13	*M* = 28.62 *SD* = 8.85	*M* = 28.17 *SD* = 7.57

Note. The factor scores were left unstandardized since they were being compared only across samples and not other factors.

Six separate independent samples t-tests were conducted to compare the M-PEQ total and factor means between the UWM and OSU samples. All t-tests were statistically significant at the 0.0065 level (Bonferroni Adjustment; See Table 6).

Table 6

Descriptive and Inferential Statistics for the OSU and UWM Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) Comparison.

Score	M_{OSU}	M_{UWM}	SD_{OSU}	SD_{UWM}	t	$p <$	d	$CI_{0.95}$
M-PEQ total	180.43	385.96	48.98	83.56	37.64	0.001	3.15	194.80, 216.26
Factor 1	57.91	68.76	16.25	12.43	10.45	0.001	0.73	8.81, 12.89
Factor 2	47.73	53.97	13.92	11.93	6.69	0.001	0.45	4.41, 8.08
Factor 3	24.48	202.87	8.00	58.87	52.30	0.001	4.90	171.68, 185.11
Factor 4	26.48	30.63	9.15	7.21	7.10	0.001	0.49	3.00, 5.29
Factor 5	23.67	28.17	8.47	7.57	7.85	0.001	0.55	3.38, 5.64

This means that there was a statistically significant difference between the mean scores of OSU's and UWM's normative undergraduate self-rated expectations overall, in addition to their expectations of therapeutic activities, expectations of self in therapy, expectations of improvement after therapy, expectations of therapist/alliance, and expectations of personal improvement. As seen in Table 6, each of these differences were highly significant with the M-PEQ total score and expectations of improvement after therapy having large effect sizes.

In addition, replications of internal consistency and test-retest reliability were hypothesized. As seen in Table 7, the internal consistencies of each of the factors was uniformly high in the replicated OSU sample, as in the normative undergraduate UWM sample.

Table 7

Internal Consistency for the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) in the undergraduates without previous treatment exposure sample at Oklahoma State University.

Score	Alpha for OSU	Alpha for UWM
M-PEQ Total	0.95	--
Expectations of Therapeutic Activities	0.90	0.89
Expectations of Self in Therapy	0.91	0.87
Expectations of Improvement after Therapy	0.89	0.81
Expectations of the Therapist/Alliance	0.88	0.85
Expectations of Personal Improvement	0.90	0.89

Note. Given traditional conventions, each alpha level is adequate for an instrument in the early stages of development (Ferketich, 1990).

The-test-retest reliabilities were also acceptably high for the OSU sample up to a four week interval (see Table 8). Approximately 14.40% of undergraduates returned for the test-retest analyses. As evidenced in Table 8, the UWM sample was only retested once after two weeks and total score correlations were not reported by the measures' authors.

Table 8

Test-Retest Reliability for the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ.

Score	*r* for OSU	*r* for UWM
One Week Retest (N = 23)		
M-PEQ Total Score	0.93**	--
Expectations of Therapeutic Activities	0.92**	--
Expectations of Self in Therapy	0.83**	--
Expectations of Improvement after Therapy	0.85**	--
Expectations of the Therapist/Alliance	0.70**	--
Expectations of Personal Improvement	0.65**	--
Two Weeks Retest (N = 17)		
M-PEQ Total Score	0.88**	--
Expectations of Therapeutic Activities	0.86**	0.78
Expectations of Self in Therapy	0.87**	0.85
Expectations of Improvement after Therapy	0.87**	0.73
Expectations of the Therapist/Alliance	0.74**	0.78
Expectations of Personal Improvement	0.73**	0.81
Three Weeks Retest (N = 13)		
M-PEQ Total Score	0.90**	--
Expectations of Therapeutic Activities	0.90**	--
Expectations of Self in Therapy	0.83**	--
Expectations of Improvement after Therapy	0.66*	--
Expectations of the Therapist/Alliance	0.76**	--
Expectations of Personal Improvement	0.87**	--

table continues

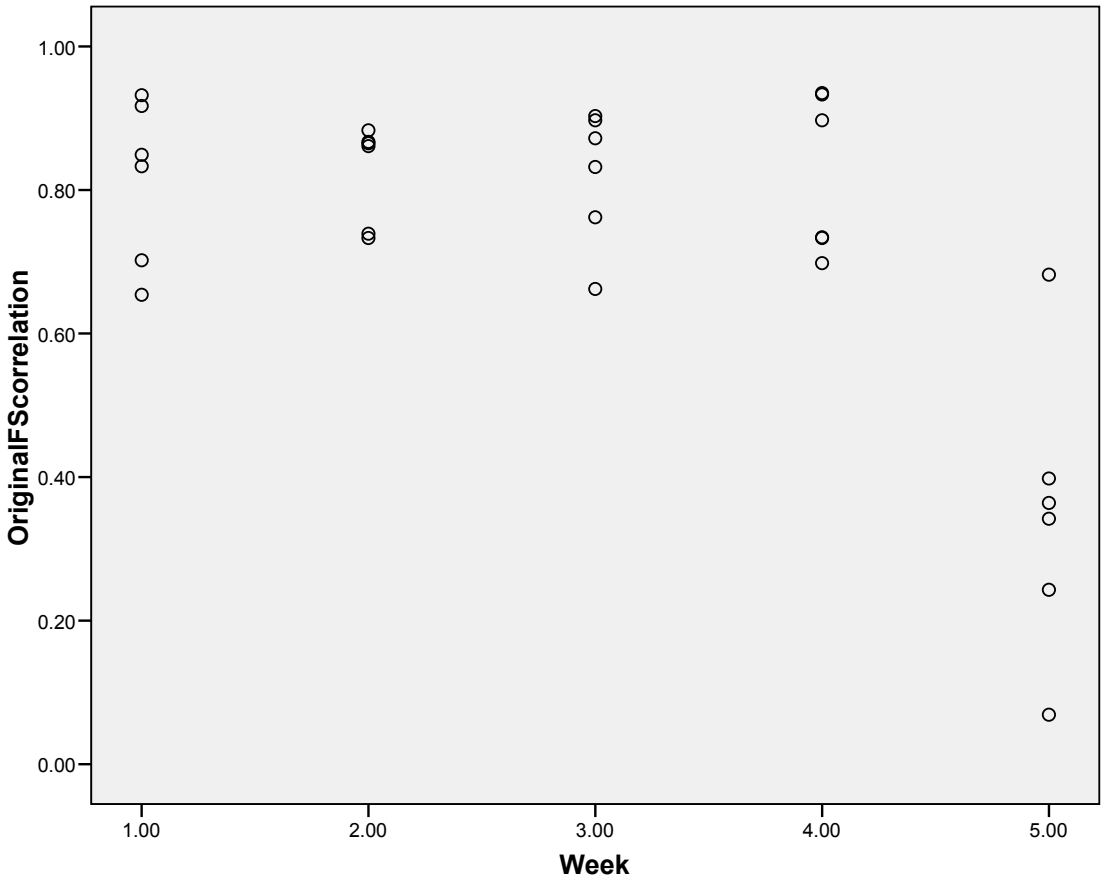
Score	*r* for OSU	*r* for UWM
Four Weeks Retest (N = 7)		
M-PEQ Total Score	0.94**	--
Expectations of Therapeutic Activities	0.73*	--
Expectations of Self in Therapy	0.90**	--
Expectations of Improvement after Therapy	0.93**	--
Expectations of the Therapist/Alliance	0.73*	--
Expectations of Personal Improvement	0.70*	--
Five or More Weeks Retest (N = 15)		
M-PEQ Total Score	0.24	--
Expectations of Therapeutic Activities	0.40	--
Expectations of Self in Therapy	0.68*	--
Expectations of Improvement after Therapy	0.07	--
Expectations of the Therapist/Alliance	0.36	--
Expectations of Personal Improvement	0.34	--

* p (two-tailed) < 0.05
**p (two-tailed) < 0.01

Note. The UWM sample only did the test-retest analyses after a two week interval and did not perform test-retest analyses on the total M-PEQ score.

A one-way analysis of variance with a follow-up Tukey's test and alpha adjustment of $\alpha = 0.01$ (for five different weeks) revealed that there was only one statistically significant difference (in all factor scores and the total M-PEQ score combined) between those that took the retest after five or more weeks and all other groups [$F(4,25) = 9.04$, $p < 0.001$, $\eta^2 = 0.14$; *Tukey's* $p < 0.002$]. In other words, there was a statistically significant effect of time (weeks) on the test-retest correlation values such that the mean correlation for the fifth week, collapsed across all five factors and the M-PEQ total score, was statistically significantly lower than all other weeks ($M_{Week1} = 1.22$, $SD_{Week1} = 0.36$; $M_{Week2} = 1.20$, $SD_{Week2} = 0.21$; $M_{Week3} = 1.21$, $SD_{Week3} = 0.27$; $M_{Week4} = 1.27$, $SD_{Week4} = 0.40$; $M_{Week5} = 0.38$, $SD_{Week5} = 0.25$). Specifically, 14% of the variance in the correlation between time one and time two expectations can be attributed to the amount of time (in weeks) that elapsed between the administrations of these two questionnaires. Overall, this effect size was medium and 95% confidence intervals constructed around means evidenced low precision (See Figure 1 for graphical representation of data).

Figure 1. Test-retest Reliability Correlations Scatterplot for the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) Score.



Note. The scatterplot above contains the original factor score correlations (not z scores) for the test retest reliabilities for each week.

As seen in Figure 1, there was much greater variability in test-retest correlations for week five than in any other weeks. In addition, only one outlier exists in any of the data points and this is the 0.68 point for week five. Even with a large outlier in week five, the results still evidenced that week five's test-retest correlation was statistically significantly lower than all other weeks. In addition, the low sample size attests to the robust effect seen in this case.

Analyses for Hypothesis 3

The final primary hypothesis stated that there would be an expected difference in the M-PEQ scores between the three samples from OSU including; (a) a normative undergraduate sample with no previous treatment exposure, (b) OSU undergraduates with previous treatment exposure, and (c) help-seeking individuals presenting to the Psychological Services Center (PSC) for an intake. See Table 5 above for the M-PEQ descriptive statistics for each sample. A one -way analysis of variance was used to compare the means of the total and factor scores across all three groups and because there were statistically significant differences between the UWM and OSU undergraduates without previous treatment exposure, the UWM 28-item measure data was also compared. The results indicated that there were statistically significant differences between the four samples in terms of their M-PEQ total scores and all additional factor scores (See Table 9).

