THE IMPACT OF MOTIVATIONAL INTERVIEWING ON CLIENT RESPONSE TO THE TREATMENT RATIONALE WITHIN COGNITIVE BEHAVIOURAL THERAPY FOR GENERALIZED ANXIETY

ANGELA KERTES

A DISSERTATION SUBMITTED TO

THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

GRADUATE PROGRAM IN PSYCHOLOGY

YORK UNIVERSITY

TORONTO, ONTARIO

MARCH, 2015

Abstract

Motivational Interviewing (MI) has been applied to the treatment of anxiety disorders in an effort to bolster engagement with and response rates to Cognitive Behavioral Therapy (CBT). Although the addition of MI to CBT has been widely advocated, little is known about the impact of MI on therapy process in CBT. The current study used the Structural Analysis of Social Behaviour (SASB) coding system to discern interpersonal processes (i.e., therapist-client interactions) within therapy sessions from an existing dataset of a clinical trial of MI plus CBT for Generalized Anxiety Disorder (GAD). The outcome data from the trial demonstrated that the addition of MI significantly improved response to CBT, specifically for those of the highest worry severity at baseline.

The current study systematically examined the impact of having received MI (or not) on interpersonal processes following the presentation of the treatment rationale in the first session of CBT, a theoretically meaningful point in the CBT treatment process. In particular, SASB was employed to code 20 video-taped sessions for clients of high worry severity who either received MI as a pre-treatment to CBT (n=10) or who did not receive MI prior to CBT (n=10). MI has been found to decrease client resistance and increase client engagement and motivation for therapy in previous studies. Therefore, it was expected that those who received MI prior to CBT would be more receptive to the CBT treatment rationale and would engage in more affiliative interpersonal processes.

Findings revealed that, following the presentation of the CBT treatment rationale, clients who did not receive MI prior to CBT both separated from the therapist to a greater extent and deferred significantly more to the therapist than those who received MI prior to CBT. Moreover, these clients shifted the focus away from themselves and onto the therapist at significantly

higher rates than clients who received MI prior to CBT. Accordingly, therapists of clients who did not receive MI both shifted the focus away from the client and onto themselves at significantly higher rates than the MI group, and also engaged in more controlling behaviour than therapists of clients who received MI. Conversely, clients who received MI prior to CBT showed little evidence of negative interpersonal process in response to the presentation of the CBT rationale. These findings have significant implications for improving processes within CBT at theoretically meaningful moments in therapy.

Acknowledgements

I express my heartfelt gratitude to my graduate supervisor and mentor, Dr. Henny Westra. It was an honour to both work with and learn from her as a graduate student. I am so grateful for the guidance and support she provided along this long but fulfilling journey. Henny has had a profound influence on my research skills and development as a clinician. Because of her, I am proud of my academic roots, and in the next phase of my career I hope that I can pass on the research and clinical values that I have acquired.

I also thank my committee members, Dr. Alberta Pos and Dr. Karen Fergus, for their guidance and thoughtful feedback on my dissertation. It has been a pleasure to have them on my graduate committee. My thanks also go to Dr. David Reid for taking the time to be on my committee and for providing support throughout my graduate training at York.

A special thanks to Dr. Michael Constantino, not only for agreeing to be an external committee member, but also for providing exceptional training in the SASB methodology. I appreciate his willingness to help shape and guide the direction of this work with his careful and instructive comments. This study would not have been completed in a timely manner without his assistance and tremendous encouragement.

In addition, thanks to members of the Westra lab, especially Adi Aviram and Mariyam Ahmed, for their help during the coding process. I feel very lucky to be part of such a magnificent lab. Thank you all for making the lab such a warm and inviting place to work in and to collaborate.

I would not have been able to meet my goals without the love and support of my family. In particular, I may not have pursued this path if it were not for my parents, Helen and Joe, who nurtured my creativity, interest in others, and pursuit of science, all of which find their place in

this dissertation. Thanks to my sister Natalie for her support and for always being there for me. And finally, thank you to my husband Jordan, who has encouraged my passion for psychology and has always believed in me.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

The Impact of Motivational Interviewing on Client Response to the Treatment Rationale within Cognitive Behavioral Therapy for Generalized Anxiety

Cognitive Behavioural Therapy (CBT) has a well-documented efficacy for anxiety disorders (Barlow, 2002; Barlow, 2008; Covin, Ouimet, Seeds & Dozois 2008; Westra & Stewart, 1998). However, a substantial proportion of CBT clients either fail to respond to treatment, respond only partially, drop out prematurely, or relapse at follow-up (Hunot, Churchill, Teixeira & Silva de Lima, 2007; Westen & Morrisson, 2001). Limited treatment response in CBT is often attributed to a lack of client motivation, which may lead to less than optimal client engagement or 'resistance' in therapy (Antony, Roth Ledley, & Heimberg, 2005; Arkowitz, Westra, Miller, & Rollnick, 2008; Leahy, 2003; McCabe & Antony, 2005; Sanderson & Bruce, 2007; Sookman & Steketee, 2007). As a result, recommendations and efforts to integrate or add motivational enhancement methods to CBT for anxiety, such as Motivational Interviewing (MI), are increasingly emerging (e.g., Westra & Arkowitz, 2010; Antony et al., 2005; Westra, 2012; Simpson, 2011; Simpson, Zuckoff, Page, Franklin, et al, 2008; Slagle & Gray, 2007). While initial studies are yielding promising findings for enhancing treatment outcomes for anxiety (see Westra, Aviram, & Doell, 2011 for a review), little is known about how adding/integrating motivational enhancement methods impacts process in CBT.

In an effort to address this gap, the current study compared interpersonal processes, early in therapy, within therapy dyads with clients who either did or did not receive MI prior to CBT for Generalized Anxiety Disorder (GAD). Specifically, the current study utilized an interpersonal process coding system, the Structural Analysis of Social Behavior (SASB; Benjamin, 1974) to assess therapist and client in-session behaviors. Interpersonal processes were examined within a particular theoretically meaningful event within the CBT session: following

the therapists' presentation of the treatment rationale. Previous studies have consistently demonstrated that receptivity to a treatment rationale is a common factor across psychotherapies and has been found to be significantly related to positive outcome (e.g., Frank, 1961, 1971; Kanter et al., 2002). Given that the literature suggests that MI has been found to decrease client resistance and increase client engagement/motivation for therapy (Arkowitz, Westra, Miller, & Rollnick, 2008; Aviram & Westra, 2011), it was expected that those who received MI prior to CBT would be more receptive to the CBT treatment rationale and would engage in more affiliative interpersonal processes.

To contextualize the study, I briefly discuss GAD and CBT for treating this disorder. Next, I review literature on the efficacy of CBT for GAD and the need to improve treatment response rates for GAD. This is followed by a discussion of MI and the existing studies that have attempted to add or integrate MI with CBT for anxiety. Given the need to study process during theoretically meaningful moments in treatment, the significance of the treatment rationale in CBT is then explored. Next, the SASB model is presented and studies using SASB to examine interpersonal process within CBT are discussed. The larger randomized clinical trial (RCT) from which the current data were extracted is then described. Finally, an overview of the current study is offered.

GAD

GAD is primarily characterized by excessive and chronic worry regarding a number of events, with the focus of worry and anxiety often shifting from one concern to another at any time and over the course of the disorder. Clients with GAD identify their worry as "excessive" and report subjective distress and impairment in functioning due to constant and chronic worry (American Psychiatric Association, 2000; 2013).

GAD is distinguished from non-pathological anxiety such that worry in GAD is experienced as excessive and significantly interferes with functioning. Conversely, non-pathological worry is viewed as more manageable and can be deferred when more important issues arise. In addition, pathological worry in GAD frequently occurs without objective cause and is generally more pronounced, chronic, pervasive, and distressing. Non-pathological worry is less likely to be associated with physiological symptoms, whereas those with GAD often describe experiencing physiological symptoms when anxious (e.g., feelings of restlessness, feeling keyed-up/on edge, easily fatigued, or muscle tension, etc.; American Psychiatric Association, 2000; 2013).

Although individuals with GAD often report having felt anxious for as long as they can remember, the median age of onset is 30 years of age (American Psychiatric Association, 2000; 2013), notably later than that of other anxiety disorders. This may be because early generalized symptoms of anxiety, characteristic of GAD, may be viewed as part of an anxious temperament rather than pathological worry and therefore go untreated for longer. The symptoms of GAD tend to be chronic and fluctuate across the lifespan, with rates of full remission being low. The primary difference in the presentation of GAD across age groups is the content of worry. For example, children may tend to worry more about school while adults may worry about the health or well being of family members (American Psychiatric Association, 2000; 2013).

There are many functional consequences of GAD. GAD has been linked to significant disability and distress, independent of comorbid disorders. Excessive worry has been found to impair one's ability to complete tasks efficiently because worrying takes significant time and energy. The physiological symptoms that accompany GAD (e.g., muscle tension, feeling keyed up/on edge, fatigue, impaired concentration, and disrupted sleep) further contribute to functional

impairment and distress (American Psychiatric Association, 2000; 2013).

CBT for GAD

There are a number of well-known theoretical and empirical approaches to understanding and treating GAD. CBT has drawn from several of these models including; cognitive avoidance theories, intolerance of uncertainty theory, and metacognitive theories. The following is a discussion of these three theories and their relationship to CBT for GAD.

Avoidance Theory. The process of worrying has been conceptualized as a type of cognitive avoidance of perceived threat. Reducing threat for the sake of survival is imperative and cognitive activity has been found to be one way to alleviate such perceived threat (Borkovec, Alcaine, & Behar, 2004). Studies have demonstrated that the suppression of the sympathetic nervous system (i.e., fight or flight response) and the absence of predicted feared events negatively reinforces worry (Borkovec, Alcaine, & Behar, 2004; Borkovec, Hazlett-Stevens, & Diaz, 1999; Borkovec, Lyonfields, Wiser, & Diehl, 1993). In addition, because worry is often superficial in content, worry may reflect avoidance of deeper and more distressing thoughts and emotions stemming from past trauma (Beck & Emery, 1985; Roemer, Molina, Litz, & Borkovec, 1997), maladaptive attachment experiences from childhood (Borkovec, Alcaine, & Behar, 2004; Cassidy, 1995), and interpersonal difficulties (Borkovec, Newman, Pincus, & Lytle, 2002; Roemer, Molina, Litz, & Borkovec, 1997). A broader implication of worry as an avoidance strategy is that, much like other forms of avoidance, worry does not allow for optimal emotional processing, thereby preventing the reduction of distressing symptoms associated with worry. As a result, worry as an avoidance strategy may actually paradoxically work to strengthen the significance of what is being avoided (e.g., ‘this topic must be dangerous if I am worrying about it so much’; Borkovec, Alcaine, & Behar, 2004).

Attempts to gain control over uncontrollable worry feels impossible for individuals struggling with GAD. According to avoidance theory, the uncontrollable nature of worry in GAD may be due to worry being strongly reinforced by avoidance. Certain cognitive behavioural treatment interventions have been specifically developed to address the central concepts of avoidance theory in GAD. These include: "worry time" (establishing a specific time and place for worrying); and the use of imagery in both relaxation and exposure (Behar, et al., 2009; Behar & Borkovec, 2010; Borkovec, Alcaine, & Behar, 2004). Each of these is elaborated briefly below.

Since individuals with GAD tend to worry at any time or in any given place, worry becomes associated with (and can be triggered by) countless times and places. Borkovec and colleagues (2004) suggest that, in order to gain some control over and reduce worry, individuals implement a specific "worry period", so that over time they gradually restrict the time and place in which they allow themselves to worry. Specifically, clients are asked to create a worry period that occurs at the same time and place each day. This exercise also includes the self-monitoring of worry, determining when it is triggered, and postponing worry to the designated worry period (Borkovec, Alcaine, & Behar, 2004).