Table 9

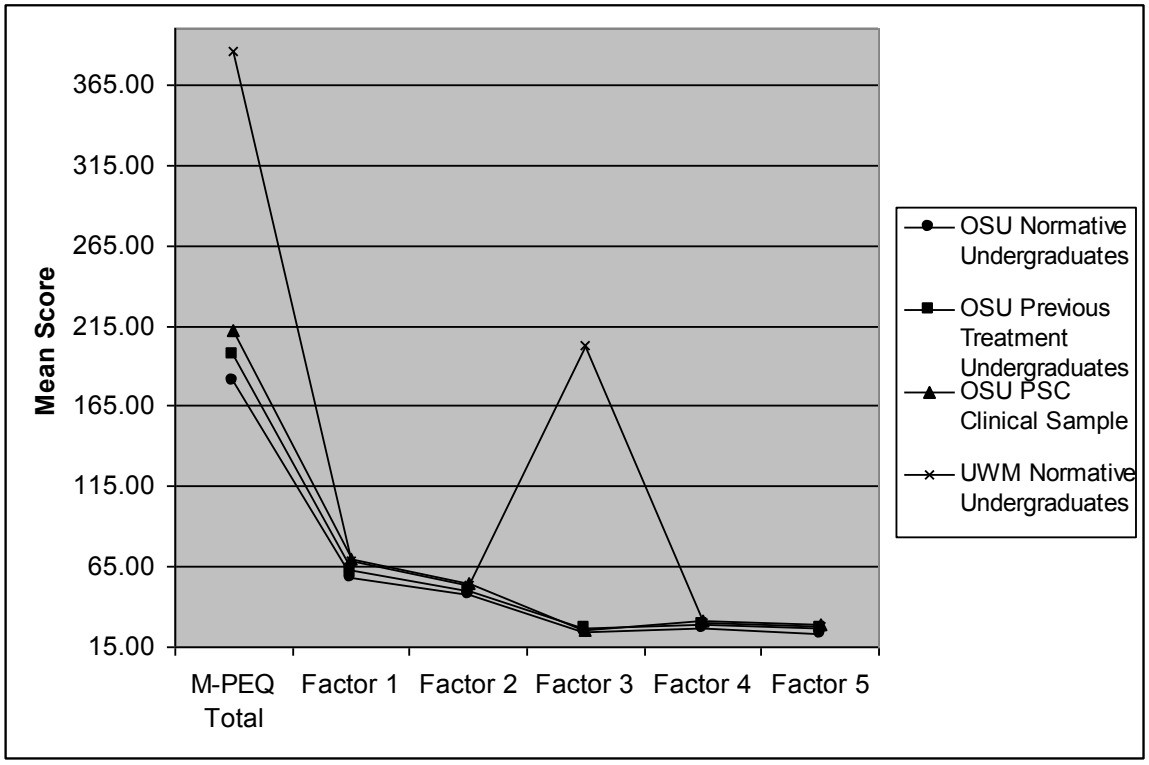
Descriptive and Inferential Statistics for the Three OSU and UWM Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) Comparisons.

Statistic	Score					
	M-PEQ Total	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
$M_{\text{Normative OSU}}$	180.43	57.91	47.73	24.48	26.48	23.67
$M_{\text{Trx. OSU}}$	197.22	63.38	50.43	26.83	29.54	26.85
$M_{\text{PSC Clinical}}$	212.42	69.89	54.85	25.29	30.85	28.62
M_{UWM}	385.96	68.76	53.97	202.87	30.63	28.17
$SD_{\text{Normative OSU}}$	48.98	16.25	13.92	8.00	9.15	8.47
$SD_{\text{Trx. OSU}}$	56.30	18.97	15.20	8.13	9.25	9.13
$SD_{\text{PSC Clinical}}$	42.42	15.00	11.86	8.77	8.16	8.85
SD_{UWM}	83.56	12.43	11.93	58.87	7.21	7.57
F	674.81	33.91	18.25	2225.35	17.84	22.70
$p <$	0.001	0.001	0.001	0.001	0.001	0.001
η^2	0.003	0.003	0.003	0.003	0.003	0.003

Note. Normative OSU refers to the OSU undergraduates without previous treatment exposure, Trx. OSU refers to the OSU undergraduates with previous treatment exposure, PSC Clinical refers to the help-seeking individuals presenting to the Psychological Services Center fro an intake, and UWM refers to the normative undergraduate sample from the University of Wisconsin-Milwaukee.

This means that across the four groups, there were statistically significant differences in their self-rated expectations overall, in addition to their expectations of therapeutic activities, expectations of self in therapy, expectations of improvement after therapy, expectations of therapist/alliance, and expectations of personal improvement. As seen in Table 9, each of these differences were highly significant, however, effect sizes were consistently low. See Figure 2 below for the pattern of means for each sample, across all factors and the M-PEQ total score.

Figure 2. Pattern of Means for the *Milwaukee Psychotherapy Expectations Questionnaire* (M-PEQ) Score.



As seen in Figure 1, the three OSU samples had the same pattern of means. Yet given the statistical analyses, the undergraduates without previous treatment exposure were not consistently related to any of the other three samples, although their M-PEQ scores were most similar to the undergraduates with previous treatment exposure. The normative undergraduate sample evidenced consistently lower expectations that the three other samples. In addition, the PSC clinical sample and undergraduates with previous treatment exposure did not evidence statistically significantly different expectations at all. And finally, there were some similarities between the UWM sample and both the PSC clinical sample and OSU undergraduates with previous treatment exposure. However, the UWM sample mean scores were much greater for the third factor, which contributed to an elevated and statistically significantly larger M-PEQ total score, in comparison to all three of the OSU samples.

Secondary Analyses

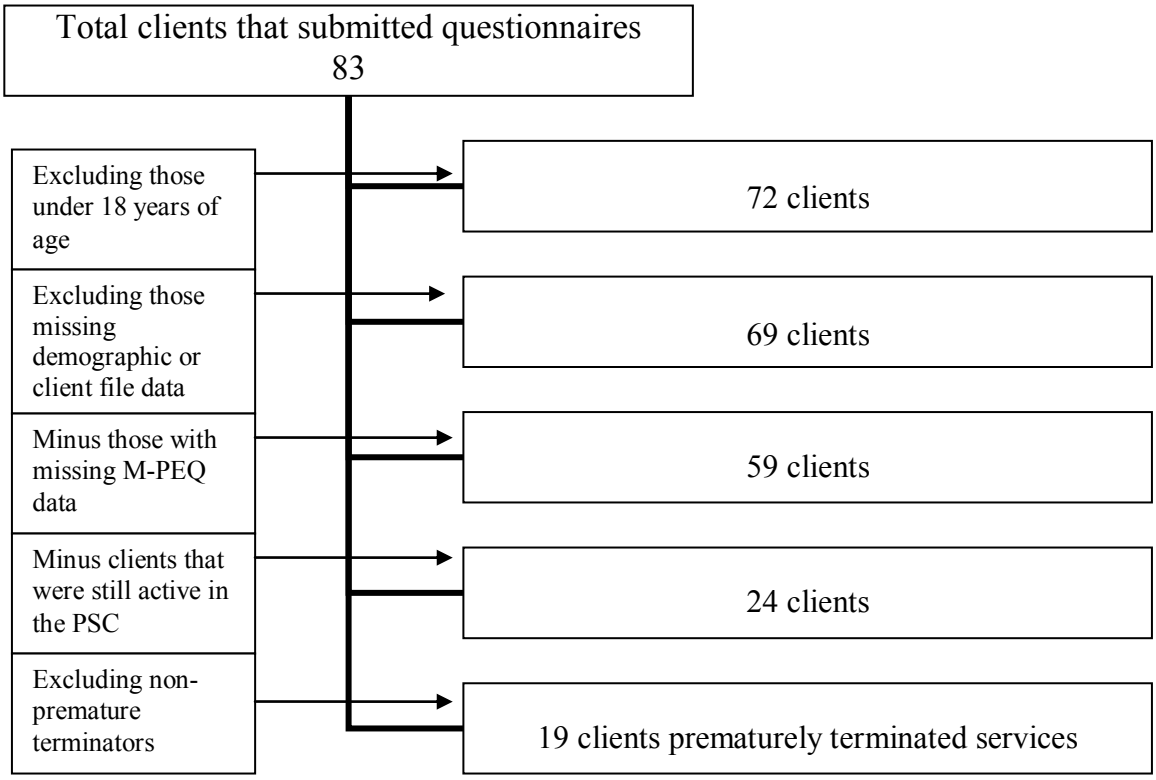
Analyses for Secondary Hypothesis 1

The first of the secondary questions that was proposed concerned whether those at risk of attrition (i.e., premature termination) could be identified by their expectations. To explore this question, both retrospective and prospective designs were used for the M-PEQ total and factor scores. First, we examined the retrospective data gathered from OSU undergraduates with previous treatment exposure. Participants were coded as prematurely terminating based on the following item on the questionnaire; "How was your most recent course of treatment discontinued?" Participants that answered "Unplanned (e.g. just stopped going)" were considered to be prematurely terminating for analyses. Those that reported terminating in any planned fashion (e.g. by them, the

therapist, or via mutual agreement) were not considered premature terminators. Of the 199 participants, four participants left the question blank and were therefore excluded from the analysis; 71 participants (35.68%) indicated that the termination of their most recent course of treatment was unplanned.

The prospective design examining attrition used data gathered from help seeking individuals presenting to the Psychological Services Center (PSC) for an intake (N = 69). Participants who were still active clients of the PSC were excluded from the analysis (N = 35). Of those remaining, review of termination summaries was used to determine which participants had prematurely terminated. Three clients were excluded from analyses because there was insufficient information to determine whether they prematurely terminated and/or the client was seeking an assessment rather than individual therapy services. Participants were considered to have terminated prematurely if the termination summary indicated that the course of treatment ended in an unplanned fashion. The results indicate that 19 out of 24 clients (79.17%) prematurely terminated services. See Figure 3 for a flowchart of client inclusion.

Figure 3. Flowchart of Client Inclusion.



Note. The attrition rate was calculated by dividing the number of premature terminators by the 24 clients with complete data and information regarding their termination.

The Bayesian analyses were conducted using Jacobson and Truax's (1991) cut score approach. Using this method involves determining a cutoff score via the following formula;

$$\text{CS cutoff} = \frac{(SD_1 \times M_2) + (SD_2 \times M_1)}{SD_1 + SD_2}$$

where M_1 and SD_1 are the mean and standard deviation of the dysfunctional group (premature terminators) and M_2 and SD_2 are the mean and standard deviation for the functional group (normative, non-premature terminators).

Using the resultant cutoff scores for the M-PEQ total and factor scores, four frequency tallies were then computed. This included the number of true positives (TP; premature terminators below the cut score), the number of false positives (FP; non-premature terminators below the cut score), the number of false negatives (FN; premature terminators exceeding the cut score), and the number of true negatives (TN; non-premature terminators exceeding the cut score). These four frequencies were then used to calculate sensitivity, specificity, and positive and negative likelihood ratios of the retrospective and prospective designs via the following formulas (Kline, 2004);

Sensitivity = TP/ (TP + FN)

Specificity = TN/ (FP + TN)

Positive Likelihood Ratio = Sensitivity/ (1 – Specificity)

Negative Likelihood Ratio = (1 – Sensitivity)/ Specificity

See Tables 10-12 for each of the aforementioned values for the retrospective design and the prospective design evaluated with both the retrospective and prospective cut scores.

Table 10

Bayesian Analyses Values for the Retrospective (Undergraduates with Previous Treatment Exposure) Design Group.

Stats	M-PEQ Total	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
$M_{dysfunctional}$	184.65	61.14	47.67	24.41	27.59	24.87
$M_{functional}$	204.65	64.69	52.63	28.11	30.64	27.90
$SD_{dysfunctional}$	61.99	20.13	17.59	8.76	10.21	9.73
$SD_{functional}$	51.51	18.21	15.63	7.49	8.49	8.64
Cut score	195.57	63.00	50.30	26.4	29.26	26.47
True +	32.00	32.00	30.00	40.00	33.00	38.00
False +	39.00	52.00	44.00	41.00	44.00	49.00
False -	33.00	38.00	37.00	30.00	38.00	33.00
True -	71.00	68.00	76.00	86.00	81.00	77.00
Sensitivity	0.4923	0.4571	0.4478	0.5714	0.4648	0.5352
Specificity	0.6455	0.5667	0.6333	0.6772	0.6480	0.6111
+Likelihood Ratio	1.3886	1.0549	1.2212	1.7700	1.3204	1.3763
- Likelihood Ratio	0.7866	0.9580	0.8720	0.6329	0.8259	0.7606

Table 11

Bayesian Analyses Values for the Prospective (PSC Clinical Sample) Design Group with the Prospective Cut Score.

Stats	M-PEQ Total	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
$M_{dysfunctional}$	209.53	69.21	56.26	24.21	31.53	28.31
$M_{functional}$	230.80	79.80	58.80	29.20	33.20	29.80
$SD_{dysfunctional}$	41.30	13.71	10.78	9.08	6.22	6.78
$SD_{functional}$	30.09	9.04	8.96	8.32	4.09	12.13
Cut score	221.83	75.59	57.65	26.81	32.54	28.84
True +	10.00	12.00	10.00	9.00	11.00	7.00
False +	2.00	2.00	1.00	1.00	3.00	2.00
False -	9.00	7.00	9.00	10.00	8.00	12.00
True -	3.00	3.00	9.00	4.00	2.00	3.00
Sensitivity	0.5263	0.6316	0.5263	0.4737	0.5789	0.3684
Specificity	0.6000	0.6000	0.9000	0.8000	0.4000	0.8667
+Likelihood Ratio	1.3158	1.5789	5.2632	2.3684	0.9649	2.7632
- Likelihood Ratio	0.7895	0.6140	0.5263	0.6579	1.0526	0.7287

Table 12

Bayesian Analyses Values for the Prospective (PSC Clinical Sample) Design Group with the Retrospective Cut Score.

Stats	M-PEQ Total	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
$M_{dysfunctional}$	209.53	69.21	56.26	24.21	31.53	28.31
$M_{functional}$	230.80	79.80	58.80	29.20	33.20	29.80
$SD_{dysfunctional}$	41.30	13.71	10.78	9.08	6.22	6.78
$SD_{functional}$	30.09	9.04	8.96	8.32	4.09	12.13
Cut score	195.57	63.00	50.30	26.4	29.26	26.47
True +	6.00	8.00	5.00	9.00	8.00	6.00
False +	0.00	0.00	1.00	1.00	1.00	1.00
False -	13.00	11.00	14.00	10.00	11.00	13.00
True -	5.00	5.00	9.00	4.00	4.00	4.00
Sensitivity	0.3158	0.4211	0.2632	0.4737	0.4211	0.3158
Specificity	1.0000	1.0000	0.9000	0.8000	0.8000	0.8000
+Likelihood Ratio	Infinity	Infinity	2.6316	2.3684	2.1053	1.5789
- Likelihood Ratio	0.6842	0.5789	0.8187	0.6579	0.7237	0.8553

In terms of the Bayesian analyses, the retrospective design group (undergraduates with previous treatment exposure) did not evidence high sensitivity or specificity. However, the positive and negative likelihood ratios were in the predicted pattern for all factors and the M-PEQ total score such that those below the cut score are slightly more likely to prematurely terminate (values > 1) and those above the cut score are slightly less likely to prematurely terminate (values <1). In fact, overall the sensitivities and negative likelihood ratios did not seem to be notable in any of the analyses. In terms of sensitivities, the value reflects the percentage of clients with low expectations that will indeed prematurely terminate. In this case, the highest value is 0.6316 of 63.16%. Although interpretation of sensitivity is debatable and conventional standards have not been established for this type of analysis with this sample and construct (premature termination), a value slightly over 50% does not seem to be particularly impressive. This was also true for the negative likelihood ratios. In this case, clients with high expectations scores were slightly less than half (1 - 0.5263 = 0.4737) as likely to prematurely terminate than those with low expectations scores. Although the specificity and positive likelihood values were more quantitatively meaningful, there was some ambiguity as to their utility when comparing the retrospective and prospective cut scores and the M-PEQ total versus factor scores.

First, a specificity value can be interpreted as the percentage of clients that have high expectations that will not prematurely terminate. For instance, if the value reported was 0.90, which would mean that 90% of clients with expectations above the cut score did not prematurely terminate. In this case, values as high as 1.0 were reported. Secondly, a positive likelihood ratio indicates the likelihood that those with low expectations will

prematurely terminate. For instance, if the value was 5.26, that would mean that those with expectations scores below the cut score were 5.26 times more likely to prematurely terminate than those above the cut score. In this case, values as high as infinity were reported.

In terms of the pattern of specificity and positive likelihood ratios in this particular study, analysis with the retrospective cut score applied to the prospective design group evidenced greater specificity and/or positive likelihood ratios for the M-PEQ total score and factors 1 and 4. In contrast, analysis with the prospective cut score applied to the prospective design group evidenced greater specificity and/or positive likelihood ratios for factors 2 and 5. Factor 3 values did not differ between cut scores.

In addition, some, but not all of the factor scores evidenced greater specificity and/or positive likelihood ratios than the M-PEQ total score, depending on whether the retrospective or prospective cut score was used. When using the prospective cut score, Factors 2, 3, and 5 were better than the M-PEQ total score, but when using the retrospective cut score, Factor 1 was better than the M-PEQ total score. Therefore, the separate factor scores were better than the M-PEQ total score, regardless of which cut score was used.

Analyses for Secondary Hypothesis 2

Whether M-PEQ scores might be significantly related to other measures that are known to be related to positive treatment outcomes was also examined. More specifically, it was hypothesized that expectations, as measured by the M-PEQ, would be significantly related to measures of general self-efficacy, subjective well-being, hopefulness (state), and another expectations measure in each of the three data sets.

Results indicate that the M-PEQ total score was statistically significantly related to all of the other total scores for each one of the additional measures in both undergraduate samples. In addition, the M-PEQ and PEI-R were statistically significantly related in the help-seeking individuals presenting to the PSC for an intake (see Table 13).

Table 13

Correlations between the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) and Other Study Measures.

Sample	Measure	*r*	r^2 (%)	$CI_{0.95}$
OSU normative undergraduates	Psychotherapy Expectancy Inventory-Revised (PEI-R)	0.65**	42.3	0.60, 0.71
	General Self-Efficacy Scale (GSE)	0.13**	1.7	0.04, 0.21
	State Hope Scale	0.18**	3.2	0.09, 0.26
	Subjective Well-Being	0.12*	1.4	0.03, 0.20
OSU previous treatment undergraduates	Psychotherapy Expectancy Inventory-Revised (PEI-R)	0.70**	49.0	0.62, 0.77
	General Self-Efficacy Scale (GSE)	0.35**	12.3	0.23, 0.47
	State Hope Scale	0.43**	18.5	0.31, 0.54
	Subjective Well-Being	0.18*	3.2	0.04, 0.31
PSC clinical sample	Psychotherapy Expectancy Inventory-Revised (PEI-R)	0.53**	28.1	0.30, 0.69
	General Self-Efficacy Scale (GSE)	-0.12	1.4	-0.13, 0.35
	State Hope Scale	-0.03	0.09	-0.22, 0.27
	Subjective Well-Being	-0.05	0.25	-0.20, 0.29

* p (two-tailed) < 0.05
** p (two-tailed) < 0.01

Note. The correlations are between the total scores of each measure and the total score on the Milwaukee Psychotherapy Expectations Questionnaire.

As evident in Table 13, these correlations were uniformly higher for the undergraduates with previous treatment exposure compared to those without previous treatment exposure and the PSC clinical sample. In other words, the expectations of undergraduates with previous treatment exposure were more highly correlated with the constructs of perceived general self-efficacy (*General Self-Efficacy Scale)*, state hope (*State Hope Scale)*, subjective-well-being, and the convergent measure of expectations (*Psychotherapy Expectancy Inventory-Revised*) than the other two samples from OSU.

In order to investigate group differences in measure scores between the three OSU samples, a one-way analysis of variance was conducted. The results demonstrated that there was a statistically significant difference between the three samples' M-PEQ total scores, GSE total scores, State Hope Scale total scores, and Subjective Well-Being total scores, but not their PEI-R total scores (See Table 14 and Figure 3).

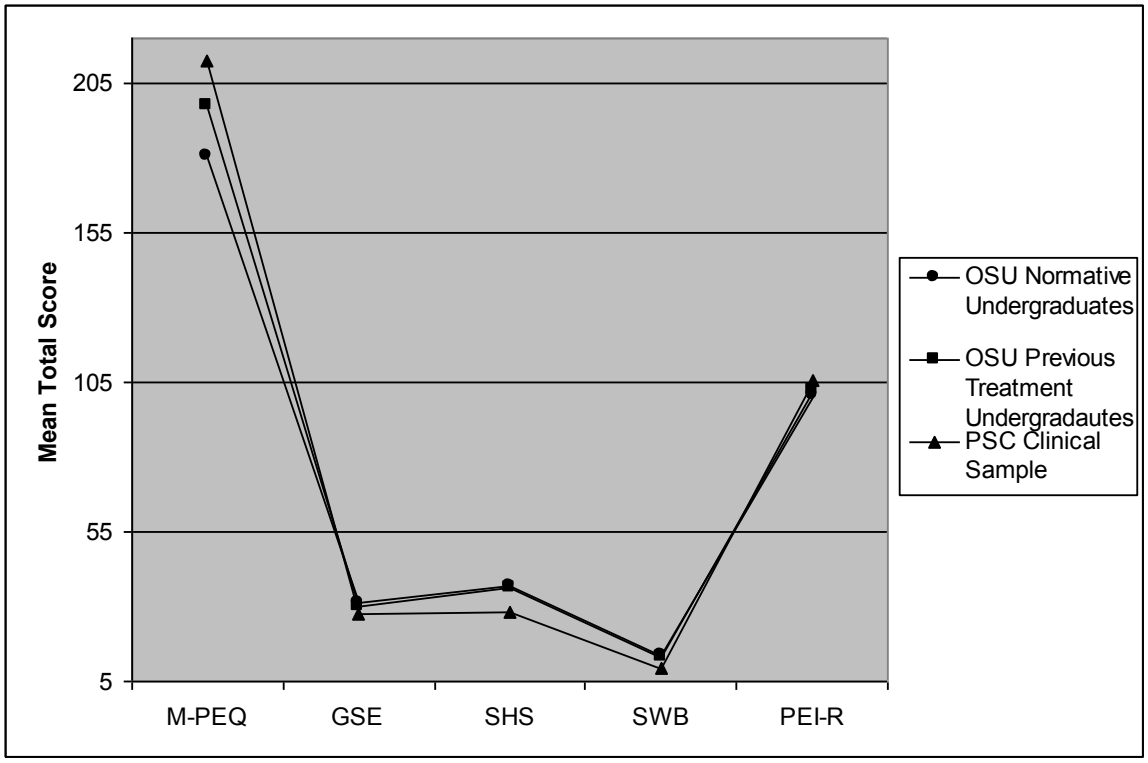
Table 14

Descriptive and Inferential Statistics for the Three OSU Sample's Measure Comparisons.

Total Score	M-PEQ	GSE	SHS	SWB	PEI-R
$M_{\text{Normative OSU}}$	180.43	31.09	37.11	13.79	100.41
$M_{\text{Trx. OSU}}$	197.22	30.27	36.27	12.93	102.49
$M_{\text{PSC Clinical}}$	212.42	27.45	28.31	9.39	105.38
$SD_{\text{Normative OSU}}$	48.98	4.42	7.6	2.98	21.53
$SD_{\text{Trx. OSU}}$	56.3	4.88	8.4	3.44	23.01
$SD_{\text{PSC Clinical}}$	42.42	5.62	10.58	3.01	20.66
F	13.99	17.95	34.20	58.21	1.58
$p <$	0.001	0.001	0.001	0.001	$p = 0.206$
η^2	0.003	0.003	0.003	0.003	

Note. Normative OSU refers to the OSU undergraduates without previous treatment exposure, Trx. OSU refers to the OSU undergraduates with previous treatment exposure, PSC Clinical refers to the help-seeking individuals presenting to the Psychological Services Center fro an intake, and UWM refers to the normative undergraduate sample from the University of Wisconsin-Milwaukee.

Figure 4. Pattern of Means for the Three OSU Sample's Measure Comparisons.



Overall, it appears that the PSC clinical sample scores were most disparate from the other two samples, but that these differences were not as pronounced on the PEI-R as they were in all other measures. In fact, the only similarity between the undergraduates and clinical sample was that the undergraduates with previous treatment exposure did not have statistically significant differences in expectations, as compared to the PSC clinical sample. Additionally, there were no statistically significant differences between the two undergraduate samples in terms of general self-efficacy and state hope. However, there were significant differences between the two undergraduate samples in terms of general expectations and subjective well-being.

Because it seemed that the correlations between the PEI-R and the M-PEQ were larger than any of the other correlations, a *t-test* was used to determine whether there were significant differences between the two highest dependent correlations in each sample (Chen & Popovich, 2002; See Table 15).