Avoidance theorists also recommend the use of imagery in relaxation and exposure. Given that clients with GAD often avoid fearful negative images, clients are asked to repeatedly imagine anxiety-provoking events until they experience anxiety and negative emotions. At the onset of such emotions, clients are asked to imagine a relaxed version of themselves in the imagined event, to practice relaxation, and to think of previously identified alternative perspectives (determined earlier in therapy). This strategy both exposes the individual to anxiety cues and also allows for the rehearsal of somatic and cognitive coping (Borkovec, Alcaine, &

Behar, 2004).

Intolerance of Uncertainty Theory. It has been theorized that intolerance of uncertainty is another process that may maintain and contribute to the development of GAD. When compared to other anxiety disorders, intolerance of uncertainty may be a cognitive process that is specific to GAD and worry (Dugas, Buhr, & Ladouceur, 2004; Dugas, Marchand, & Ladouceur, 2005; Ladouceur, et al., 1999). In fact, Dugas, Gagnon, Ladouceur, and Freeston (1998) found that those who met criteria for GAD were significantly more intolerant of uncertainty than non-clinical controls.

Intolerance of uncertainty is the tendency to respond negatively to uncertain future situations and events. Those who struggle with GAD often find tolerating uncertainty distressing and have difficulty functioning in uncertain or ambiguous situations (Dugas & Koerner, 2005). Moreover, in this context, worry is often perceived by the worrier as effective in terms of coping with feared events or preventing negative events from occurring, both reducing uncertainty (Behar, et al., 2009). Difficulty tolerating uncertainty has been shown to reduce the ability to employ the cognitive and emotional resources required for problem solving (Davey, Jubb, & Cameron, 1996; Dugas, Buhr, & Ladouceur, 2004; Dugas et al., 1998). As a result, Koerner and Dugas (2006) suggest that individuals who are intolerant of uncertainly will lack confidence in their ability to problem solve, tend to perceive problems as threatening, become easily frustrated when attempting to problem solve, and are pessimistic about potential outcomes of problem-solving attempts; all of which serve to further exacerbate worry and anxiety. Decreased tolerance of uncertainty has been found to lead individuals with GAD to focus on unlikely negative outcomes and overestimate the cost and probability of negative experiences occurring (Dugas, Buhr, & Ladouceur, 2004). It has been noted that intolerance of uncertainty may also

trigger the cognitive avoidance process (as described above) and therefore promote the use of cognitive strategies (such as, thought replacement, distraction, thought suppression) that enable avoidance of arousal and threatening images (Behar, et al., 2009; Dugas et al., 1998; Dugas & Koerner, 2005).

Cognitive behavioural interventions based on the intolerance of uncertainty model centre around increasing tolerance for, and acceptance of, uncertainty (Behar, et al., 2009; Dugas, Buhr, & Ladouceur, 2004; Robichaud & Dugas, 2006). These strategies focus on helping clients to recognize, accept, and develop adaptive ways of dealing with inevitable uncertainty. This is accomplished first by providing psychoeducation and by teaching individuals with GAD to discriminate between worries about current problems versus worries about potential future problems. Clients are then taught to practice different strategies when each type of worry arises. In particular, problem solving techniques are applied to worries about current problems, and cognitive exposure strategies are used for worries about future potential problems, with each of these strategies resulting in an increased tolerance for uncertainty (Dugas, Buhr, & Ladouceur, 2004).

Given the intolerance of uncertainty model's conceptualization that individuals with GAD have difficulties with problem solving, one treatment component involves teaching clients how to more effectively distinguish between problematic situations and emotions stemming from a situation, normalizing that problems are a part of life, and helping client's to view problems as opportunities rather than dangerous threats (Robichaud & Dugas, 2006). These problem-solving strategies aim to help clients to problem-solve despite not knowing what the outcome will be, thereby further targeting intolerance of uncertainty (Dugas, Buhr, & Ladouceur, 2004).

In addition, because the tolerance of uncertainty model suggests that intolerance of uncertainty triggers cognitive avoidance arising from arousal and threatening images (as described above). Cognitive exposure interventions are employed to target potential future worries rather than current worries. This is because future worries are often more challenging to target using problem solving strategies and the content of future worries frequently reflect events that have a highly remote chance of occurring (Behar, et al., 2009; Robichaud & Dugas, 2006). During exposures clients are asked to describe the worrisome image in detail and expose themselves to this image repeatedly. This cognitive exposure allows clients to increase tolerance of uncertainty by altering the threatening meaning they ascribe to potential future events (Dugas, Buhr, & Ladouceur, 2004).

Metacognitive Theory. According to this model, metacognitive beliefs are fundamental to the development and maintenance of worry. Because worry in GAD is often employed as a chief way of coping with imagined threat, it is also associated with the activation of positive beliefs about worry that ultimately reinforce and direct the process of future worrying. While positive beliefs about worry, such as "worry helps me cope" or "worry helps me prepare", may not be exclusively present in pathological worriers, in GAD they may be seen as markers for the use of worry as a primary coping strategy. Moreover, it has been suggested that these positive beliefs are what lead to the subsequent formation of negative beliefs about worry, which is essential to the development of pathological worry in this model (Wells, 2004).

Specifically, in his metacognitive theory of worry, Wells (1997, 2004, 2005) proposes that there are two types of worry. Type 1 worry includes positive beliefs about worry triggered by an initial anxiety-provoking experience of internal or external cues. These events may be comprised of physical sensations, emotions, thoughts, or external situations in the environment.

Type 1 worry initially produces anxiety but may decrease if the event causing the worry has been resolved. However, if the initial worry response is itself interpreted negatively (e.g., "I am not coping well"), this increases the demand for ongoing worry. Thus, it is theorized that negative beliefs about worry are triggered by the experience of Type 1 worry (Behar, et al., 2009; Wells, 1995; Wells, 2004). As such, those with GAD tend to worry about experiencing their Type 1 worry and it is this "meta-worry" (or "worry about worry") that comprises Type 2 worry (Behar, et al., 2009; Wells, 2004). Wells (2004; 2005) suggests that it is the negative beliefs about worry and Type 2 worry that differentiates those with GAD from non-clinical worriers. Examples of negative beliefs about worry and meta-worry include: "I'm worrying again and it's going to get worse", "I'm losing control", "my worry is out of control", or "worrying could make me go crazy", to name a few. In order to avoid meta-worry or Type 2 worry, individuals often attempt to control thoughts and feelings through reassurance-seeking, checking behaviour, suppression of thoughts, distraction, or avoidance of situations that may cause worry (Wells, 2004). Yet these coping strategies are often ineffective, which reinforces the belief that worry is uncontrollable and dangerous. Also these unsuccessful attempts at coping do not allow for disconfirming experiences that suggest worry is not dangerous (Behar, et al., 2009; Wells, 2004).

Cognitive behavioural treatment strategies related to metacognitive theory revolve around reducing meta-worry or Type 2 worry (Behar, et al., 2009; Wells, 2006). Specifically, the client is encouraged to adopt alternative coping strategies for managing worry. A focus of treatment is on evaluating cognitions related to both worry being viewed as having a positive impact and the negative beliefs about worry as being uncontrollable and threatening. Wells (2006) suggests that specific treatment interventions include case formulation and socialization

to the model (Wells, 2006).

At the outset of treatment, client and therapist explore recent worry episodes with the intention of identifying Type 1 and Type 2 worries and creating an individualized case conceptualization. According to Wells (2004; 2006), case formulation also involves questioning the cognitions triggering the individual's episode of worry, the client's personal reaction to the worry episode, and the client's efforts to suppress or control the worry. This helps to understand worry triggers and any positive and negative beliefs about worry that serve to maintain the worry process. In other words, helping the client to understand how their excessive worry is maintained by various problematic beliefs about thinking (i.e., meta-worry) is essential to this phase of treatment (Wells, 2004).

Socialization to the metacognitive model includes psychoeducation about the goals of the metacognitive approach with an emphasis on the importance of altering beliefs about worry (rather than reducing the worry itself). This phase typically involves behavioural experiments that are focused on testing out the role that unhelpful thought control strategies play in the maintenance of worry (e.g., clients may be asked to deliberately suppress their thoughts in order to demonstrate the ineffectiveness of this strategy; Wells, 2004; 2006).

Efficacy of CBT for GAD

Given that worry is a common attribute among most anxiety disorders, our knowledge of GAD and the continued study of GAD may have implications for our understanding of other anxiety disorders (Barlow, 2002). Yet, unlike other anxiety disorders in which substantial developments in research are evident, GAD continues to be understudied, misunderstood, and difficult to treat (Barlow, 2002; Borkovec & Ruscio, 2001; Dugas, 2000; Heimberg, Turk, & Mennin, 2004; Persons, Davidson & Tomkins, 2001).

Several meta-analytic reviews have been published on the efficacy of CBT for GAD, summarizing the outcome literature. In an early meta-analysis, Gould et al. (1997) included outcome studies that utilized either cognitive or behavioural strategies, but not necessarily both. Findings indicated that when compared to clinical controls, CBT for GAD yielded an overall effect size of 0.70. Gould and colleagues have since updated this meta-analysis (see Gould et al., 2004), and maintain that CBT is an effective treatment for reducing GAD symptoms at both short and long-term follow-up. Borkovec and Ruscio's (2001) meta-analysis included studies that used both cognitive and behavioural interventions in the treatment of GAD. Within-group effect sizes showed that CBT was effective in reducing anxiety symptoms at both post-treatment and follow-up (which averaged 9 months). As such, much like Gould et al. (1997, 2004), the authors' findings led them to deduce that CBT is an effective treatment for GAD.

Fisher and Durham (1999) reviewed 6 randomized control trails examining CBT for GAD and analyzed clinically significant change across studies. Findings demonstrated that CBT and applied relaxation treatment conditions showed promising overall recovery rates of 50-60% at 6-month follow-up. Moreover, in their meta-analysis assessing the effectiveness of CBT for GAD, Covin and colleagues (2008) investigated whether CBT works to effectively reduce pathological worry in GAD, estimated the effect sizes for such findings, and examined the stability of any treatment gains. Findings showed that CBT was an effective treatment for reducing pathological worry among GAD samples with a large overall effect size. Notably, results demonstrated that CBT's effectiveness was moderated by age of the client, with younger adults benefiting more from CBT at post-treatment when compared to older adult samples. Results also showed that treatment gains were maintained for up to a year.

In their recent meta-analysis, Cuijpers and colleagues (2014) included 41 studies in their

analysis, investigating the effects of psychological treatments for GAD. The majority of studies included in the analysis assessed the effects of CBT for GAD, with most studies utilizing a waitlist control. Findings indicated that CBT was more effective in the longer term than applied relaxation (though both were equally effective short term). As such, the authors suggest that CBT is preferable to applied relaxation as a first line treatment for GAD.

More broadly, Norton and Price (2007) conducted a meta-analysis of CBT outcome studies across anxiety disorders, including 108 randomized controlled trials in their analyses. Results indicated that cognitive interventions and exposure-based strategies on their own, together, or combined with relaxation training, were found to be effective overall, across anxiety disorders. Though few differences emerged when comparing outcomes across anxiety diagnoses, GAD and posttraumatic stress disorder outcomes were found to be greater than those for social anxiety disorder.

The Need to Improve Response Rates in CBT

Despite evidence supporting the efficacy of CBT for GAD, there is still significant room to improve response rates to CBT. Westen and Morrison (2001) conducted a meta-analysis examining the effectiveness of empirically supported treatments for panic, depression, and GAD. Though CBT did produce initial positive results (i.e., moderate to strong effect sizes post-treatment), findings suggest that the majority of patients with depression or GAD did not maintain treatment gains over 1 to 2 years, showing clinically significant levels of symptomatology following treatment.