Table 15

Descriptive and Inferential Statistics for the Highest Dependent Measure Correlations in the Three OSU Samples.

	Highest Correlation							
Sample	r_1	r_2	Mr_1	Mr_2	t_{obs}	t_{crit}	$p <$	d
OSU Normative undergraduates	M-PEQ, PEI-R	M-PEQ, SHS	0.65	0.18	8.82	1.967	0.05	0.65
OSU previous treatment undergraduates	M-PEQ, PEI-R	M-PEQ, SHS	0.70	0.43	4.15	1.975	0.05	0.46
PSC clinical sample	M-PEQ, PEI-R	M-PEQ, GSE	0.53	-0.12	3.64	2.02	0.05	0.79

Note. In the above table, M-PEQ refers to the Milwaukee Psychotherapy Expectations Questionnaire, the PEI-R refers to the Psychotherapy Expectancies Inventory-Revised, the SHS refers to the State Hope Scale, and the GSE refers to the General Self-Efficacy Scale.

For all three OSU samples, the correlation between the M-PEQ and the PEI-R was statistically significantly larger than the second highest correlation. The correlation differences were notably large in each case (as in Table 15) and the effect sizes were medium to large in each case as well.

Analyses for Secondary Hypothesis 3

The final secondary hypothesis that was investigated was whether there were gender differences in expectations. Based on previous literature, females were expected to have higher expectations than males. To test this prediction, six independent samples *t-tests* were constructed to compare the total M-PEQ and all factor scores between males and females. Because there are differences in expectations between those who have and have not been previously exposed to treatment, the undergraduates with no previous treatment exposure sample was used in this analysis. I chose the normative sample because this seems to be the most prominent sample demonstrating these gender differences, within the literature. Based on the fact that multiple *t-tests* were conducted, a Bonferroni Adjustment of $\alpha = 0.05/6 = 0.00833$ was used.

The results demonstrated that the only statistically significant gender difference was present with Factor 1 [$t(472) = -2.81$, $p = 0.005$, two-tailed], in which females ($M = 59.57$, $SD = 16.01$) had greater expectations of therapeutic activities than males ($M = 55.29$, $SD = 16.33$), on average. According to Cohen's conventions ($d = 0.27$), this was a small effect and the 95% Confidence Interval around the mean group difference had middling precision ($C.I._{0.95} = 1.28 \leq \mu \leq 7.26$).

CHAPTER V

DISCUSSION

At the most elementary level, it seems that the three samples involved in this study did differ in several important ways. First, there was a statistically significant difference between the undergraduates with previous treatment exposure versus those without in terms of age and gender distribution. However, given the current research literature, age and gender are not thought to be consistently or meaningfully related to treatment outcome and therefore are not thought to have served as confounds in the current study (Dubrin & Zastowny, 1988; Sledge, Moras, Hartley, & Levine, 1990; Garfield, 1994; Petry, Tennen, & Affleck, 2000).

Concerning the replication of the original Factor Analysis performed by Hynan et al. (personal communication, November 30, 2005), there were several issues with regard to their initial methodology and conclusions that are relevant to the findings from the current investigation. Although not a focus of this study, the preliminary stages of development for the M-PEQ involved some unclear procedures and analyses, which may have impacted the resulting measure. Nevertheless, the analysis of the 28-item measure on the sample of OSU undergraduates without previous treatment exposure did indeed substantially replicate the original factor structure from the UWM undergraduate sample, as originally hypothesized.

Although there were a few slight variations in the factor structure between the undergraduate sample from UWM and the undergraduate sample from OSU, overall the factor structure was replicated. The only discrepancies between the two models (as seen in Table 3) were that items 7 and 11 loaded on the Expectations of Therapeutic Activities, or first factor, in the original UWM sample and instead loaded on the Expectations of Personal Improvement, or fifth factor, in the replicated OSU sample. Items 7 and 11 state respectively, "I will be given new information about myself" and "I will learn more about myself." Perhaps this difference could be attributed to differences in the expected sources of change. Whereas the UWM sample may have interpreted the mode of change as originating from something inherent in therapy, perhaps the OSU sample interpreted this change as internal, derived from the individual themselves. It is unclear why such differences in interpretation may exist, but perhaps they reflect subtle geographic regional differences or the fact that the two samples were taken from different environments (i.e. urban v. rural). Maybe these two items could be framed differently in the future, in order to accentuate the causes for such changes in therapy, to avoid ambiguity and variability in the conceptualization of the statement.

In addition, with one exception, the OSU sample also replicated the high internal consistencies and test-retest reliabilities from the original UWM sample (see Tables 7 and 8). This may also be a product of the large, statistically significant intercorrelations between factors (see Table 4). The exception is with those whom completed the retest after a five or more week time interval in the replicated OSU sample. Although there was some variability within the test-retest correlations in the first four weeks, an analysis of variance revealed that there was only a statistically significant difference between those

that took the retest after five or more weeks and all other groups. The clinical implication behind this finding is that the re-administration of the measure should occur at least on a monthly basis, given that the results of each administration were not nearly as reliable after five or more weeks.

Concerning the normative analyses, contrary to the original hypotheses, there was a marked difference between the M-PEQ descriptive statistics between the undergraduates taking the 28-item measure from UWM versus those from OSU. This could be for many reasons including; regional differences in individuals, a potential cohort effect, or even cultural differences between the two groups, given that the descriptive statistics between the two groups are slightly different. For instance, the average participant age at UWM was over a year older than at OSU and the range of ages was from18 years to 52 years of age at UWM (18-42 years at OSU) with a modal age of 20 years (19 years at OSU). There were a larger proportion of females in the UWM sample 78.80% as compared to OSU's 61.0%). And, the ethnic distribution was also different with UWM having 82.1% of their participants endorsing Caucasian ethnicity (78.9% at OSU), 7.3% endorsing African American ethnicity (4.6% at OSU), 3.3% endorsing Hispanic American ethnicity (1.9% at OSU), 3.6% endorsing Asian ethnicity (1.7% at OSU), and only 2.6% endorsing other (combined Native American, Bi/Multi-Racial, and International residing in the U.S. is 12.8% at OSU).

In terms of the extension of the measure to new samples, the relationship between the mean total M-PEQ score and each factor score between the three separate samples from OSU and the UWM sample demonstrated that the undergraduates with no previous treatment exposure were not consistently related to any of the other samples. Their M-

PEQ total score or overall expectations, expectations of self in therapy, and expectations of improvement after therapy were not significantly different from the undergraduates with previous treatment exposure and their expectations of therapeutic activities and expectations of improvement after therapy were not significantly different from the PSC clinical sample However, the PSC clinical sample and undergraduates with previous treatment exposure were not significantly different in terms of their M-PEQ total score or any of the subscale scores including; expectations of therapeutic activities, expectations of self in therapy, expectations of improvement after therapy, expectations of the therapist/alliance, and expectations of personal improvement.

Therefore as previously predicted, there must be a difference between the expectations of those that have versus those that have not previously engaged in psychotherapy. Given the mean scores, it appears that the normative undergraduate sample had lower or less realistic expectations than the other samples. This may just be because they do not know what to expect from psychotherapy or may also be a product of good experiences/ prior advantageous interactions in the previous treatment groups. Interestingly, the UWM sample was not significantly different from the PSC clinical sample in expectations of therapeutic activities, expectations of self in therapy, expectations of the therapist/alliance, or expectations of personal improvement and was not significantly different from the undergraduates with previous treatment exposure in expectations of therapeutic activities as conceptualized with the OSU suggested factor structure, expectations of self in therapy, expectations of the therapist/alliance, and expectations of personal improvement . This may be due to the fact that the undergraduate sample was more informed of psychotherapy processes and outcome, as

opposed to OSU undergraduates, or it may just be a product of qualitative differences in expectations between the two different sites.

Finally, given the secondary analyses, 35.68% of undergraduates with previous treatment exposure and 83.87% of clients presenting to the Psychological Services Center for an intake self-reported that they had left therapy in an unplanned fashion (i.e. prematurely terminated). The research literature suggests that the former percentage is within the normal range, but that the latter is higher than typical. A meta-analysis of 125 outpatient psychotherapy studies revealed that the average rate of dropout was 47% (Wierzbicki & Pekarik, 1993). However, attrition rates range from 23-60% depending on whether they are determined from the client's or therapist's perspective (Garfield, 1994). This could be due to the fact that attrition may be higher within the training clinic, the cases that were excluded may have been disproportionately uncharacteristic of premature termination, or may be due general sample differences.

Overall, there were two conceptual issues worth mentioning concerning the results of the Bayesian analyses. First, there was issue with regard to whether the prospective design group should be analyzed using the retrospective or prospective cut score. All in all, the retrospective cut score seemed to be a better fit because the specificities and positive likelihood ratios were mostly higher for the M-PEQ total and factor scores conceptualized via this cut score, as applied to the prospective design group. As mentioned before, there were several inconsistencies in this pattern, between factors. Given that this is the first analysis of its kind, perhaps future replications could investigate factor differences in cut score utility to see whether this pattern was consistent.

Secondly, given that the factor analysis suggested that the measure is related to one general, second-order expectations factor, rather than five separate factors, it was important to decide whether there was clinical utility in conceptualizing expectations more broadly or separating expectations into five qualitatively different types. In terms of the factor structure itself, while there was a replication of the original 28- item factor structure, there seems to be some evidence in support of the M-PEQ as a measure of one broad second-order expectations factor, rather than the five qualitatively different first-order expectations factors reported by Hynan et al. (personal communication, November 30, 2005): (1) there were very high intercorrelations between factors in both samples (UWM range = 0.52-0.76; OSU range = 0.60-0.76), (2) there were multiple cross-loadings of items from the M-PEQ onto multiple factors, (3) the criteria for distinguishing factors given the Exploratory Factor Analysis was violated given the scree plot and eigenvalues (greater than 1), and (4) the goodness of fit indices from the original UWM Confirmatory Factor Analysis were all better for the second-order factor with all first-order factors parsed out (NFI = .9, NNFI = 3.5, CFI = 1.0, RMSEA = .00), as compared to the five first-order factors alone (NFI = .83, NNFI = .90, CFI = .91, and RMSEA = .06; Hynan et al., personal communication, November 30, 2005).

However, the Bayesian analyses suggest that using the five-factor conceptualization may provide more clinical utility than measuring expectations as one broad, general, factor. This can be seen via the observation that the specificities and positive likelihood ratios were greater for specific factors over the M-PEQ total score, regardless of whether the prospective design group was analyzed using the retrospective or prospective cut score. Clearly, more prospective studies are needed to investigate

client expectations and their relationship with attrition. More specifically, it may be useful to compare the expectations of clients entering a training clinic versus those entering other types of mental healthcare facilities.

As originally hypothesized, it also appears that the total M-PEQ score was statistically significantly related to all of the other total scores for each one of the additional measures in both undergraduate samples and that the M-PEQ and PEI-R were statistically significantly related in the PSC clinical sample. However, these correlations were higher in the sample of undergraduates with previous treatment. In addition, there were significant differences between the two undergraduate samples in terms of general expectations and subjective well-being. It is still unclear whether this pattern is clinically meaningful and may reflect that those exposed to treatment are different than never exposed persons in terms of expectations, but that this pattern differs for the constructs of general self-efficacy, state hope, and subjective well-being. Perhaps there is a difference in the general self-efficacy and hope appraisals of those who are versus those who are not currently seeking treatment. In addition, those entering the PSC are not necessarily students and may not have the same financial support as the undergraduates, which may have a negative impact on their state hope and general self-efficacy.