In addition, the length of therapy may not have an impact on relapse at follow-up. Durham and colleagues (2004) examined whether an increased number of CBT sessions improves outcome for those with a poor prognosis. Clients of good prognosis GAD (i.e., low

complexity and low severity) received five sessions of CBT, and clients of poor prognosis GAD (i.e., high complexity and high severity) received either 9 or 15 sessions of CBT. Findings demonstrated that increasing the number of sessions did not improve outcome for poor prognosis clients, with 60% of these individuals remaining symptomatic at 6 month follow-up. In addition, merely 12% of good prognosis clients remained symptomatic at 6 month follow-up after having received five sessions of CBT. The authors argue that client characteristics have a more significant influence on outcome than do the number of CBT sessions.

In their review of psychological therapies for GAD, Hunot at al. (2007) reviewed 25 randomized controlled studies and included 22 in their meta-analysis. Results demonstrated that less than 50% of clients from studies examined in their review showed clinically significant response to CBT, and as such, the authors conclude that GAD is a disorder that is difficult to treat. In addition, individuals enrolled in group CBT and older adults were most likely to drop out of therapy (Hunot et al., 2007). Similarly, though Covin et al. (2008; see above) concluded in their meta-analysis that CBT was an effective treatment for reducing pathological worry among GAD samples, results also showed that younger adults benefited more from CBT at post-treatment than older adults. These findings may be reflective of the increased chronicity of the disorder in older adults. Regardless, CBT may not be beneficial for all clients. Moreover, among the anxiety disorders, GAD is regarded as the disorder least responsive to CBT (Newman, Castonguay, Borkovec, Fisher, & Nordberg, 2008; Newman & Erickson, 2010). Newman et al. (2008) note that although CBT is effective, when compared to other anxiety disorders, CBT has the lowest average effect size for GAD.

The Need to Improve Engagement with CBT. It is widely recognized that there is considerable room to increase engagement within CBT. In fact, as many as two-thirds of clients

seeking help for mental health concerns are either in the precontemplation or the contemplation stage of readiness to change (i.e., not yet considering change, or considering change but still ambivalent, respectively). Within a sample of 299 outpatients in a mental health setting, O'Hare (1996) examined the relationship between client-rated distress and readiness for change across various domains. Findings indicated that there was a significant relationship between client-rated distress and readiness for change for psychophysiological and family pathology-related problems. As such, most clients entering treatment are likely not ready to use action-oriented interventions (O'Hare, 1996; Westra, 2012).

The literature suggests that those who struggle with anxiety often enter treatment reluctantly or with reservations about engaging with the tasks of therapy and with the therapeutic process (e.g., Dozois, Westra, Collins, Fung, & Garry, 2004; Simpson, Zukoff, Page, Franklin, & Foa, 2008; Westra, 2012). In an early study, Kushner and Sher (1989) examined the association between treatment-related fear and mental health treatment history and/or current treatment status. Results suggest that greater treatment-related fear was associated with a history of under-using services. Given that treatment fears are associated with treatment-seeking decisions, treatment fears likely play a role in treatment compliance and motivation for change (Kushner & Sher, 1989; Westra, 2012).

Fittingly, interventions that require clients to take active steps toward change entail high levels of motivation. Given that a large number of clients do not engage with or respond to treatment (Westen & Morrison, 2001), ambivalence about changing may be partially responsible for reduced engagement in therapy and limited response to action-oriented treatment (Westra, 2012). Sanderson and Bruce (2007) asked expert cognitive behavioural therapists what they have found to contribute to poor treatment response and what strategies they use to manage these

difficulties. Ten factors associated with suboptimal responding emerged, with the top two ranked as being "lack of engagement in behavioural experiments" and "noncompliance" (Sanderson & Bruce, 2007). In addition, resistance to the direction set by the therapist has been found to be a strong predictor of therapy outcome and engagement with therapeutic tasks in CBT (Aviram & Westra, 2011; Beutler, Harwood, Michelson, Song, & Holman, 2011; Jungbluth & Shirk, 2009).

In fact, a great deal of what is considered resistance or noncompliance in psychotherapy may be a reflection of ambivalence about change (Arkowitz, 2002; Engle & Arkowitz, 2006; Westra, 2012). For example, in the area of GAD, researchers have identified conflicting beliefs about worry. Thus, although GAD clients often see their worry as a problem, they also hold *positive* beliefs about worry (e.g., 'worry is motivating') and therefore can often be ambivalent about relinquishing their worry (Borkovec & Roemer, 1995; Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994; Westra & Arkowitz, 2010).

Penney, Mazmanian, and Rudanycz (2013) recently found that both positive and negative beliefs about worry were significantly associated with GAD symptomatology and trait worry. Moreover, the following positive beliefs about worry have been described in the literature: worry prevents or reduces the likelihood of negative outcomes from occurring, prepares one for the worst, is distracting from more emotional topics, is motivating, and helps with problem-solving (Borkovec, Hazlett-Stevens, & Diaz, 1999; Borkovec & Roemer, 1995). This is consistent with the avoidance model of worry outlined earlier, within which worry has been found to have important avoidance and self-reinforcing characteristics, protecting the individual from experiencing fearful emotional arousal (Borkovec, 1994).

In the intolerance of uncertainty model of CBT for GAD (outlined earlier), Dugas and Koerner (2005) also discuss positive beliefs about worry. They argue that individuals with GAD

find uncertainty threatening which triggers chronic worry. Such individuals often believe that worry will help to either increase their ability to cope with feared events or even prevent feared events from happening at all, which both serve to maintain GAD. Positive beliefs about worry also figure prominently in Wells' (1997, 2004, 2005) metacognitive model of GAD. When worry is triggered, positive beliefs about the utility of worry are then activated. However, it is also suggested that 'worry about worry' or metaworry plays a vital role in the development and maintenance of GAD.

Given that worriers hold both positive and negative beliefs about their worry and therefore have mixed or contradictory feelings about worry, change may be more challenging for the individual who is conflicted about worry. Therefore, if underlying ambivalence is not addressed in therapy, then conceivably, clients may exhibit low motivation for change and therefore be more resistant to treatment.

Motivational Interviewing

Models that address ambivalence about change may hold promise for increasing engagement with CBT for GAD. Motivational Interviewing (MI) is one way to target this ambivalence in therapy and enhance motivation for change.

What is MI? Motivational interviewing is based on the client-centered approach of Carl Rogers (1956), where the client's internal frame of reference is prioritized, and a particular emphasis is placed on enhancing intrinsic motivation for change and treatment (Miller & Rollnick, 2002). In MI, resistance to change is not viewed as an obstacle to successful treatment; rather, ambivalence about change is regarded as a normal and expected response to the prospect of change (i.e., this internal conflict is considered normal). As such, MI is an approach for eliciting behaviour change by helping clients explore and resolve their ambivalence about

change. In doing so, MI attempts to draw on inherent motivational processes within the individual that enable the change process (Miller & Rollnick, 2002; 2009; Westra, 2012). Motivational interviewing not only recognizes that individuals who seek therapy may be ambivalent about change, but also presumes that motivation may increase and decrease over the course of therapy. As such, therapist attunement to this variability is essential for evoking change (Westra, 2012). This psychotherapeutic approach differs from therapist-driven ways of facilitating change. Given that change may be incongruent with the client's level of readiness in a given moment, MI does not force change. Instead, MI reinforces change in a person-centered fashion, corresponding with the client's wishes, values, and readiness (Miller & Rollnick, 2002; 2009).

In addition, 'spirit' is emphasized in MI, which includes evocation or drawing out the client's notions about change, collaboration between client and therapist, and preserving client autonomy (Miller & Rollnick, 2002; Westra, 2012). Unlike other treatment models such as CBT, that underscore the therapist as "expert", in MI the authority for change lies with the client. Accordingly, it is ultimately up to the individual to make change occur.

Four basic principles guide the 'spirit' and practice of MI: expressing empathy, developing discrepancy, rolling with resistance, and fostering self-efficacy (Miller & Rollnick, 2002; Westra, 2012). First, the expression of empathy allows clients to feel heard and understood and is a fundamental characteristic of MI. In MI, an empathic style is employed from the beginning of treatment and is maintained over the course of therapy. An empathic therapist attempts to see the world as the client experiences it. Specifically, through skilled active and reflective listening, the therapist seeks to understand the client's frame of reference without judgement, criticism, or blame. As a result, individuals are more likely to engage in the

exploration of deeper experiences (Arkowitz et al., 2008; Miller & Rollnick, 2002; Westra, 2012).

Second, MI is intentionally directive toward the resolution of client ambivalence about change. The goal is to get clients unstuck by helping individuals move past their ambivalence. In particular, developing discrepancy involves helping clients explore the discrepancies between their current life circumstances/behaviour and their values/future goals or where they want to be. It is theorized that when individuals become aware that current thoughts/behaviours are at odds with core values or interfere with achieving self-identified goals, motivation to change is more likely to increase. Therefore, the therapist both creates and amplifies discrepancy (rooted in the client's perspective) between current behaviour and the individual's values or goals. Building discrepancy through the exploration of ambivalence ultimately leads to the client articulating arguments for change (Arkowitz et al., 2008; Miller & Rollnick, 2002; Westra, 2012).

Third, from an MI perspective, resistance is viewed as an expression of ambivalence about change. As such, client behaviour that suggests resistance goes unchallenged by the therapist and instead is met with both acceptance and empathy (i.e., the therapist is 'rolling with resistance'). In fact, any resistance to change is considered to be a valued source of information about the client's experience. As such, the MI therapist sees resistance as ambivalence arising and attempts to genuinely understand any objection to change as the client sees it. When resistance arises, this is a marker for the therapist to respond differently and roll with the client's experience. The therapist avoids arguing for change and views the client as the primary resource for finding answers (Arkowitz, 2002; Engle & Arkowitz, 2006; Miller & Rollnick, 2002; Westra, 2012).

Finally, fostering self-efficacy involves increasing the client's belief in their own ability

to accomplish a given task. Individuals often enter therapy having previously been unable to succeed or maintain desired change, which produces reservations about their capacity to change. Thus, tapping into the client's self-efficacy or belief that change is possible is required in order to make difficult life changes. Miller and Rollnick (2002) suggest that self-efficacy is an essential component in producing motivation for change and is also a good predictor of good outcome in therapy. If the client does not believe he or she is capable of change, then little effort is likely to be made on the part of the client in therapy. Hence, putting the personal responsibility for change on the client by conveying the message that they are responsible and capable of deciding on/directing their own life changes is a key principle in MI (Arkowitz et al., 2008; Miller & Rollnick, 2002; Westra, 2012).

Empirical Support for MI. Originally developed in the addictions domain, there is substantial empirical support for the use of MI in the treatment of alcohol and drug addictions (Burke, Arkowitz, & Menchola, 2003; Hettema, Steele, & Miller, 2005). There is also evidence to suggest that there is value in using MI either integrated with CBT (i.e., a shift to MI when ambivalence or resistance arises) or in conjunction with CBT (e.g., as a pre-treatment) in the treatment of other mental health problems (Arkowitz, Westra, Miller, & Rollnick, 2008; Westra, 2012). For example, in their recent review of the literature, Westra, Aviram, and Doell (2011) explored the use of MI and related motivational enhancement therapies in the treatment of anxiety, depression, eating disorders, concurrent psychosis and substance use disorders. The authors found that motivational interventions have been used most often as either a pre-treatment to other therapies or integrated into assessment practices. Across clinical populations, current evidence generally supports the addition of MI to existing psychotherapies in order to increase engagement with treatment and improve outcomes. Westra and colleagues (2011) suggest that

this finding is particularly important given that many of the studies included in their review focus on severe and treatment-resistant populations.