Additionally, the high correlation between the PEI-R and M-PEQ in all samples demonstrates that the M-PEQ has good convergent validity with the additional expectations measure, the *Psychotherapy Expectancy Inventory-Revised (PEI-R)*. Because the correlations between the M-PEQ and PEI-R were statistically significantly greater than any other correlations with the M-PEQ, this attests to the discriminant validity of the measure for identifying expectations. Overall, these patterns of

correlations help to qualitatively define expectations by demonstrating that they are related to one's perceived general self-efficacy (*General Self-Efficacy Scale)*, state hope (*State Hope Scale)*, and subjective-well-being. Because there is a clear relationship between these constructs, future research could be aimed at investigating the moderator/mediator status of each, in relation to expectations and therapeutic outcome. In addition, there may be a difference in state hope and general self-efficacy between those currently in treatment versus those not seeking treatment, which could be studied further, in order to evaluate why people seek treatment and how that may be meaningfully related to their expectations and treatment outcome. Likewise, this information may be useful in defining client expectations more broadly.

Lastly, there only appeared to be significant gender differences in expectations toward therapeutic activities, and not any other expectations. Given that previous gender differences have been measured with broader constructs, such as attitudes toward therapy in general (Smith, Peck, & McGovern, 1994), there should be more studies that investigate gender differences in expectations toward psychotherapy more specifically. A replication of the previous finding may have implications for gender differences in addressing expectations about therapeutic activities and clinically countering those expectations that may be hazardous to treatment outcome.

Overall, the present study investigated the relationship between client expectations and treatment outcome. More specifically, a new measure known as the *Milwaukee Psychotherapy Expectations Questionnaire* (M-PEQ) and several established measures including; the *General Self-Efficacy Scale* (GSE), the *State Hope Scale*, and several subjective-well-being questions were given to (a) undergraduates registered with

Experimetrix with no previous treatment exposure, (b) undergraduates registered with Experimetrix with previous treatment exposure, and (c) a help-seeking sample entering the Psychological Services Center at Oklahoma State University for an intake. The replication component of the study investigated data from the undergraduate sample without previous treatment exposure (N = 521) and demonstrated that this sample from OSU replicated the M-PEQ factor structure, test-retest reliabilities, and internal consistencies, but not the M-PEQ total and subscale scores from undergraduates at UWM. The extension component of this study demonstrated that the undergraduates with previous treatment exposure (N = 199) and PSC clinical samples (N = 70) had similar M-PEQ total and subscale scores. Interestingly, these scores were more similar to the original UWM normative undergraduate sample than the OSU normative undergraduate sample. The Bayesian analyses conducted on the PSC clinical sample and undergraduates with previous treatment exposure displayed promising results for indicating those at risk of attrition, given their expectation scores on the M-PEQ. This analysis also suggested that although the five factors on the M-PEQ are highly related, there is some clinical utility in conceptualizing separate factors, when attempting to predict attrition from pre-therapy expectations. A replication of the multi-sample design may prove useful in the future, with widespread clinical implications. In addition, there is a clear relationship between expectations and general self-efficacy, state hope, and subjective well-being, but these relationships seem to be affected by one's previous and current level of treatment exposure. Future studies may aim to identify why individuals seek treatment, how this is related to the constructs of general self-efficacy, state hope, and subjective well-being, and how this in turn affects treatment outcome. Lastly, although previous research has

suggested a gender difference in expectations of psychotherapy, there was only one gender differences in expectations noted, but not a uniform pattern within the M-PEQ.

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APPENDIX A

Survey for undergraduates as it appears on World Wide Web (for those who have previously completed a course of therapy)

Expectations Related to Psychotherapy

Investigator:

Jennifer Callahan, PhD; Assistant Professor; Oklahoma State University

Purpose of Project:

Dr. Callahan, Oklahoma State University, is conducting a study on the expectations people have about participating in therapy. If you are over 18 years of age, your participation would be greatly appreciated.

Time Commitment:

The survey is comprised of several subsections and will take approximately 30 minutes to complete. You will not be solicited for any other information in the future. You will be awarded one credit for research participation that you may assign to a specific course by logging in to the Experimetrix system.

Risks and Benefits:

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life. There are no personal benefits that are anticipated as a result of participating in this study. More generally, the information resulting from this study may aid in understanding the expectations

that people may have before entering psychotherapy and improving psychological services.

Confidentiality:

Please note that this survey is **confidential**. Any data you submit will be automatically coded upon clicking the "submit" button and sent directly to the researcher without identification of the sender. The data obtained from this study will be kept confidential, and the responses will not be linked to any of the participants. The data will be stored electronically and protected by password on a laboratory computer with only the principal investigator having access to it.

Contact Information:

For information regarding this study, please contact Dr. Jennifer Callahan, at (405) 744-3788 or by email at jennifer.callahan@okstate.edu

For information on subjects' rights, contact Dr. Sue Jacobs, IRB Chair, 415 Whitehurst Hall, 405-744-1676.

Participants Rights:

Your participation is completely voluntary, and you have the right to withdraw from this study at any time without penalty.

Consent:

The completion of this survey indicates that I am at least 18 years of age and consent to participate in this project. If you are not at least 18 years of age, please do not proceed any further.

IRB Approval:

This research study has been approved by the Institutional Review Board (IRB) for the protection of human subjects at Oklahoma State University (#AS0645). The IRB approval will expire on 2/12/2007.

Directions:

To complete this survey, all you need to do is select among the choices in the following form and SUBMIT the form when you are done by pressing the SUBMIT button at the end of the survey. **IT IS VERY IMPORTANT TO SUBMIT THE PAGE,** otherwise no data will be collected. Please be sure you complete the form entirely by responding to every question.

Thank you for your participation in this study.

First, please provide some basic information about yourself.

Your age:

Your gender: choose one

Your ethnicity: choose one

Your level of education: choose one

Number of psychology credits you've completed:

Your occupational level:
choose one

Who you live with: choose one

Marital status: choose one

Are you currently receiving therapy from a mental health professional? choose one

Your mother's occupational level:
choose one

Your mother's highest level of education: choose one

Your father's occupational level:
choose one

Your father's highest level of education: choose one

Go on to the next section.

How many different times have you been in therapy?

For your longest treatment experience, how many sessions were involved?

For the next set of questions, please consider only the most recent course of treatment (that is, all the sessions you had with your last, most recent therapist).

What was the primary (main) diagnosis or presenting problem?
choose one

If you aren't sure of the response, please choose "unsure" in the box above and describe the reason you started therapy in this box:

My therapist and I agreed about the things I would need to do in therapy to help improve my situation. choose one

What I was doing in therapy gave me new ways of looking at my problem.
choose one

I believed my therapist liked me. choose one

My therapist did not understand what I was trying to accomplish in therapy.
choose one

I was confident in my therapist's ability to help me.
choose one

My therapist and I were working towards mutually agreed upon goals.
choose one

I felt that my therapist appreciated me. choose one

We agreed on what was important for me to work on.
choose one

My therapist and I trusted one another. choose one

My therapist and I had different ideas on what my problems were.
choose one

We established a good understanding of the kind of changes that would be good for me.
choose one

I believed the way we were working together with my problem was correct.
choose one

How was your most recent course of treatment discontinued?
choose one

When you stopped treatment, how resolved was the problem or reason that caused you to seek therapy? choose one

What was the therapeutic orientation of your treatment provider?
choose one

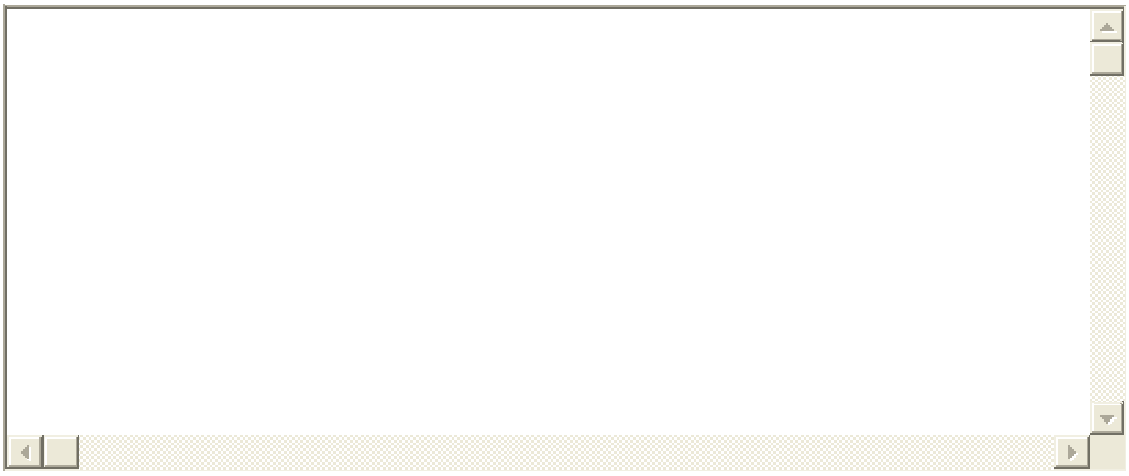
How did you learn of the treatment provider's therapeutic orientation?
choose one

Please describe (in a few sentences) the **best, most helpful**, experience or discussion that happened during a session:

Do you think that the overall outcome of treatment would have been different had this experience or discussion not occurred?

choose one

Please describe (in a few sentences) the **worst, least helpful**, experience or discussion that happened during a session:



Do you think that the overall outcome of treatment would have been different had this experience or discussion not occurred?

choose one

Go on to the next section.

INSTRUCTIONS: ***Again, consider only your most recent course of treatment and answer the questions below using the following scale:***

< - - - - -1 - - - - - - - - - 2 - - - - - - - - 3 - - - - - - - - - - 4 - - - - - - - - - 5 - - - - - - - - 6 - - - - - - - - 7 - - - - ->

Not at all A little bit Somewhat Moderately Quite a bit Quite a lot Very Much

I felt that the things I did in therapy would help me to accomplish the changes that I wanted. choose one

When important things came to mind, how often did you find yourself keeping them to yourself, rather than sharing them with your therapist? choose one

How much did your therapist help you to gain a deeper understanding of your problems? choose one

Did you find your therapist's comments unhelpful, that is, confusing, mistaken, or not really applying to you? choose one

I believed that my therapist was genuinely concerned for my welfare. choose one

My therapist and I agreed on what was important for me to work on. choose one

I wished my therapist and I could clarify the purpose of our sessions. choose one

My therapist and I trusted each other. choose one

What I did in therapy gave me new ways of looking at my problem. choose one

I was clear on what my responsibilities were in therapy. choose one

How much did you disagree with your therapist about what issues were most important to work on during sessions? choose one

I was frustrated by the things I was doing in therapy. choose one

Did you find yourself tempted to stop therapy when you were upset or disappointed with therapy? choose one

I believed my therapist liked me. choose one

I felt my therapist cared about me even when I did things that he/she did not approve of. choose one

Did you disagree with your therapist about the kind of changes you would like to make in your therapy? choose one

Did you feel you were working at cross purposes with your therapist, that you did not share the same sense of how to proceed so that you could get the help you wanted? choose one

I felt that my therapist appreciated me. choose one

My therapist and I established a good understanding of the kind of changes that would be good for me. choose one

How much did you hold back your feelings during your sessions? choose one

I disagreed with my therapist about what I ought to get out of therapy. choose one

Did you feel that even though you might have had moments of doubt, confusion, or mistrust, that overall therapy was worthwhile? choose one

How confident did you feel that through your own efforts and those of your therapist you would gain relief from your problems? choose one

My therapist and I were working toward mutually agreed upon goals. choose one

I was worried about the outcome of the sessions. choose one

Go on to the next section.

INSTRUCTIONS: ***Please describe your feelings about <u>YOUR MOST RECENT THERAPY SESSION</u> and answer the questions below using the following scale:***

Weak Feeling	*Moderate Feeling*	*Strong Feeling*	*Extremely Strong Feeling*
1	*2*	*3*	*4*

The things my therapist said and did not make me feel I could trust him/her. choose one

My therapist did not seem genuine. choose one

My therapist pretended to like or understand me more than he or she really did. choose one

I felt that my therapist thought that I was worthwhile. choose one

My therapist was friendly and warm toward me. choose one

My therapist did not really care what happened to me. choose one

My therapist understood what I said. choose one

My therapist understood my words, but not the way I felt. choose one

My therapist really sympathized with my difficulties. choose one

My therapist acted condescending; talked down to me. choose one

Go on to the next section.