Simpson, Zuckoff, Page, Franklin, and Foa (2008) examined the use of MI in combination with exposure and response prevention for obsessive compulsive disorder (OCD). Treatment consisted of three motivational enhancement sessions followed by 15 exposure and response prevention sessions where MI was integrated as needed. Six patients with moderate to severe OCD underwent treatment with five showing a decrease in their baseline OCD symptoms and an increase in their quality of life. The authors argue that integrating MI with standard exposure and response prevention may hold promise in both increasing and maintaining engagement with treatment for OCD and improving outcomes. Also, these findings have been replicated elsewhere in the area of OCD (see Merlo, Storch, Lehmkuhl, Jacob, et al., 2010; Tolin, & Maltby, 2008).

Moreover, Buckner, Roth, Heimberg, and Schmidt (2008) conducted a case study involving an individual with social anxiety disorder and a comorbid alcohol use disorder. Given the evidence supporting the efficacy of MI for alcohol use and CBT for social anxiety, Buckner and colleagues (2008) successfully combined the two in this case study. Findings suggest that following 19 sessions of MI combined with CBT for social anxiety disorder, the patient was in remission for both disorders and continued to maintain gains at 6-month follow-up. Similarly, in their RCT, Buckner and Schmidt (2009) added three-sessions of a motivational enhancement therapy to CBT in order to examine whether motivational interventions increase the utilization of CBT among socially anxious clients. Twenty-seven socially anxious individuals who were not seeking treatment were randomly assigned either to the motivational enhancement therapy condition or to the control condition. Seven of the 12 clients who received motivational

enhancement therapy attended the first CBT session, while only two of 15 control participants attended CBT. In addition, willingness to schedule a CBT appointment increased significantly for individuals who received the motivational intervention. Findings advocate for the use of motivational enhancement as a means of increasing the utilization of CBT for social anxiety.

In the area of post-traumatic stress disorder (PTSD), veterans participating in a year-long combat-related PTSD program were randomly assigned to receive either 4 motivational enhancement groups prior to participating in the regular trauma recovery program, or 4 psychoeducational groups for PTSD prior to participating in the trauma program. Results demonstrated that the motivational enhancement group participants showed greater treatment adherence, readiness to change, perceived treatment relevance, and PTSD program attendance (Murphy, Thompson, Murray, Rainey, & Uddo, 2009). Moreover, in a study of veteran attitudes toward the need to change, Murphy (2008) found that those who participated in motivational enhancement groups showed significantly increased scores on readiness to change items when compared to controls.

In addition, there is reliable evidence that the efficacy of psychotherapy is associated with less resistance in therapy (Aviram & Westra, 2011; Beutler, Moleiro, & Talebi, 2002; Westra, 2011). As such, MI may hold promise in decreasing resistance in therapy. In the area of GAD, Aviram and Westra (2011) examined observed resistance and homework compliance in CBT among those who either did or did not receive MI prior to CBT for high severity GAD. Findings demonstrated that the MI group showed less resistance early in CBT compared to those who received only CBT. Observed resistance was found to mediate the relationship between treatment group and decreased worry. Notably, results suggest that MI enhanced outcomes when added to CBT for GAD by reducing client resistance and increasing client engagement with

treatment (Aviram & Westra, 2011).

Furthermore, Kertes, Westra and Angus (2011) demonstrated that clients of high worry severity who received MI prior to CBT described the CBT therapist as collaborative and described themselves as playing an active role in therapy. Conversely, clients who received only CBT (and no MI) described the same CBT therapist as directive and described themselves as passive recipients of therapist expertise. The authors suggest that the significant differences in outcome between the two treatment groups may have been due to both a client's active involvement in therapy and to therapist collaboration. In addition, findings point to the importance of studying the interpersonal processes between client and therapist in CBT. In particular, the authors argued for the need to systematically explore how much the therapist and/or therapist-client collaboration is actually shaped by client motivation as a result of having received an MI pre-treatment (Kertes et al., 2011).

Overall, MI has been consistently related to specific behaviour changes (such as, entering treatment, attendance, and symptom decreases), increased engagement with therapy, improved outcomes, decreased resistance, and improved client agency. As such, these findings strongly support the value of using MI in the treatment of anxiety, especially for individuals who present to treatment as motivated for change, yet still have difficulty engaging with the tasks of treatment. Generally, given that clients who present with GAD regularly describe themselves as having worried for as long as they can remember, many believe that there are advantages to worry (e.g., preparing for events, preventing catastrophe, and solving problems). At the same time, these individuals tend to believe that their worry is outside of their control. As such, MI may be a particularly good option in attempting to reduce ambivalence for change in GAD clients.

Despite these findings, we have a limited understanding of MI's mechanisms of change and therefore require more process research in this area. Though MI has been found to enhance engagement with therapy, it is generally unclear in the literature how MI generates its effects, particularly when combined with other treatments such as CBT. Perhaps it is because CBT does not necessarily target motivational issues or ambivalence about change, and given that MI addresses this gap, it may lead to increased engagement with treatment (Arkowitz et al., 2008). Conceivably, MI may work to improve motivation for change while CBT offers strategies to help take action toward change.

In addition, there is a paucity of research examining the interpersonal style with which CBT is conducted (Burke, 2011; Miller & Rose, 2009). It may be that MI and the MI spirit contribute to the process of conducting 'good' therapy and taking a more humanistic approach to protocol-based CBT, by emphasizing the therapeutic alliance, empathy and therapist attunement (Arkowitz et al., 2008; Burke, 2011; Flynn, 2011; Miller & Rose, 2009). Therefore, investigating whether or not MI may increase receptivity to treatment during clinically meaningful moments in therapy (e.g., during the presentation of the treatment rationale) holds promise in helping to understand how MI in fact works.

Presentation of the Treatment Rationale

It has been suggested that in conducting rigorous, moment-to-moment psychotherapy process research, it is theoretically important to examine processes that occur during key moments in therapy (Greenberg, 1986). Greenberg (1986) argues that most process research neglects context. As such, instead of making the assumption that all therapeutic processes have equal significance, Greenberg (1986) asserts that, "…it is important to segment therapy into different therapeutic episodes or events in order to understand process in the context of clinically

meaningful units" (p. 4). Accordingly, the current study focused on the presentation of the treatment rationale in CBT. The presentation of, and receptivity to, a treatment rationale is a key moment in therapy, reflecting attempts to negotiate agreement between therapist and client on the goals and tasks of treatment.

According to Frank and Frank (1991), those who seek psychotherapy often experience feelings of hopelessness and helplessness (or 'demoralization') as a result of an inability to manage their symptoms/problems. As such, according to Frank and Frank, presentation of the treatment rationale is one key factor that can positively influence demoralization. Delivery of the therapeutic rationale entails labeling and describing a condition, informing patients of the effectiveness of upcoming treatment and its success in providing symptom relief to others with similar difficulties. This implies that the disorder is understood and inspires hope in the client that it can be treated successfully (Frank, 1961; Frank & Frank 1991; Ilardi & Craighead 1994; Kanter, Kohlenberg & Loftus, 2002; Snyder, Illardi, Michael & Cheavens 2000).

Generally, the literature suggests that a therapeutic rationale that is accepted by both patient and therapist is common to all psychotherapies and affects outcome (Frank, 1961; 1971). In particular, acceptance of a treatment rationale has been found to be associated with positive therapy outcomes (Addis & Jacobson, 2000; Fennell & Teasdale, 1987; Safren, Heimberg, & Juster, 1997). For example, Fennell and Teasdale (1987) indicated that those who responded positively to CBT for depression rated the treatment rationale as significantly more relevant to their problems than non-responders. Also, they found that individuals who responded positively to Beck and Greenberg's (1974) handout entitled, "Coping with Depression" changed more quickly from the first to the fourth session of CBT and exhibited better long-term outcomes.

Even before engaging in specific treatment strategies, positive reactions to a treatment

rationale may predict early improvement in therapy. In other words, therapeutic change may occur even prior to the introduction of active interventions in treatment. In Ilardi and Craighead's (1994) review of nine studies examining the rate of change in CBT, findings revealed that on average, 64.3% of change occurred by the fourth session of therapy. This is usually before specific cognitive techniques are introduced. Conceivably, this evidence implies that much of the change that occurs in CBT may not be entirely attributed to techniques but rather to early processes such as client receptivity to the CBT treatment rationale.

In addition, a client's understanding of the treatment rationale has been found to significantly predict response to CBT within a variety of clinical samples including obsessive compulsive disorder (Abramowitz, Franklin, Zoellner & DiBernardo 2002), generalized anxiety disorder (Borkovec, Newman, Pincus & Lytle 2002), and social phobia (Ahmed & Westra, 2009; Safren, Heimberg & Juster 1997). In fact, Addis and Jacobson's (2000) findings suggest that the acceptance of the CBT treatment rationale was a significant predictor of change in depression scores both at mid- and post-treatment. In an early study, Oliveau and colleagues (1969) reported that systematic desensitization was significantly less effective when done without the presentation of a treatment rationale than when the same procedure was completed with the presentation of a rationale.

Moreover, receptivity to a treatment rationale has been shown to enhance client expectations of being able to engage with the tasks of treatment (Ahmed & Westra, 2009; Kazdin & Krouse, 1983). Studies have consistently demonstrated that higher early outcome expectations have been related to improved treatment outcomes (Arnkoff, Glass, & Shapiro, 2002; Constantino, Glass, Arnkoff, Ametrano, & Smith, 2011; Greenberg, Constantino, & Bruce, 2006; Noble, Douglas, & Newman, 2001). In their recent practice-oriented review,

Constantino, Ametrano, and Greenberg (2012) examined the relationship between client expectations for treatment and psychotherapy process and outcome. The authors propose a number of important practice suggestions based on their review of the literature that relate to assessing, addressing, and influencing client treatment expectations. One such recommendation included providing a strong treatment rationale. In particular, providing a rationale that is both clear and convincing and then competently delivering a treatment that is consistent with the rationale is thought to foster more positive treatment outcomes (Constantino, Ametrano, & Greenberg, 2012).

The importance of the treatment rationale has been well documented and has been found to play an essential role in CBT specifically (e.g., Beck, Rush, Shaw, & Emery, 1979; Craske, Meadows, & Barlow, 1994). The literature suggests that the central purpose of the CBT treatment rationale is to provide both therapist and client with a prototype of the etiology and treatment of a particular concern. Addis and Jacobson (2000) demonstrated that acceptance of the therapeutic rationale during the first three sessions of CBT for depression predicted change halfway through treatment and at treatment outcome. Much like attempts to increase homework compliance, the capacity to deliver a credible CBT rationale that is accepted by the client is considered an important skill that contributes to the success of treatment.

Ahmed and Westra (2009) examined the impact of a CBT treatment rationale on a socially anxious sample. Specifically, an experienced CBT therapist presented a CBT rationale for social anxiety via videotape to 77 undergraduates with high fear of negative evaluation. Findings demonstrated significant increases in self-efficacy for change, an increased self-confidence in conducting interpersonal exposures, and a perceived helpfulness of exposure. Moreover, at one-month follow-up, positive responses to the CBT treatment rationale were

linked to an increased frequency of engaging in interpersonal exposures.

Kazdin and Krouse (1983) examined the impact of content of treatment rationales on expectancies for change in therapy. Findings indicated that treatment rationales that were said to be based on scientific research, tested in clinical trials, novel in relation to traditional therapies, and when successful case examples were included produced greater expectancies for therapeutic change, were viewed as more effective, and were evaluated more favourably by participants. Moreover, when the treatment rationale included a broader focus (affect, cognition, and behaviour) and was offered in technical jargon, it generated greater expectancies for change and was evaluated more positively than when the focus was on behaviour alone or when treatment was described in everyday language.