In the past two weeks, have you been feeling dissatisfied with life? choose one

If yes, how much dissatisfaction have you been feeling? choose one

Have you ever considered seeing a therapist because of this dissatisfaction?
choose one

If yes, how much dissatisfaction would you expect to feel by the end of therapy?
choose one

Now I want you to imagine that you are experiencing a sufficient amount of distress and dissatisfaction with life and are considering seeking therapy for this distress and dissatisfaction. If you are currently feeling a lot of distress, then you do not need to imagine, just focus on how you feel right now. However, if you are not currently experiencing a lot of distress, imagine that you are and that life is not going the way you want it to go. Imagine that you are thinking about talking to a therapist. Given any expectations that you have about therapy, please answer the following questions. Thank you.

1. I expect my therapist will provide support. choose one

2. Therapy will provide me with a better understanding of my problem.
choose one

3. I will be taught new skills in therapy. choose one

4. In therapy I will learn to use skills that I already have to solve my problems.
choose one

5.My therapist will provide me feedback. choose one

6. I will discover different ways to alter my behavior through participating in therapy. choose one

7. I will be given new information about myself. choose one

8. I will be able to work on my own goals in therapy. choose one

9. I will be able to express my true thoughts and feelings. choose one

10. I will feel comfortable with my therapist. choose one

11. I will learn more about myself. choose one

12. My therapist will be sincere. choose one

13. My therapist will be interested in what I have to say. choose one

14. My therapist will be sympathetic. choose one

15. My therapist will be nurturing. choose one

16. I will be willing to talk about myself, even if it is embarrassing. choose one

17. I expect that I will come to every appointment. choose one

18. I will be willing to trust my therapist. choose one

19. Therapy will provide me with an increased level of self-respect. choose one

20. After therapy, I will have the strength needed to avoid feelings of distress in the future. choose one

21. I anticipate being a better person as a result of therapy. choose one

22. After therapy, I will be a much more optimistic person. choose one

23. I expect I will work hard to address my problems in therapy. choose one

24. I expect that I will tell my therapist if I have concerns about therapy. choose one

25. At the end of the therapy period, how much improvement in your problem(s) do you think will occur? choose one

26. By the end of the therapy period, how much improvement in your problem(s) do you feel will occur? choose one

27. By the end of therapy period, how satisfied do you expect to be with the treatment results? choose one

28. Which of the following best describes your expectations about what is likely to happen as a result of your treatment? choose one

Go on to the next section.

Instructions: ***Please answer the questions below using the following scale:***

< - - - - -1 - - - - - - 2 - - - - - - - 3 - - - - - - 4 - - - - - - 5 - - - - - - 6 - - - - - - 7 - - - - ->

Not at all ***Moderately*** ***Very Strongly***

1. How strongly do you expect your therapist to say whatever comes into his/her mind? choose one

2. How strongly do you expect to say whatever comes into your mind? choose one

3. How strongly do you expect to act as freely as you would with your best friend? choose one

4. How strongly do you expect to feel “free” and “open”? choose one

5. How strongly do you expect to watch your therapist’s behavior for “helpful hints” as to desirable behavior during the hour? choose one

6. How strongly do you expect to feel like opening up without any help from your therapist? choose one

7.How strongly do you expect your therapist to be gentle in phrasing his/her opinions about an important topic? choose one

8. How strongly do you expect to behave in a spontaneous manner? choose one

9. How strongly do you expect to be concerned with the impression you make on your therapist? choose one

10. How strongly do you expect to please your therapist? choose one

11. How strongly do you expect to be comfortable in expressing your feelings toward the therapist? choose one

12. How strongly do you expect to feel as though you were "in charge" of the hour? choose one

13. How strongly do you expect to get definite advice from your therapist? choose one

14. How strongly do you expect your therapist to discover what's responsible for you current problems? choose one

15. How strongly do you expect your therapist to suggest what you should do about your problem? choose one

16. How strongly do you expect to be the one who begins the talking? choose one

17. How strongly do you expect your therapist to clearly announce his/her value judgments about your behavior? choose one

18. How strongly do you expect to be concerned with how you appear to your therapist? choose one

19. How strongly do you expect to "carry the ball" conversationally? choose one

20. How strongly do you expect to discuss whatever comes to mind without "pulling punches"? choose one

21. How strongly do you expect to seek "answers" from your therapist? choose one

22. How strongly do you expect to initiate the conversation? choose one

23. How strongly do you expect to lead the way in bringing up topics to talk about? choose one

24. How strongly do you expect your therapist to pick your ideas apart and criticize them? choose one

Go on to the next section.

Instructions: ***Please answer the questions below using the following scale:***

1 = Not at all True
2 = Hardly True
3 = Moderately True
4 = Exactly True

1. I can always manage to solve difficult problems if I try hard enough.
choose one

2. If someone opposes me, I can find the means and ways to get what I want.
choose one

3. It is easy for me to stick to my aims and accomplish my goals. choose one

4. I am confident that I could deal efficiently with unexpected events.
choose one

5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
choose one

6. I can solve most problems if I invest the necessary effort. choose one

7. I can remain calm when facing difficulties because I can rely on my coping abilities.
choose one

8. When I am confronted with a problem, I can usually find several solutions.
choose one

9. If I am in trouble, I can usually think of a solution. choose one

10. I can usually handle whatever comes my way. choose one

Go on to the next section.

Instructions: ***Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.***

1. I can think of many ways to get out of a jam. choose one

2. I energetically pursue my goals. choose one

3. I feel tired most of the time. choose one

4. There are lots of ways around any problem. choose one

5. I am easily downed in an argument. choose one

6. I can think of many ways to get the things in life that are most important to me.
choose one

7. I worry about my health. choose one

8. Even when others get discouraged, I know I can find a way to solve the problem.
choose one

9. My past experiences have prepared me well for my future. choose one

10. I've been pretty successful in life. choose one

Go on to the next section.

Instructions: ***Using the scale shown below, please select the number that best describes how you think about yourself right now and put that number in the blank before each sentence. Please take a few moments to focus on yourself and what is going on in your life at this moment. Once you have this "here and now" set, go ahead and answer each item according to the following scale:***

1 = Definitely False
2 = Mostly False
3 = Somewhat False
4 = Slightly False
5 = Slightly True
6 = Somewhat True
7 = Mostly True
8 = Definitely True

1. If I should find myself in a jam, I could think of many ways to get out of it.
choose one

2. At the present time, I am energetically pursuing my goals. choose one

3. There are lots of ways around any problem that I am facing now.
choose one

4. Right now, I see myself as being pretty successful. choose one

5. I can think of many ways to reach my current goals. choose one

6. At this time, I am meeting the goals that I have set for myself.
choose one

Go on to the next section.

Instructions: ***Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this survey, work is defined as employment, school, housework, volunteer work, and so forth.***

1. I feel weak. choose one

2. I feel fearful. choose one

3. I have frequent arguments. choose one

4. I feel hopeless about the future. choose one

5. I am not working/studying as well as I used to. choose one

6. I have trouble getting along with friends and close acquaintances. choose one

7. I feel that something bad is going to happen. choose one

8. I feel nervous. choose one

9. I feel my love relationships are full and complete. choose one

10. I have too many disagreements at work/school. choose one

11. I feel something is wrong with my mind. choose one

12. I feel blue. choose one

13. I am satisfied with my relationships with others. choose one

Go on to the next section.

Instructions: ***For each question, please select the response that best describes your current situation.***

Currently, how upset have you been feeling? choose one

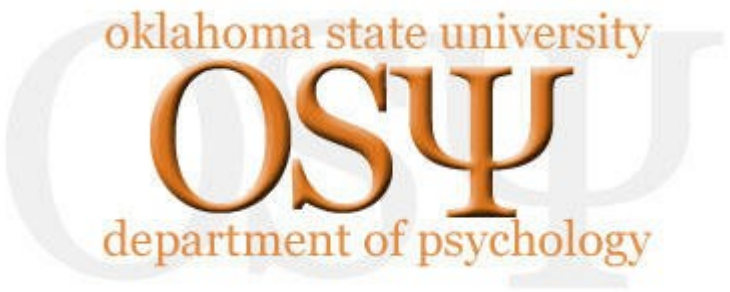
Currently, how energetic have you been feeling? choose one

Currently, how do you feel that you are getting along emotionally? choose one

Currently, how satisfied have you been feeling with you life? choose one

Please click the SUBMIT button below to send your data.

SUBMIT Reset



Thank you for participating in this study.

The site listed below may be of interest to you if you are currently feeling distressed.

Psychological Services Center at OSU; low cost help for students

APPENDIX B

Survey for undergraduates as it appears on World Wide Web (regardless of previous therapy experience)

Expectations Related to Psychotherapy

Investigator:

Jennifer Callahan, PhD; Assistant Professor; Oklahoma State University

Purpose of Project:

Dr. Callahan, Oklahoma State University, is conducting a study on the expectations people have about participating in therapy. If you are over 18 years of age, your participation would be greatly appreciated.

Time Commitment:

The survey is comprised of several subsections and will take approximately 30 minutes to complete. You will not be solicited for any other information in the future. You will be awarded one credit for research participation that you may assign to a specific course by logging in to the Experimetrix system.

Risks and Benefits: There are no known risks associated with this project which are greater than those ordinarily encountered in daily life. There are no personal benefits that are anticipated as a result of participating in this study. More generally, the

information resulting from this study may aid in understanding the expectations that people may have before entering psychotherapy and improving psychological services.

Confidentiality:

Please note that this survey is **confidential**. Any data you submit will be automatically coded upon clicking the "submit" button and sent directly to the researcher without identification of the sender. The data obtained from this study will be kept confidential, and the responses will not be linked to any of the participants. The data will be stored electronically and protected by password on a laboratory computer with only the principal investigator having access to it.

Contact Information:

For information regarding this study, please contact Dr. Jennifer Callahan, at (405) 744-3788 or by email at jennifer.callahan@okstate.edu

For information on subjects' rights, contact Dr. Sue Jacobs, IRB Chair, 415 Whitehurst Hall, 405-744-1676.

Participants Rights:

Your participation is completely voluntary, and you have the right to withdraw from this study at any time without penalty.

Consent:

The completion of this survey indicates that I am at least 18 years of age and consent to participate in this project. If you are not at least 18 years of age, please do not proceed any further.

IRB Approval:

This research study has been approved by the Institutional Review Board (IRB) for the protection of human subjects at Oklahoma State University (#AS0645). The IRB approval will expire on 2/12/2007.

Directions:

To complete this survey, all you need to do is select among the choices in the following form and SUBMIT the form when you are done by pressing the SUBMIT button at the end of the survey. **IT IS VERY IMPORTANT TO SUBMIT THE PAGE,** otherwise no data will be collected. Please be sure you complete the form entirely by responding to every question. One week after registering for the experiment on Experimetrix, you will be sent an email with a link to this survey and be asked to return to complete the survey again. You will be asked to create a unique identifier so that data you submit on each

occasion can be linked in analyses. It is not necessary to provide personal information as your identifier (e.g., your name), but it IS necessary that you come up with something unique that others will not likely also submit. A mixture of letters and numbers is recommended.

Thank you for your participation in this study.

First, please provide some basic information about yourself.

Your age:

Your gender: choose one

Your ethnicity: choose one

Your level of education: choose one

Number of psychology credits you've completed:

Your occupational level:

choose one

Who you live with: choose one

Marital status: choose one

Are you currently receiving therapy from a mental health professional? choose one

Your mother's occupational level:

choose one

Your mother's highest level of education: choose one

Your father's occupational level:
choose one

Your father's highest level of education: choose one

Go on to the next section.