However, while there is some research focusing on the content of the treatment rationale, no studies to date have focused on the interpersonal processes underlying response to the treatment rationale. In other words, in spite of the research demonstrating the significance of the treatment rationale to psychotherapy outcomes, the immediate impact of interpersonal processes on client receptivity to the rationale remains under-investigated. Little is known about individual process factors that influence response to a treatment rationale. And more broadly, there are a lack of studies examining early treatment factors that might be improved in order to enhance outcome and engagement with treatment (Kazdin, 2005). As such, the present study takes an interpersonal approach to the exploration of psychotherapy process and uses the Structural Analysis of Social Behaviour coding system to examine therapist-client interactions within therapy sessions. This instrument for studying interpersonal process is further elaborated below.

Structural Analysis of Social Behavior (SASB)

One commonly used model for understanding and investigating interpersonal process in

therapy is the Structural Analysis of Social Behaviour (SASB; Benjamin, 1974) model. The SASB is a circumplex-based observational coding scheme that has been used in the exploration of a wide range of interpersonal behaviours (Benjamin, 1974; Constantino, 2000). The SASB coding scheme is based on two underlying intersecting dimensions of affiliation and interdependence, and has been used in the exploration of a wide range of interpersonal behaviours. In particular, the SASB is appropriate for psychotherapy process research because the model is based on validated personality theory, interpersonal diagnosis, and clinical interventions (Benjamin, 1994, 1996; Pincus, 1998; Constantino, 2000; Florsheim & Benjamin, 2001).

Existing process studies utilizing the SASB model have primarily examined interpersonal processes within psychodynamic, experiential, and interpersonal psychotherapies. Overall, these studies have demonstrated that poor outcome and weak alliance cases show greater evidence of negative interpersonal process when compared to good outcome/strong alliance cases (Henry, Schacht, & Strupp, 1986, 1990; Coady & Marziali, 1994; Jorgensen, Hougaard, Rosenbaum, Valbak, & Rehfeld, 2000; Najavits & Strupp, 1994; Tasca & McMullen, 1992; Wong & Pos, 2012). Generally, these studies have demonstrated that in good outcome cases, therapists engage in significantly more affiliative behaviours and clients respond with greater friendly autonomy (e.g., self-disclosure and expression) and less hostile separation from the therapist/therapy. In contrast, both client and therapist in poor outcome cases generally displayed higher levels of disaffiliation, therapist control, lower levels of client self-disclosure, and higher levels of interpersonal hostility (e.g., Henry et al., 1986, 1990; Tasca & McMullen, 1992).

For example, Henry, Schacht, and Strupp (1986) used the SASB to examine 15-minute

excerpts from the third session of time-limited dynamic psychotherapy. Findings demonstrated that in good outcome cases, therapists engaged in significantly more affiliative and autonomy-granting behaviours. As well, clients of good outcome dyads countered with more friendly autonomy and less hostile behaviours. In contrast, therapists in poor outcome cases exhibited more hostile control and provided less autonomy, and clients of poor outcome dyads responded with less affiliative and more hostile behaviours. Similarly, Najavits and Strupp (1994) examined interpersonal processes in time-limited dynamic psychotherapy and found that, in contrast to less effective therapists, more effective therapists demonstrated significantly more affiliative behaviors such as affirming/understanding, and helping/protecting. These therapists also exhibited fewer hostile behaviors such as belittling/blaming, ignoring/neglecting, and attacking/rejecting. Moreover, additional studies have been able to replicate these findings (e.g., Coady, 1991; Henry et al., 1990; Jorgensen, Hougaard, Rosenbaum, Valbak, & Rehfeld, 2000).

Coady and Marziali (1994) investigated therapist and client behaviors associated with good or poor alliance in time-limited individual psychodynamic therapy. Results indicated that therapist watching/controlling behaviors, and client asserting/separating, walling-off/distancing, and sulking/scurrying behaviours were associated with poor alliance scores at various points in treatment (Coady & Marziali, 1994). In a recent study, Wong and Pos (2012) used the SASB to examine the relationship between in-session interpersonal process and alliance in the first session of experiential therapy for depression. Findings suggested that therapists were affirming/understanding and nurturing/protecting in both the high and low alliance groups. Interestingly, therapists in the higher alliance group also exhibited more loving/approaching behaviours, and clients self-disclosed more in these dyads. In contrast, clients in the lower alliance dyads engaged in more asserting/separating than those in the higher alliance group.

Even after controlling for interpersonal problems at baseline, client self-disclosure uniquely predicted the therapeutic bond and explained 14% of the variance in alliance after session one.

Few studies have used SASB to examine interpersonal process within CBT. In an attempt to replicate findings from the psychodynamic-interpersonal literature linking interpersonal process to outcome, Critchfield, Henry, Castonguay, and Borkovec (2007) used SASB to investigate three variants of CBT for GAD. The three groups were composed of good outcome cases (n = 8), poor outcome cases (n = 8), and good outcome cases that had declined at follow-up (n = 8). Lower levels of interpersonal hostility were observed in the sample and interpersonal process variables were not found to be strong predictors of outcome. Although Critchfield et al.'s (2007) findings do not necessarily contradict previous results, the authors suggest that a potential contributor to the absence of significant findings in the study could be due to a restricted range of interpersonal hostility in their sample. When hostility was present, it was observed primarily in the poorer outcome dyads.

In addition, Ahmed, Westra, and Constantino (2012) used SASB to examine early interpersonal process among clients of low or high treatment expectations during resistant and cooperative moments in session one of CBT for GAD. Their findings suggest that during moments of resistance, higher levels of client separation and hostility were present in the low expectations group when compared to the high expectations group. During moments of cooperation in therapy, therapists of clients with low outcome expectations employed less affirming and understanding, and more controlling behaviours. These findings support a potentially strong association between in-session interpersonal process and early client outcome expectations.

SASB Complementarity

An important principle in SASB is the principle of interpersonal complementarity. According to SASB, complementarity occurs when both participants are focused on the same person, and express the same type and intensity of affiliation and interdependence (Benjamin, 1984). Specifically, interpersonal behaviors "pull for" a complementary response. For example, on the affiliation dimension, friendliness pulls for friendliness and hostility pulls for hostility (Benjamin & Cushing, 2000). Therefore, individual SASB codes have a strong meaningful relationship with one another and understanding that relationship allows the researcher to make valuable predictions about interpersonal process. Thus, each therapist and client behaviour may be considered individually, but also *together* using SASB's concept of interpersonal complementarity.

Interpersonal theory suggests that the behaviour of two individuals may be mutually and causally interconnected or interdependent. It is theorized that one person's behaviour invites, pulls, elicits or evokes certain reactions from the other. Interpersonal reactions are therefore not random; rather, reactions tend to be restricted to a particular range of interpersonal responses. Moreover, an individual often produces responses that maximize feelings of security and minimize feelings of anxiety (Keisler, 1996). As such, interpersonally *complementary* behaviors are thought to be those that reduce, eliminate, or lessen interpersonal anxiety while evoking approach behaviours from both participants. In contrast, non-complementarity often leads to avoidance or escape behaviours, or a combination of approach and avoidance reactions, resulting in relational conflict or system imbalance due to a perceived threat to the interpersonal needs of one or both members of the dyad (Villard & Whipple, 1976).

Tracey (1993) reviewed the literature on complementarity that supported a three-stage

model in which good-outcome therapy was linked to high levels of complementarity in the early stage of therapy, lower levels of complementarity in the middle stage of therapy, and high complementarity in the later stage of therapy. In the early stage of therapy, higher complementarity may be associated with establishing rapport and may be necessary for an effective transition into the middle stage, where therapeutic interventions are introduced. This often requires the therapist to alter their behavior by intervening (e.g., by offering interpretations or by confronting cognitive distortions), which may result in lower complementarity (Dietzel & Abeles, 1975; Tracey, Sherry, & Albright, 1999). When therapy returns to higher levels of complementarity at the end of treatment, this may reflect a repair of the rupture in the alliance that may have occurred as a result of lower complementarity in the middle stage of therapy (Safran, Muran, Samstag, & Stevens, 2001). This high-low-high pattern of interpersonal complementarity has been linked to positive outcomes in psychodynamic, interpersonal, and cognitive behavioural therapies (Dietzel & Abeles, 1975; Tasca & McMullen, 1992; Tracey, Sherry, & Albright, 1999).

Specifically, Tracey, Sherry, and Albright (1999) investigated the pattern of complementarity and its relation to outcome by examining 20 therapist-client CBT dyads within a university counseling center. Findings suggest that more successful therapy dyads showed a pattern of initial high levels of complementarity, decreasing levels in the middle of treatment, and then increasing levels at the end (though not as high as at the beginning). Conversely, less successful therapy dyads did not demonstrate this pattern. Specifically, when complimentarity was separated into friendly and hostile types, client friendly complimentarity, client hostile complimentarity, and therapist friendly complimentarity followed this pattern in good outcome dyads. These data support the link between Tracey's (1993) three-stage pattern of

complementarity and outcome in CBT. Generally, dyads that did not demonstrate this pattern of complementarity were associated with lower outcome scores overall.

Moreover, Tasca, Foot, Leite, Maxwell, and colleagues (2011) utilized both Tracey's (1993) interpersonal stage model of psychotherapy process and SASB in order to compare the group therapy processes of a psychodynamic-interpersonal group and a cognitive-behavioural group for binge eating disorder. Participants in both groups demonstrated improved outcomes for binge eating and depression. Findings revealed that the psychodynamic-interpersonal therapist was more autonomy-giving, while the cognitive-behavioural therapist was more controlling and directive. The psychodynamic-interpersonal group demonstrated high levels of interpersonal complementarity in the early stage of therapy and lower complementarity in the middle stage of therapy. Consistent with Tracey's (1993) model, the cognitive-behavioural group exhibited a high-low-high pattern of complementarity across the three stages of therapy. Yet, the psychodynamic-interpersonal group showed higher levels complementarity overall when compared to the complementarity of the cognitive-behavioural group. Although the interpersonal behaviors of the two groups differed, they were consistent with their theoretical orientations.

Summary

CBT has been found to be an effective treatment for anxiety disorders including GAD (Borkovec & Ruscio, 2001; Gould et al., 1997, 2004; Norton & Price, 2007). However, there is a well-documented lack of engagement with CBT for GAD with a substantial proportion of clients failing to respond to treatment, responding only partially, dropping out prematurely, or relapsing at follow-up (Covin et al., 2008; Hunot et al., 2007; Newman et al., 2008; Westen & Morrisson, 2001). Inadequate treatment response in CBT is often ascribed to a lack of client motivation,

which may lead to less than optimal client engagement or 'resistance' in therapy (Antony et al., 2005; Arkowitz et al., 2008; Leahy, 2003; McCabe & Antony, 2005; Sanderson & Bruce, 2007; Sookman & Steketee, 2007). Given that MI has been found to increase motivation for change, efforts to integrate or add MI to CBT are increasingly emerging (Arkowitz et al., 2008; Westra & Arkowitz, 2010; Westra, 2012).

While preliminary studies are generating promising results for enhancing treatment outcomes for anxiety (see Westra, Aviram, & Doell, 2011 for a review), little is known about how adding or integrating MI effects process in CBT. Empirically, the literature suggests that receptivity to a treatment rationale may be a key moment in therapy given that it reflects agreement between therapist and client on the goals and tasks of therapy and has been shown to be significantly related to outcome (Frank, 1961, 1971; Kanter et al., 2002). Thus, how agreement with a treatment rationale is negotiated between client and therapist is of particular interest when examining questions about therapy process, therapy outcome and client engagement in therapy.

In spite of the research demonstrating the significance of the treatment rationale to psychotherapy outcomes, the use of MI for anxiety, and the need to improve response rates to CBT for GAD, there are a lack of studies examining early treatment factors that might be improved in order to enhance outcome and engagement in therapy, particularly from an interpersonal process perspective. As such, the current study attempts to begin to address this gap in the literature.