In the past two weeks, have you been feeling dissatisfied with life? choose one

If yes, how much dissatisfaction have you been feeling? choose one

Have you ever considered seeing a therapist because of this dissatisfaction?
choose one

If yes, how much dissatisfaction would you expect to feel by the end of therapy?
choose one

Now I want you to imagine that you are experiencing a sufficient amount of distress and dissatisfaction with life and are considering seeking therapy for this distress and dissatisfaction. If you are currently feeling a lot of distress, then you do not need to imagine, just focus on how you feel right now. However, if you are not currently experiencing a lot of distress, imagine that you are and that life is not going the way you want it to go. Imagine that you are thinking about talking to a therapist. Given any expectations that you have about therapy, please answer the following questions. Thank you.

1. I expect my therapist will provide support. choose one

2. Therapy will provide me with a better understanding of my problem.
choose one

3. I will be taught new skills in therapy. choose one

4. In therapy I will learn to use skills that I already have to solve my problems.
choose one

5.My therapist will provide me feedback. choose one

6. I will discover different ways to alter my behavior through participating in therapy. choose one

7. I will be given new information about myself. choose one

8. I will be able to work on my own goals in therapy. choose one

9. I will be able to express my true thoughts and feelings. choose one

10. I will feel comfortable with my therapist. choose one

11. I will learn more about myself. choose one

12. My therapist will be sincere. choose one

13. My therapist will be interested in what I have to say. choose one

14. My therapist will be sympathetic. choose one

15. My therapist will be nurturing. choose one

16. I will be willing to talk about myself, even if it is embarrassing. choose one

17. I expect that I will come to every appointment. choose one

18. I will be willing to trust my therapist. choose one

19. Therapy will provide me with an increased level of self-respect. choose one

20. After therapy, I will have the strength needed to avoid feelings of distress in the future. choose one

21. I anticipate being a better person as a result of therapy. choose one

22. After therapy, I will be a much more optimistic person. choose one

23. I expect I will work hard to address my problems in therapy. choose one

24. I expect that I will tell my therapist if I have concerns about therapy.
choose one

25. At the end of the therapy period, how much improvement in your problem(s) do you think will occur? choose one

26. By the end of the therapy period, how much improvement in your problem(s) do you feel will occur? choose one

27. By the end of therapy period, how satisfied do you expect to be with the treatment results? choose one

28. Which of the following best describes your expectations about what is likely to happen as a result of your treatment? choose one

Go on to the next section.

Instructions: ***Please answer the questions below using the following scale:***

< - - - - -1 - - - - - - 2 - - - - - - - 3 - - - - - - 4 - - - - - - 5 - - - - - - 6 - - - - - - 7 - - - - ->

Not at all ***Moderately*** ***Very Strongly***

1. How strongly do you expect your therapist to say whatever comes into his/her mind?
choose one

2. How strongly do you expect to say whatever comes into your mind? choose one

3. How strongly do you expect to act as freely as you would with your best friend?
choose one

4. How strongly do you expect to feel "free" and "open"? choose one

5. How strongly do you expect to watch your therapist's behavior for "helpful hints" as to desirable behavior during the hour? choose one

6. How strongly do you expect to feel like opening up without any help from your therapist? choose one

7.How strongly do you expect your therapist to be gentle in phrasing his/her opinions about an important topic? choose one

8. How strongly do you expect to behave in a spontaneous manner? choose one

9. How strongly do you expect to be concerned with the impression you make on your therapist? choose one

10. How strongly do you expect to please your therapist? choose one

11. How strongly do you expect to be comfortable in expressing your feelings toward the therapist? choose one

12. How strongly do you expect to feel as though you were "in charge" of the hour? choose one

13. How strongly do you expect to get definite advice from your therapist? choose one

14. How strongly do you expect your therapist to discover what's responsible for you current problems? choose one

15. How strongly do you expect your therapist to suggest what you should do about your problem? choose one

16. How strongly do you expect to be the one who begins the talking? choose one

17. How strongly do you expect your therapist to clearly announce his/her value judgments about your behavior? choose one

18. How strongly do you expect to be concerned with how you appear to your therapist? choose one

19. How strongly do you expect to "carry the ball" conversationally? choose one

20. How strongly do you expect to discuss whatever comes to mind without "pulling punches"? choose one

21. How strongly do you expect to seek "answers" from your therapist? choose one

22. How strongly do you expect to initiate the conversation? choose one

23. How strongly do you expect to lead the way in bringing up topics to talk about? choose one

24. How strongly do you expect your therapist to pick your ideas apart and criticize them? choose one

Go on to the next section.

Instructions: ***Please answer the questions below using the following scale:***

1 = Not at all True
2 = Hardly True
3 = Moderately True
4 = Exactly True

1. I can always manage to solve difficult problems if I try hard enough. choose one

2. If someone opposes me, I can find the means and ways to get what I want. choose one

3. It is easy for me to stick to my aims and accomplish my goals. choose one

4. I am confident that I could deal efficiently with unexpected events. choose one

5. Thanks to my resourcefulness, I know how to handle unforeseen situations. choose one

6. I can solve most problems if I invest the necessary effort. choose one

7. I can remain calm when facing difficulties because I can rely on my coping abilities. choose one

8. When I am confronted with a problem, I can usually find several solutions. choose one

9. If I am in trouble, I can usually think of a solution. choose one

10. I can usually handle whatever comes my way. choose one

Go on to the next section.

Instructions: ***Read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.***

1. I can think of many ways to get out of a jam. choose one

2. I energetically pursue my goals. choose one

3. I feel tired most of the time. choose one

4. There are lots of ways around any problem. choose one

5. I am easily downed in an argument. choose one

6. I can think of many ways to get the things in life that are most important to me. choose one

7. I worry about my health. choose one

8. Even when others get discouraged, I know I can find a way to solve the problem. choose one

9. My past experiences have prepared me well for my future. choose one

10. I've been pretty successful in life. choose one

Go on to the next section.

Instructions: ***Using the scale shown below, please select the number that best describes how you think about yourself right now and put that number in the blank before each sentence. Please take a few moments to focus on yourself and what is going on in your life at this moment. Once you have this "here and now" set, go ahead and answer each item according to the following scale:***

1 = Definitely False
2 = Mostly False
3 = Somewhat False
4 = Slightly False
5 = Slightly True
6 = Somewhat True
7 = Mostly True
8 = Definitely True

1. If I should find myself in a jam, I could think of many ways to get out of it.
choose one

2. At the present time, I am energetically pursuing my goals. choose one

3. There are lots of ways around any problem that I am facing now.
choose one

4. Right now, I see myself as being pretty successful. choose one

5. I can think of many ways to reach my current goals. choose one

6. At this time, I am meeting the goals that I have set for myself.
choose one

Go on to the next section.

Instructions: ***Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this survey, work is defined as employment, school, housework, volunteer work, and so forth.***

1. I feel weak. choose one

2. I feel fearful. choose one

3. I have frequent arguments. choose one

4. I feel hopeless about the future. choose one

5. I am not working/studying as well as I used to. choose one

6. I have trouble getting along with friends and close acquaintances.
choose one

7. I feel that something bad is going to happen. choose one

8. I feel nervous. choose one

9. I feel my love relationships are full and complete. choose one

10. I have too many disagreements at work/school. choose one

11. I feel something is wrong with my mind. choose one

12. I feel blue. choose one

13. I am satisfied with my relationships with others. choose one

Go on to the next section.

Instructions: ***For each question, please select the response that best describes your current situation.***

Currently, how upset have you been feeling? choose one

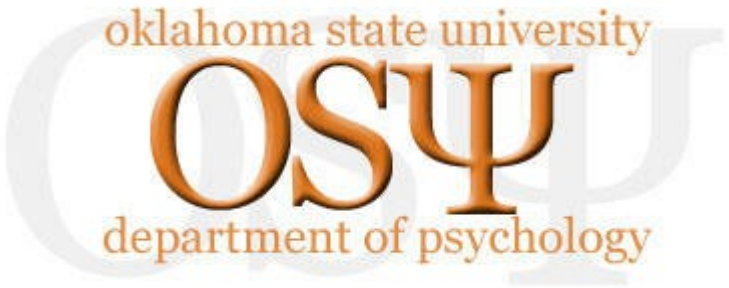
Currently, how energetic have you been feeling? choose one

Currently, how do you feel that you are getting along emotionally?
choose one

Currently, how satisfied have you been feeling with you life? choose one

Please click the SUBMIT button below to send your data.

SUBMIT Reset



Thank you for participating in this study.

The site listed below may be of interest to you if you are currently feeling distressed.

Psychological Services Center at OSU; low cost help for students

APPENDIX C

Survey for clients as it appears on paper at intake

Part One Instructions: *Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the circle under the category which best describes your current situation. For this survey, work is defined as employment, school, housework, volunteer work, and so forth.*

	Never	Rarely	Sometimes	Frequently	Almost Always
1. I feel weak.	O_0	O_1	O_2	O_3	O_4
2. I feel fearful.	O_0	O_1	O_2	O_3	O_4
3. I have frequent arguments.	O_0	O_1	O_2	O_3	O_4
4. I feel hopeless about the future.	O_0	O_1	O_2	O_3	O_4
5. I am not working/studying as well as I used to.	O_0	O_1	O_2	O_3	O_4
6. I have trouble getting along with friends and close acquaintances.	O_0	O_1	O_2	O_3	O_4
7. I feel that something bad is going to happen.	O_0	O_1	O_2	O_3	O_4
8. I feel nervous.	O_0	O_1	O_2	O_3	O_4
9. I feel my love relationships are full and complete.	O_4	O_3	O_2	O_1	O_0
10. I have too many disagreements at work/school.	O_0	O_1	O_2	O_3	O_4
11. I feel something is wrong with my mind.	O_0	O_1	O_2	O_3	O_4
12. I feel blue.	O_0	O_1	O_2	O_3	O_4
13. I am satisfied with my relationships with others.	O_4	O_3	O_2	O_1	O_0

Part Two Instructions: *Please select the response that best describes your current situation.*

1. Currently, how upset have you been feeling?
    1. Not at all distressed
    2. Slightly distressed
    3. Moderately distressed
    4. Very distressed
    5. Extremely distressed

2. Currently, how energetic have you been feeling?
    1. Not at all energetic and healthy
    2. Slightly energetic and healthy
    3. Moderately energetic and healthy
    4. Very energetic and healthy
    5. Extremely energetic and healthy

3. Currently, how do you feel that you are getting along emotionally?
    1. Quite poorly; I can barely manage to deal with things
    2. Fairly poorly; life is pretty tough for me at times
    3. So-so; I manage to keep going with some effort
    4. Quite well; I have no important complaints
    5. Very well; much the way I would like my life to be

4. Currently, how satisfied have you been feeling with your life?
    1. Not at all satisfied
    2. Slightly satisfied
    3. Moderately satisfied
    4. Very satisfied
    5. Extremely satisfied

Part Three Instructions: *Please select the response that best describes your current situation.*

In the past two weeks, have you been feeling dissatisfied with life? _____yes$_1$
_____no$_0$

If yes, how much dissatisfaction have you been feeling?

0 1 2 3 4 5 6 7 8 9 10

none **very much**

Have you ever considered seeing a therapist because of this dissatisfaction? _____yes$_1$
_____no$_0$

If yes, how much dissatisfaction would you expect to feel by the end of therapy?

0 1 2 3 4 5 6 7 8 9 10

none **very much**

Now I want you to imagine that you are experiencing a sufficient amount of distress and dissatisfaction with life and are considering seeking therapy for this distress and dissatisfaction. If you are currently feeling a lot of distress, then you do not need to imagine, just focus on how you feel right now. However, if you are not currently experiencing a lot of distress, imagine that you are and that life is not going the way you want it to go. Imagine that you are thinking about talking to a therapist. Given any expectations that you have about therapy, please answer the following questions. Thank you.