The Current Study

Data from the current study were drawn from a randomized controlled trial (RCT) applying MI to the treatment of GAD in an effort to bolster engagement with and response rates

to CBT (Westra, Arkowitz & Dozois, 2009). Specifically, in the larger RCT, 76 individuals with a principal diagnosis of GAD were randomly assigned to receive either four sessions of an MI pre-treatment (which was focused on ambivalence about worry and ambivalence about change) or no pre-treatment, prior to participating in 8 sessions (or 14 hours) of CBT. Generally, MI was found to significantly improve response to CBT with the addition of MI being particularly helpful in improving CBT response for those clients of highest worry severity. This finding is particularly important since individuals of high severity have been found in the literature to be refractory to CBT (Durham, Fisher, Dow, Sharp, et al., 2004).

Using a subsample from the larger clinical trial (Westra et al., 2009), the objective of the current study was to systematically examine the interpersonal processes between client and therapist at an important moment in the first session of CBT: the presentation of the CBT treatment rationale. Based on the literature reviewed above, the content of each session was reviewed in order to select the precise point where the CBT rationale was presented. All of the excerpts included in the current study were taken from within the last 20 minutes of the first session of CBT (when the treatment rationale was typically presented). The SASB interpersonal process observational coding scheme was used to explore interpersonal processes between client and therapist at that time (i.e., immediately following the presentation of the treatment rationale).

Overall, the current study primarily sought to explore whether or not receiving MI prior to CBT influenced early interpersonal processes between client and therapist at an important moment within CBT (i.e., presentation of a treatment rationale).

Based on previous research it was hypothesized that:

(1) clients who received MI prior to CBT would exhibit more affiliative and fewer dissafiliative behaviors in response to the presentation of the CBT treatment rationale

compared to clients who received CBT-alone

(2) therapists of clients who received MI prior to CBT would exhibit more affiliative and fewer dissafiliative behaviors following the presentation of the CBT treatment rationale compared to therapists of clients who received CBT-alone

(3) client-therapist dyads who received MI prior to CBT would exhibit more positive (affiliative) complementarity or reciprocity in responding to one another following the presentation of the treatment rationale, compared to CBT-alone dyads

Method

Participants

All participants (N=20) were extracted from the larger RCT (Westra et al., 2009) of MI plus CBT for GAD, with an equal number (10 per group) of participants either receiving an MI pre-treatment (MI-CBT) or no pretreatment (CBT-alone) prior to CBT. Clients were recruited from community advertisements in the greater Toronto area. All clients had a principal diagnosis of GAD as assessed by the Anxiety Disorders Interview Schedule IV (ADIS-IV; Brown, DiNardo, & Barlow, 1994). Other inclusion criteria included being 16 years of age or older and receiving a minimum GAD severity score in the clinical range on the ADIS-IV. Participants were excluded from the study if they had comorbid substance dependence, a history of psychotic or bipolar disorder, evidence of neurological difficulties, major cognitive impairments or learning disabilities, and if they were on benzodiazepines. In addition, clients who were on antidepressant medication at baseline had to be stabilized on this medication for at least 2 months prior to beginning treatment. Medicated participants agreed to maintain their existing dosage of medication throughout therapy and only clients who did not begin any other form of psychotherapy over the course of treatment were included. At initial intake, informed consent

was obtained for all study procedures, and the study was approved by the Institutional Ethics Review Board for research involving human participants.

Since, in the larger trial (Westra et al., 2009), the largest between group differences were observed for clients of highest worry severity at baseline (n = 36), the current study focused on this subgroup of high worry severity clients. Individuals in the current study (N = 20) were drawn from the larger trial's high severity subgroup [with the MI group showing improved outcome compared to the CBT-alone group, $t(18)=-1.99$, $d=-0.89$]; and they were matched for treatment group, CBT therapist, sex, baseline motivation (as measured by the CQ), and baseline worry severity (as measured by the PSWQ). Specifically, ten dyads from the high severity MI group and ten from the high severity CBT-alone group were included in the current sample (all having a PSWQ score of at least 68 out of 80; Westra et al., 2009). This sample size is consistent with those of previous SASB studies (Critchfield et al., 2007; Henry et al., 1986, 1990), which were used as a guide in selecting the current sample. Importantly, given evidence of therapist effects in psychotherapy studies (Aveline, 2005; Beutler et al., 2004; Wampold, 2001), and in the larger RCT from which these data were drawn (Westra, Constantino, Arkowitz, & Dozois, 2011), the two groups in this subsample were matched for CBT therapist, with each of the four CBT therapists seeing an equal number of cases in each of the two treatment groups (between 2 and 3 clients per therapist in each group). As such, every therapist acted as their own control for their own 'personal therapist effects', thereby controlling for between treatment group therapist effects.

Measures

Penn State Worry Questionnaire *(PSWQ;* Meyer, Miller, Metzger, & Borkovec, 1990). The PSWQ is the measure most frequently used to assess chronic worry in both clinical and non-

clinical populations. Given that it is one of the most widely used measures of trait worry, the PSWQ was used as the primary outcome measure in the larger clinical trial (Westra et al., 2009). With a maximum possible score of 80, the 16-items on the PSWQ are rated on a five-point Likert-type scale (i.e., 1 = "Not at all typical of me" and 5 = "Very typical of me"), with higher scores indicating higher levels of worry (see Appendix A). This measure has also been found to hold high internal consistency, temporal stability, and good discriminant and convergent validity (Brown, Antony, & Barlow, 1992; Meyer et al., 1990). The PSWQ has also been found to differentiate individuals with GAD from those with other anxiety disorders (Brown et al., 1992).

Change Questionnaire (*CQ;* Miller & Johnson, 2008). The CQ is a 12-item measure derived from psycholinguistic research on natural language and is used by clients to describe their own motivation (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003; see Appendix B). First, the respondent labels what they plan on changing and items are then completed with reference to that identified change. Two items each represent desire, ability, reasons, need, commitment to change, as well as taking steps to change. Each item is rated on a 0 (definitely not) to 10 (definitely) scale according to the degree to which each statement describes their motivation (e.g., I want to worry less, I could worry less, etc.). It can also be adapted to a 3-item version (i.e., Importance: It is import for me to…, Confidence: I could..., and Commitment: I am trying to...), making it highly amenable to administration in clinical practice. Higher scores indicate higher levels of change-talk/motivation. The CQ has good internal consistency and test-retest reliability (Miller & Johnson, 2008). Although the CQ has only been evaluated with an anxiety population in one study (Westra, 2011), this study found that it outperformed other self-report measures of motivation in significantly predicting post-treatment and even one-year post-treatment worry scores among those with GAD.

Structural Analysis of Social Behavior *(SASB;* Benjamin, 1974*).* The SASB is a circumplex-based observational coding scheme based on two underlying intersecting dimensions of affiliation and interdependence, and has been used in the exploration of a wide range of interpersonal behaviours (see Figure 1 for a depiction of the SASB model). The SASB is a model of interpersonal relationships that consists of three surfaces, one for each of three potential behavioural foci (Benjamin, 1984). These include: 1) Focus on Self, 2) Focus on Other, and 3) Introject Focus. For the purposes of the current study, only the first two surfaces were utilized. This is because the third SASB surface measures intra-psychic processes, and our primary focus was on interpersonal processes between dyads rather than on actions directed toward the self.

Specifically, the first surface reflects behaviors focused on the other (i.e., transitive actions that are to/for/about another person). In psychotherapy, these behaviours are most often representative of the therapist who is typically acting toward the other (i.e., toward the client). Examples of such behaviours include: affirming, nurturing, protecting, controlling, blaming, and ignoring, to name a few (see Table 1). Surface two includes behaviours focused on the self in relation to other (i.e., intransitive reactions to perceptions of what is going to be done to/for/about the self in relation to another). These behaviors are typically observed of the client in the therapy dyad, who is most often focused on himself or herself in relation to the therapist. Examples of such behaviours include: separating, disclosing, trusting, submitting, sulking, and walling-off, to name a few (Benjamin, 1984; See Table 2). Generally, within therapy sessions, the therapist largely focuses on the other (i.e., the client) and the client primarily focuses on himself or herself.

Each SASB surface consists of two interacting dimensions. The horizontal dimension

represents the degree of affiliation, ranging from friendliness and love, to attack and recoil. The vertical dimension represents degree of interdependence, ranging from enmeshment to differentiation. Accordingly, each surface is divided by the two aforementioned axes into eight possible clusters of behaviour. Each of these eight clusters reflects different permutations of affiliation and interdependence. The structural fidelity of SASB has been well-established by factor analysis, circumplex analysis, dimensional analysis, and autocorrelation (Benjamin, 1974; Benjamin, Rothweiler & Critchfield, 2006; Pincus, Gurtman, & Ruiz, 1998), and the system has been effectively applied to the study of psychotherapy dyads (e.g., Constantino, 2000).

Treatments

MI. The MI was based on the principles and methods described by Miller and Rollnick (2002), but with a focus on ambivalence about worry and GAD-related difficulties. Treatment followed the manual developed by Westra and Dozois (2003), which adapted MI for the treatment of anxiety. The protocol defines the two phases of MI that were used in the current study, where the first phase focused on understanding and exploring ambivalence, and the second phase focused on developing client self-efficacy. The presentation of MI principles and a description of specific exercises, such as the use of a decisional balance in the first phase and the use of role plays for strengthening change talk in the second phase. Treatment was guided by a manual (Westra & Dozois, 2008). Those in the MI group received four individual sessions of MI adapted for anxiety prior to receiving eight sessions (or 14 hours) of CBT for GAD; while those who received no pre-treatment (no-MI group) waited four weeks and then received CBT-alone.

CBT. Following the MI pretreatment or four-week waiting period for individuals in the CBT-alone condition, all clients participated in individual CBT for GAD. Cognitive behavioural treatment in the current study was based on the manual developed by Borkovec and colleagues

(Borkovec & Costello, 1993; Borkovec & Mathews, 1988; Borkovec et al., 2002). This treatment focused on the core features of GAD including, chronic hyperarousal, uncontrollable worry, and inhibited emotional reprocessing. The techniques that were used incorporated thought records, exposure to worry and worry cues, self-monitoring, progressive muscle relaxation training, and behavioral experiments. Weekly therapy sessions were comprised of six two-hour sessions, and two one-hour sessions, totaling 14 hours of CBT for each dyad (Westra et al., 2009).

The first session of CBT contained a presentation of the CBT rationale (typically toward the end of the session), which was the focus of the current study. In particular, the presentation of the CBT rationale included providing psychoeducation about both the impact of worry and the interconnection between triggering situations, automatic thoughts, behaviours, and physiological reactions. In addition to the discussion of the treatment rationale, the first session also typically included the client describing their experience of worry/presenting problems, the therapist gathering information about the nature of the client's difficulties, discussion of treatment goals, discussion of the structure of therapy (e.g., setting an agenda, reviewing homework, frequency of meetings, etc.), and homework assignment.

Therapists & Therapist Training

In the current study, different therapists delivered the MI and the CBT. Four experienced female therapists delivered the MI pretreatment. Two were Ph.D. level clinical psychologists and 2 were senior doctoral students in clinical psychology. Similarly, four CBT therapists participated in the current study (2 female, 2 male), including one Ph.D. level psychologist, two senior graduate students, and one junior graduate student in clinical psychology. Participants were randomly assigned to therapists within both the MI and CBT treatment conditions.

Both the MI and CBT therapists were trained in a group setting. Training consisted of relevant readings, a minimum of 30 hours of discussion and role-play, and intensive weekly group supervision, which included regular review of videotaped sessions. Two highly experienced MI and CBT therapists were involved in the training and supervision of therapists in their respective conditions. CBT training and supervision emphasized proficient delivery of specific techniques, and sensitivity to issues of client engagement and collaboration in therapy.

Procedure

In the Westra et al. (2009) RCT, clients were randomly assigned to therapists, with CBT therapists being blind to treatment group (i.e., whether or not their clients received MI prior to CBT). Clients received either 4 sessions of MI followed by 8 sessions of CBT (six two-hour sessions, then two one-hour sessions; MI-CBT) or waited 4 weeks and then received 8 sessions of CBT (CBT-alone). The PSWQ was administered at baseline, after pre-treatment (or 4 week waiting period) and at post-treatment. In addition, clients completed the CQ at baseline and after pre-treatment (or after a 4-week waiting period).

Excerpt Selection. SASB was used to code twenty 10.5-minute videotaped and transcribed excerpts from the first session of CBT. Given that coding that utilizes the SASB model is extremely labour-intensive, only a small segment of a therapy session is typically selected for coding (e.g., approximately 10 minutes; Benjamin & Cushing, 2000). In addition, rather than sampling segments for intensive investigation at random, excerpts in the current study were selected systematically to sample a theoretically relevant moment. This is consistent with recommendations made by Greenberg (1986), who suggested that processes may not have equal significance or meanings within therapy and that it is important to select specific therapeutic events in order to understand clinically meaningful processes. As such, excerpts

were selected from the time *immediately following* the therapist's delivery of the CBT treatment rationale, beginning with when the therapist asked the client about their understanding of (and response to) the rationale.

Specifically, in the current study, excerpts were selected out of 120-minute (or two-hour) therapy sessions, and all excerpts were taken from within the last 20 minutes of the first session of CBT (when the treatment rationale was typically presented). The selected videotaped excerpts were transcribed according to Mergenthaler and Stinson's (1992) Psychotherapy Transcription Standards. The selected segments were then coded using the SASB cluster model. The coding of the current study material used both the extracted videotaped segments and the transcripts of these segments.

SASB Coders & Training. Three graduate student coders used both the videos and transcripts to code the current sample of excerpts. These coders received extensive training in SASB coding over a period of two years from an expert instructor who was trained to criterion in the use of the SASB. In particular, SASB training was comprised of a two-day workshop (i.e., involving didactic presentations, moment-to-moment coding, and discussion of real-world sample transcripts). Subsequently, both instructor and trainees met via teleconference for monthly two-hour meetings over the course of a year. Accordingly, each of the three SASB coders involved in the current study were trained to criterion on the SASB, achieving a weighted kappa of 0.65 or greater when compared to a set of SASB criterion codes obtained from expert coders.

SASB Coding. Broadly, the coding process involved the segmenting of study material into thought units, establishing the focus, degree of affiliation/interdependence, and finally assigning an appropriate code. Each pair of coders divided the excerpts into thought units, and

arrived at a consensus code for each thought unit. A subsample of 100 thought units for each transcript were double coded by both individuals within a coding pair to determine reliability. The weighted kappa ranged from .83 to .96 (M = .895), reflecting excellent agreement beyond chance. In addition, coders were blind to knowledge of client treatment group.

To elaborate, the SASB coding was conducted in accordance with Benjamin and Cushing's (2000) coding manual. Specifically, transcripts were segmented into thought units before being SASB coded. These thought units were defined as segments of speech that expressed a complete thought from either the therapist or the client. Thought units varied in length, ranging from a single word utterance (e.g., "mm-hmm" or "okay") to multiple sentences. Coders then established the focus of each thought unit. That is, they determined whether or not the speaker was acting toward the other (surface 1) or focusing on the self (surface 2). The degree of affiliation and interdependence was then determined. Affiliation was gauged based on degree of friendliness versus hostility, and interdependence was appraised on a continuum of autonomy granting versus control (if the focus is on other) or on autonomy taking versus submission (if the focus is on self). Lastly, the cluster code on the appropriate surface (see Figure 1) was assigned. Upon ascribing a code to the thought unit, a final clinical test was completed such that the coders reviewed the description of items of the selected cluster code to ensure that the final code captured the appropriate meaning of the interpersonal message intended by the speaker. If the final clinical test did not represent the spirit of the interaction, the aforementioned coding steps were repeated in order to appoint an appropriate code.

In most cases, each individual thought unit was given a single SASB cluster code. However, in few cases, more than one cluster code (i.e., a "complex code") was assigned to a single thought unit when the interaction simultaneously contained two interpersonal behaviors.

For example, when a client simultaneously attempted to both ignore and control the therapist (Benjamin & Cushing, 2000; Constantino, 2000).

Calculation of SASB Indices

In the current study, SASB data were analyzed in two ways. First, the relative frequency (percent of total) of each therapist and client behavior served as a unit of analysis. This was calculated by totaling each SASB cluster code for a given participant and then dividing by the total number of thought units for that individual. This controls for differences in overall intensity of activity between clients, therapists, and dyads.

The second way the data were evaluated involved the calculation of an interpersonal complementarity index. Here, rather than examining each participant's behavior in isolation, the complementarity index accounted for reciprocity between the interpersonal behaviors of the client and the immediate responsive behaviors of the therapist and vice versa, on a moment-to-moment basis.

As previously discussed, the SASB model defines complementarity as a response of one individual to the other that is reciprocal in: (1) focus (i.e., the participant is focused on self and the respondent is focused on other, or vice versa), (2) affiliation (i.e., both participants express the same type and intensity of affect: friendliness pulls for friendliness, and hostility pulls for hostility), and (3) interdependence (i.e., both participants express the same type and intensity of interdependence: dominance pulls for submission, submission pulls for dominance; Benjamin, 1984; Keisler, 1996). For example, if a client is self-disclosing (focus on self, affiliation, autonomy-taking), a complementary response for the therapist would be to affirm and understand (focus on other, affiliation, autonomy-granting). If the therapist is nurturing and protecting (focus on other, affiliation, autonomy-taking), a complementary response for the

client would be trusting and relying (focus on self, affiliation, submitting).

For each dyad, units of interaction between therapist and client were evaluated for the presence or absence of complementarity (and all interactions, whether initiated by client or therapist, were included). Following Henry and colleagues (1986)'s method, the last thought unit of the speaker and the first thought unit of the responder were included. A complementary interaction was considered one that met all three of the above criteria for complementarity, and all others were considered noncomplementary. Also, following Henry et al. (1986)'s method, interaction units were separated based on positive complementarity (i.e., affiliative) and negative complementarity (i.e., hostile). For each therapist-client dyad, the percentages of positive or negative complementary interchanges was computed by dividing the total number of complementary units by the total number of interaction units for the dyad.

Results

Table 3 presents the client demographics, therapist distribution across the two treatment groups, client baseline PSWQ scores, and client baseline CQ scores. As part of the inclusion criteria for the current study, all participants had PSWQ scores in the high severity range (i.e., a score of 68+ out of 80). There were no significant between group differences on any demographic variable including age, $t(18) = -0.59$, $p = .561$; gender, $X^2(1) = 0.27$, $p = .606$; or education, $X^2(5) = 4.67$, $p = .458$. Treatment groups did not differ in baseline worry severity (PSWQ), $t(18) = 0.68$, $p = .504$ or baseline motivation (CQ), $t(18) = 0.09$, $p = .927$. There were also no significant differences in the total number of SASB thought units as a function of treatment group, $t(18) = 1.39$, $p = .179$ (see Table 4).

Overall SASB Results

The vast majority of therapist codes were focused on the client (i.e., the Focus on Other

surface), with therapists engaging in behaviors such as guiding the client, asking questions, making reflections, offering psychoeducation, etc. Conversely, the vast majority of client codes were focused on themselves (i.e., the Focus on Self surface); with clients engaging in behaviours such as, responding to therapist questions, following their lead, disclosing, expressing, etc. A low frequency of activity was observed for therapists on the 'Focus on Self' surface (range 0% to 10.96% across cluster codes) and for clients on the 'Focus on Other' surface (range 0% to 8.96% across cluster codes).

Moreover, consistent with previous SASB studies, client and therapist hostility (i.e., disaffiliative behaviour) rarely occurred. In fact, there were no instances of therapist disaffiliation. When client disaffiliative behaviours were observed, only one SASB cluster code captured all hostile behaviours in the current study: "sulking and scurrying". As such, the other indices of client or therapist hostility as captured by the SASB clusters ("ignoring and neglecting", "walling off and distancing", "attacking and rejecting", "protesting and recoiling", and "belittling and blaming") were never observed in the segments coded in the current study. Given the overall low rates of hostile behaviours, any discussion of the presence of disaffiliative process or hostility will specifically refer to "sulking and scurrying", and only for the client.

Similar to other SASB studies (e.g., Critchfield et al., 2007), analyses showed marked variability in the SASB data. A number of variables were found to be significantly skewed. As such, when the data were significantly skewed, violating the assumption of normality of the underlying distribution that is needed for parametric tests, the non-parametric Mann-Whitney U statistic was utilized to assess differences between groups.

Tables 5 and 6 present therapist and client codes, respectively, as a function of treatment group. Overall, no significant differences between groups on the most common therapist and

client interpersonal processes were demonstrated in the current study. That is, following the presentation of the CBT rationale, treatment groups were comparable in their rates of therapist "affirming and understanding" and therapist "nurturing and protecting" (see Table 5). In terms of common client behaviours (see Table 6), "disclosing and expressing" appeared to be equivalent between the two treatment groups and there were also no significant between group differences for client "trusting and relying".

However, groups did differ significantly on three SASB indices: 1) client level of asserting and separating, 2) client level of deferring and submitting to the therapist, and 3) therapist level of watching and controlling the client. These results are elaborated further below.

Client Asserting & Separating

In SASB terms, when the client asserts themselves and separates from the therapist, the client is acting independently and asserting their own ideas and beliefs, which are sometimes opposite to those of the therapist. This is considered an autonomy-taking behavior that is neutral on the affiliation dimension, neither particularly warm nor hostile (Florsheim & Benjamin, 2001). In the current study, following the presentation of the treatment rationale, clients who did not receive MI prior to CBT engaged in significantly more asserting and separating than those in the MI-CBT group with a large between group effect size (see Table 6). That is, in response to the presentation of the CBT rationale, clients who did not receive MI prior to CBT separated themselves from the therapist to assert their own position, and did this to a substantially greater degree than clients who received MI prior to CBT. Notably, client asserting and separating comprised less than 6% of all client responses in the CBT-alone condition, while no client in the MI-CBT group exhibited this behaviour.

To contextualize these results, consider the following examples of client asserting and

separating, extracted from therapy transcripts after the presentation of the treatment rationale in the CBT-alone condition:

Example 1:
T: So when you work on these outside the sessions…
C: [interrupt] It's a hard thing just to think 'ok, what's the situation where I was worried and this and that'

Example 2:
T: [when you do the exposure exercise] what do you think might occur with your anxiety?
C: I think I'll get bored of reading it. …I don't think it would lessen it or do anything

Example 3:
T: You sound motivated to try this
C: No I'm not

Client Deferring & Submitting

SASB defines client deference and submission as giving in, yielding, or complying with the expectations of the therapist in neither a warm nor hostile way (Florsheim & Benjamin, 2001). In the current study, following the presentation of the treatment rationale, clients who did not receive MI prior to CBT engaged in significantly more deferring and submitting than those in the MI pretreatment group (see Table 6). A large between group effect size was observed such that after the presentation of the treatment rationale, clients who did not receive MI prior to CBT deferred to the therapist to a substantially greater degree than clients who received MI prior to CBT. Overall, client deference only comprised 1% of client behaviour in the CBT-alone condition, while no client in the MI-CBT group exhibited this behaviour.

To illustrate these findings further, the following are exemplars of client deferring and submitting, extracted from therapy transcripts, after the presentation of the treatment rationale in the CBT-alone group:

Example 1:
T: …are there things you could think of this week that might be interesting to do?