	Not at all					Somewhat					Very much so
1. I expect my therapist will provide support.	0	1	2	3	4	5	6	7	8	9	10
2. Therapy will provide me with a better understanding of my problem.	0	1	2	3	4	5	6	7	8	9	10
3. I will be taught new skills in therapy.	0	1	2	3	4	5	6	7	8	9	10
4. In therapy I will learn to use skills that I already have to solve my problems.	0	1	2	3	4	5	6	7	8	9	10
5. My therapist will provide me feedback.	0	1	2	3	4	5	6	7	8	9	10
6. I will discover different ways to alter my behavior through participating in therapy.	0	1	2	3	4	5	6	7	8	9	10
7. I will be given new information about myself.	0	1	2	3	4	5	6	7	8	9	10
8. I will be able to work on my own goals in therapy.	0	1	2	3	4	5	6	7	8	9	10
9. I will be able to express my true thoughts and feelings.	0	1	2	3	4	5	6	7	8	9	10
10. I will feel comfortable with my therapist.	0	1	2	3	4	5	6	7	8	9	10
11. I will learn more about myself.	0	1	2	3	4	5	6	7	8	9	10
12. My therapist will be sincere.	0	1	2	3	4	5	6	7	8	9	10
13. My therapist will be interested in what I have to say.	0	1	2	3	4	5	6	7	8	9	10
14. My therapist will be sympathetic.	0	1	2	3	4	5	6	7	8	9	10
15. My therapist will be nurturing.	0	1	2	3	4	5	6	7	8	9	10
16. I will be willing to talk about myself, even if it is embarrassing.	0	1	2	3	4	5	6	7	8	9	10
17. I expect that I will come to every appointment.	0	1	2	3	4	5	6	7	8	9	10

18. I will be willing to trust my therapist.	0 1 2 3 4 5 6 7 8 9 10
19. Therapy will provide me with an increased level of self-respect.	0 1 2 3 4 5 6 7 8 9 10
20. After therapy, I will have the strength needed to avoid feelings of distress in the future.	0 1 2 3 4 5 6 7 8 9 10
21. I anticipate being a better person as a result of therapy.	0 1 2 3 4 5 6 7 8 9 10
22. After therapy, I will be a much more optimistic person.	0 1 2 3 4 5 6 7 8 9 10
23. I expect I will work hard to address my problems in therapy	0 1 2 3 4 5 6 7 8 9 10
24. I expect that I will tell my therapist if I have concerns about therapy.	0 1 2 3 4 5 6 7 8 9 10

25. At the end of the therapy period, how much improvement in your problem(s) do you *think* will occur?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

26. By the end of the therapy period, how much improvement in your problem(s) do you *feel* will occur?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

27. By the end of therapy period, how satisfied do you expect to be with the treatment results?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

28. Which of the following best describes your expectations about what is likely to happen as a result of your treatment (Circle only one number)?

0 – I expect to feel worse.
1
2 – I don't expect to feel any different.
3
4 – I expect to feel a little bit better.
5
6 – I expect to feel somewhat better.
7
8 – I expect to feel much better.
9
10– I expect to feel completely better.

Part Four Instructions: *Please answer the questions below using the following scale:*

< - - - - -1 - - - - - - 2 - - - - - - - 3 - - - - - - 4 - - - - - - 5 - - - - - - 6 - - - - - - 7 - - - - ->
Not at all Moderately Very Strongly

		1	2	3	4	5	6	7
1	How strongly do you expect your therapist to say whatever comes into his/her mind?							
2	How strongly do you expect to say whatever comes into your mind?							
3	How strongly do you expect to act as freely as you would with your best friend?							
4	How strongly do you expect to feel "free" and "open"?							
5	How strongly do you expect to watch your therapist's behavior for "helpful hints" as to desirable behavior during the hour?							
6	How strongly do you expect to feel like opening up without any help from your therapist?							
7	How strongly do you expect your therapist to be gentle in phrasing his/her opinions about an important topic?							
8	How strongly do you expect to behave in a spontaneous manner?							
9	How strongly do you expect to be concerned with the impression you make on your therapist?							
10	How strongly do you expect to please your therapist?							
11	How strongly do you expect to be comfortable in expressing your feelings toward the therapist?							
12	How strongly do you expect to feel as though you were "in charge" of the hour?							
13	How strongly do you expect to get definite advice from your therapist?							
14	How strongly do you expect your therapist to discover what's responsible for you current problems?							
15	How strongly do you expect your therapist to suggest what you should do about your problem?							
16	How strongly do you expect to be the one who begins the talking?							
17	How strongly do you expect your therapist to clearly announce his/her value judgments about your behavior?							
18	How strongly do you expect to be concerned with how you appear to your therapist?							
1	How strongly do you expect to "carry the ball"							

9	conversationally?							
20	How strongly do you expect to discuss whatever comes to mind without "pulling punches"?							
21	How strongly do you expect to seek "answers" from your therapist?							
22	How strongly do you expect to initiate the conversation?							
23	How strongly do you expect to lead the way in bringing up topics to talk about?							
24	How strongly do you expect your therapist to pick your ideas apart and criticize them?							

Part Five Instructions: *Please answer the questions below using the following scale:*

1 = Not at all True
2 = Hardly True
3 = Moderately True
4 = Exactly True

___ 1.	I can always manage to solve difficult problems if I try hard enough.
___ 2.	If someone opposes me, I can find the means and ways to get what I want.
___ 3.	It is easy for me to stick to my aims and accomplish my goals.
___ 4.	I am confident that I could deal efficiently with unexpected events.
___ 5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.
___ 6.	I can solve most problems if I invest the necessary effort.
___ 7.	I can remain calm when facing difficulties because I can rely on my coping abilities.
___ 8.	When I am confronted with a problem, I can usually find several solutions.
___ 9.	If I am in trouble, I can usually think of a solution.
___10.	I can usually handle whatever comes my way.

Part Six Instructions: *Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.*

1 = Definitely False 2 = Mostly False 3 = Mostly True 4 = Definitely True

_____ I can think of many ways to get out of a jam.
1.

_____ 2. I energetically pursue my goals.

_____ 3. I feel tired most of the time.

_____ 4. There are lots of ways around any problem.

_____ 5. I am easily downed in an argument.

_____ 6. I can think of many ways to get the things in life that are most important to me.

_____ 7. I worry about my health.

_____ 8. Even when others get discouraged, I know I can find a way to solve the problem.

_____ 9. My past experiences have prepared me well for my future.

_____ 10. I've been pretty successful in life.

_____ 11. I usually find myself worrying about something.

_____ 12. I meet the goals that I set for myself.

Part Seven Instructions: *Using the scale shown below, please select the number that best describes how you think about yourself* ***right now*** *and put that number in the blank before each sentence. Please take a few moments to focus on yourself and what is going on in your life at this moment. Once you have this "here and now" set, go ahead and answer each item according to the following scale:*

1 = Definitely False	2 = Mostly False	3 = Somewhat False	4 = Slightly False	5 = Slightly True	6 = Somewhat True	7 = Mostly True	8 = Definitely True

_____ 1. If I should find myself in a jam, I could think of many ways to get out of it.

_____ 2. At the present time, I am energetically pursuing my goals.

_____ 3. There are lots of ways around any problem that I am facing now.

_____ 4. Right now, I see myself as being pretty successful.

_____ 5. I can think of many ways to reach my current goals.

_____ 6. At this time, I am meeting the goals that I have set for myself.

Thank you for your participation in this study!

APPENDIX D

IRB protocol approval

Oklahoma State University Institutional Review Board

Date:	Monday, February 13, 2006
IRB Application No	AS0645
Proposal Title:	Expectancies Related to Psychotherapy
Reviewed and Processed as:	Expedited

Status Recommended by Reviewer(s): Approved Protocol Expires: 2/12/2007

Principal Investigator(s

Jennifer L. Callahan
215 N. Muray
Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

✘ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,

Sue C Jacobs

Sue C. Jacobs, Chair
Institutional Review Board

Oklahoma State University Institutional Review Board

Date	Friday, February 16, 2007	**Protocol Expires:**	**2/15/2008**
IRB Application No:	AS0645		
Proposal Title:	Expectancies Related to Psychotherapy		

Reviewed and Processed as: Expedited
Continuation

Status Recommended by Reviewer(s): **Approved**

Principal Investigator(s) :

Jennifer L. Callahan
215 N. Murray
Stillwater, OK 74078

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modifications to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

☑ The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

Signature : Sue C Jacobs

Sue C. Jacobs, Chair, Institutional Review Board

Friday, February 16, 2007
Date

VITA

Nicki Lynn Aubuchon-Endsley

Candidate for the Degree of

Master of Science

Thesis: THE MILWAKEE PSYCHOTHERAPY EXPECTATIONS QUESTIONNAIRE: A REPLICATION AND EXTENSION

Major Field: Psychology

Biographical:

Education: Graduated with a Bachelor of Science in Biology and Psychology from the University of Denver, Denver, Colorado in May 2006. Completed the Requirements for the Master of Science degree at Oklahoma State University in July 2007.

Professional Memberships: Currently a member of the American Psychological Association, the Oklahoma Psychological Association, the Southwestern Psychological Association, the Graduate and Professional Student Government Association, Phi Beta Kappa, Golden Key International Honor Society, Psi Chi, and Mortar Board Honor Society.

Research Experience: As an undergraduate at the University of Denver, I acquired approximately two years of research experience. One year included working in a Plant Evolution and Biodiversity Lab in which cataloguing and extraction of Eocene megafossils was the main focus. In addition, I worked in a Cognitive Neuroscience Lab examining the relationship between visuospatial processing and perceptual load with distractor faces. Lastly, I worked in a Neuropharmacology Lab mainly doing immunoflourescence microscopy to identify the mechanisms of protein degradation involving the proteasome, with the application of informing the processes of plaque formation in Alzheimer's Disease. As a graduate student at Oklahoma State University, I have been actively working on my thesis for slightly over a year, investigating the relationship between client expectations and therapeutic outcome.

Name: Nicki Lynn Aubuchon-Endsley Date of Degree: July, 2007

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: THE MILWAKEE PSYCHOTHERAPY EXPECTATIONS QUESTIONNAIRE: A REPLICATION AND EXTENSION

Pages in Study: 139 Candidate for the Degree of Master of Science

Major Field: Psychology

Scope and Method of Study: The present study was designed to examine the relationship between client expectations and treatment outcome. A new measure known as the Milwaukee Psychotherapy Expectations Questionnaire (M-PEQ) was dispersed to a normative sample to replicate the previous findings from the creators of the measure at the University of Wisconsin-Milwaukee (UWM) and to two clinical samples to extend the measure's usefulness within the clinical realm and examine differences in expectations between normative and clinical individuals. Data was gathered via an Expectations Related to Psychotherapy Questionnaire from (a) undergraduates registered with Experimetrix with no previous treatment exposure, (b) undergraduates registered with Experimetrix with previous treatment exposure, and (c) a help-seeking sample entering the Psychological Services Center at Oklahoma State University for an intake. In addition to two separate measures for the expectations construct, each participant was also asked about their perceived general self-efficacy, state hope, and subjective well-being to replicate aforementioned construct relationships and better define expectations.

Findings and Conclusions: Data from the undergraduate sample without previous treatment exposure (N = 521) replicated the M-PEQ factor structure, test-retest reliabilities, and internal consistencies, but not the M-PEQ total and subscale scores from undergraduates at UWM. In terms of the extension of this measure, the undergraduates with previous treatment exposure (N = 199) and PSC clinical samples (N = 69) had similar M-PEQ total and subscale scores. These scores were more similar to the original UWM normative undergraduate sample than the OSU normative undergraduate sample. In addition, Bayesian analyses displayed promising results for indicating those at risk of attrition, given their expectation scores on the M-PEQ. It seems that a five factor conceptualization may provide more clinical utility in identifying premature termination than the M-PEQ total score. In addition, there is a clear relationship between expectations and general self-efficacy, state hope, and subjective well-being, but these relationships seem to be affected by one's previous and current level of treatment exposure. Lastly, although previous research has suggested a gender difference in expectations of psychotherapy, there was only one type of gender difference in expectations noted within the M-PEQ.

ADVISER'S APPROVAL: Jennifer L. Callahan, PhD