C: uggh…[cringing] go back and do the other half? [of previously assigned homework]

Example 2:
T: …and then when you're ready to go to bed, go to bed
C: mmm (client had previously expressed reservations about engaging in this task)

Example 3:
T: This is another way of doing it [relaxation exercise], how does that fit?
C: ugh I'll try it

Therapist Watching & Controlling

According to SASB, therapist 'watching and controlling' involves controlling or monitoring another person's behaviour and is considered neither warm nor hostile in affiliation. This behaviour may involve telling a person what to do or how to think (Florsheim & Benjamin, 2001). In the current study, following the presentation of the treatment rationale, therapists of clients who did not receive MI prior to CBT exhibited significantly more watching and controlling in response to their clients than those in the MI group (see Table 5). A moderate between group effect size was observed, indicating that after the presentation of the treatment rationale, therapists of clients who did not receive MI prior to CBT monitored and controlled clients to a greater degree than therapists of clients who received MI prior to CBT. Overall, therapist watching and controlling comprised a mere 2.5% of therapist behaviour in the CBT-alone condition and less than .01% of responses in the MI-CBT group.

To illustrate these findings, the following are examples of therapist watching and controlling or the therapist telling the client exactly what to do, taken from therapy transcripts, in the CBT-alone group following the presentation of the treatment rationale:

Example 1:
T: …if the windows are a problem then get some black-out drapes or something. (in the context of discussing difficulties with sleep)

Example 2:
T: So you're going to watch TV earlier in the morning and end with reading quietly in

the living room. (in the context of discussing difficulties with sleep)

Example 3:
T: Do it before you go to bed; and then when you're ready to go to bed, go to bed. (in the context of discussing a breathing exercise)

Presence or Absence of Notable Interpersonal Behaviours

The above analyses concern the average frequency of SASB indices collapsed across all clients. However, it was also of interest to explore the actual number of clients who contributed to the various client indices that differentiated treatment groups such that the presence or absence of each relevant SASB index was tabulated for each client and then summed within groups. In other words, it was of interest to explore whether any instance of these codes occurred in the dyads (see Table 7).

'Asserting & Separating' and 'Deferring & Submitting'. 80% of clients in the CBT-alone group showed evidence of separation, while *no* client in the MI-CBT group exhibited this interpersonal behavior. In addition, 40% of clients in the CBT-alone group showed evidence of deference to the demands of the therapist, while *no* client in the MI-CBT group exhibited this interpersonal behavior.

Client Sulking & Scurrying (hostility). According to SASB, sulking and scurrying is described as hostile submissiveness. This interpersonal behaviour is focused on the self and can include whining, "poor me" statements, defensive self-justification, resentful compliance, and "scurrying" in the service of appeasing the therapist (Florsheim & Benjamin, 2001). While the frequency of sulking and scurrying did not differ between groups (see Table 6), sulking and scurrying was only observed in the group that did not receive MI prior to CBT. And 30% of clients in that group showed evidence of hostile submissiveness, while *no* client in the MI-CBT group exhibited this interpersonal behavior.

The following are examples of client sulking and scurrying, drawn from therapy transcripts, in the CBT-alone group after the presentation of the treatment rationale:

Example 1:
T: It's going to take a few weeks of working on these things outside of sessions
C: ...just to think about oneself so much, it takes effort and stuff. (whiney tone)

Example 2:
T: How would I know that you were more relaxed? What would you be doing differently?
C: ...I mean, I am who I am, I don't know how much I would really change. (whiney and defensive tone)

Example 3:
T: you sound motivated to try…
C: ugh, you know, you're the leader. (tone of resentful compliance)

Interpersonal Complementarity

Table 8 presents the mean frequencies and standard deviations for both therapist- and client-initiated complementarity following the presentation of the treatment rationale as a function of treatment group. Overall, groups did not significantly differ on any of the interpersonal complementarity indices following the presentation of the treatment rationale. That is, the majority of the time in sessions was spent in friendly, affiliative, complementary responses for dyads in both treatment groups. In other words, whether initiated by the client or therapist, therapists and clients in both treatment groups responded to the other with equal interpersonal complementarity. For example, most often, when clients were "disclosing and expressing", therapists were "affirming and understanding", and vice versa. When therapists were "nurturing and protecting", clients were often "trusting and relying", and vice versa.

Switching Interpersonal Focus

The majority of the time in therapy, the client tends to focus on themselves (SASB Surface 2, Focus on Self) and the therapist tends to focus on the client (SASB Surface 1, Focus on Other). Deviations from this pattern are typically very infrequent and rare in SASB studies.

However, moments of interpersonal focus switching were observed in the current study such that the therapist focused on themselves (rather than the client) and the client focused on the therapist (rather than the therapist) after the presentation of the treatment rationale.

When the frequency of these interpersonal focus switches were examined by treatment group, an interesting pattern emerged (see Table 9). Although rare in both groups, following the presentation of the treatment rationale, dyads in the CBT-alone group switched interpersonal focus (therapist focused on self rather than the client; client focused on the therapist rather than self) significantly more than dyads in the MI-CBT condition, with a moderate between groups effect size. Quantified in terms of presence or absence of interpersonal focus switching, in the MI-CBT group interpersonal focus switching was observed in only one therapy dyad (out of the 10 dyads). Conversely, in the CBT-alone group, six of the 10 therapy dyads demonstrated this pattern at least once. In other words, after the presentation of the treatment rationale, dyads in the CBT-alone group switched interpersonal focus to a significantly greater extent than clients who received MI prior to CBT.

To describe and illustrate what was happening during these surface switches, the specific SASB cluster codes were examined using the therapy transcripts during these moments. When therapists focused on themselves (rather than the client), the majority of these instances involved the SASB cluster code of disclosing and expressing. Based on an examination of the transcripts, these self-focused statements often reflected a therapist defending themselves, interpersonal awkwardness/tension, or therapist discomfort or anxiety. For example, one therapist explained, "*I'm not usually as talkative as this"* and *"this isn't by any means a make-work project*". In other instances, the therapist was asserting and separating. Such interpersonal behaviours most often consisted of an assertion made by the therapist in an attempt to gain back

control of the session. For example, one therapist noted*, "I don't have that ability unfortunately [to physically put you in your most feared situation]".*

Alternatively, when clients focused on the therapist (rather than themselves), the vast majority of these instances involved client attempts to influence and control the therapist after the presentation of the treatment rationale (i.e., either by means of "nurturing and protecting" or "watching and controlling" the therapist). For example, during negotiations about homework, one therapist gave explicit instructions on how the homework is intended to be carried out and asked the client to self-monitor using this particular method and by writing things down, the client responded with, *"…it won't be something where you could just take it and read it…what I could do is mark just enough down here*" (Client focused on Therapist; "watching & controlling"). In this context, rather than following the direction set out by the therapist, the client was taking control and managing the therapist by telling the therapist how the homework will be conducted and specifying what's best.

Other instances in which the client focused on the therapist rather than themselves included client "nurturing and protecting", as well as client "affirming and understanding" the therapist in the service of maintaining a focus on the therapist rather than on themselves after the presentation of the treatment rationale. The following is an example of such an interchange in the CBT-alone group:

> *C: "Maybe your culture is like that"* (Client focused on Therapist, "nurturing and protecting")
>
> *T: "maybe a little bit. I'm forth generation Japanese and so my parents are both Japanese but they were both born here, and my grandparents were born here"* (Therapist focused on Self)
>
> *C: "but they didn't keep the culture?"* (Client focused on Therapist, "nurturing and protecting")

T: "not as much, I mean I don't speak it at all and I don't understand it" (Therapist focused on Self)

C: "but that is very, very brave for them" (Client focused on Therapist, "affirming and understanding")

Discussion

The objective of the current study was to systematically examine the interpersonal processes between client and therapist following the presentation of the CBT treatment rationale, an important event in the first session of CBT. In particular, it was of interest to examine whether or not receiving MI prior to CBT (versus not receiving the MI pretreatment) positively influenced early interpersonal processes within CBT after the presentation of the treatment rationale. Since MI has been shown to decrease client resistance and increase client engagement/motivation for therapy (Arkowitz, Westra, Miller, & Rollnick, 2008; Aviram & Westra, 2011; Westra, 2012), it was expected that those who received MI prior to CBT would be more receptive to the CBT treatment rationale and would engage in more affiliative interpersonal processes. Overall, the results of the current study suggest that interpersonal processes differentiated treatment groups. In particular, when negative interpersonal processes were observed, dyads in which the client did not receive MI prior to CBT exhibited more evidence of negative interpersonal process than dyads in which the client received MI prior to CBT. Generally, these results reflect higher levels of disengagement following the presentation of the treatment rationale in the CBT-alone group compared to those clients that received MI prior to CBT.

Specific Effects of Interpersonal Processes as a Function of Treatment Group

Findings of the current study demonstrated that clients who did not receive MI prior to CBT asserted/separated and deferred/submitted at a significantly higher rate than the MI-CBT

group after the presentation of the CBT treatment rationale. These clients appeared to be interpersonally more distant, showing more evidence of a 'derailed' therapy process. Clients who did not receive MI prior to CBT also shifted the focus away from themselves and onto the therapist at higher rates following the presentation of the treatment rationale in an apparent effort to control the session, challenge the therapist, and perhaps avoid communicating discomfort with the CBT treatment rationale. Furthermore, therapists of clients who did not receive MI prior to CBT shifted the focus away from the client and onto themselves in order to self-disclose, defend themselves or agree with the client. Therapists in this group also engaged in more watching and controlling behaviour following the presentation of the treatment rationale than therapists of clients who received MI prior to CBT.

In contrast, overall, clients who received MI prior to CBT showed very little evidence of difficult interpersonal processes in response to the presentation of the CBT rationale. Specifically, unlike the CBT-alone group, clients who received MI exhibited no evidence of asserting and separating or deferring and submitting following the presentation of the treatment rationale in CBT. Clients who received MI prior to CBT also rarely engaged in interpersonal focus switching. The current findings suggest that these clients were much more amenable to 'getting along' with the therapist and engaging with the CBT therapist's suggestions. Interpersonally, clients in the MI group almost exclusively engaged in friendly and affiliative interpersonal processes. They were primarily disclosing and expressing or trusting and relying in response to the therapist.

Each of the specific group differences are further discussed below, followed by a discussion of the implications of receiving MI on client engagement and receptivity to a treatment rationale.

Client Asserting & Separating. In response to therapist intervention (i.e., the delivery of the CBT treatment rationale), clients in the group that did not receive MI directly asserted themselves, expressing separate sentiments from the therapist, to a significantly greater degree than clients in the MI-CBT group. Theoretically, a client who is asserting and separating during the treatment rationale is taking-autonomy and power even though the therapist may not necessarily be giving autonomy or freedom at that particular moment in therapy. One possible explanation may be that because MI tends to be more autonomy-granting, exploratory, and process-oriented than CBT, clients in the MI group already had opportunities to explore and resolve concerns about therapy during MI; and therefore were less likely to assert themselves during the presentation of the CBT treatment rationale. Conversely, clients in the CBT-alone condition may not have had the same opportunities to explore their concerns and therefore were more likely to express/voice such concerns after hearing the CBT treatment rationale; taking autonomy in response to therapist direction. Ideally, good therapy process might involve client autonomy-taking behaviour that is preceded by therapist autonomy-giving behaviour (i.e., complementary therapist-client responses).

Consistent with findings from the current study, previous SASB studies (e.g., Henry et al., 1986; Henry, Schacht, & Strupp, 1990) have demonstrated that client interpersonal behaviour that is coded as 'asserting and separating' on the SASB circumplex was significantly related to undesirable interpersonal process and poor outcome. Specifically, Henry and colleagues (1986) found that clients in a low-change group asserted and separated from the therapist to a greater extent than clients who were considered high-change. Along the same lines, Henry, Schacht, and Strupp (1990) demonstrated that clients in the poor outcome group showed evidence of significantly more asserting and separating than clients in the good outcome group.

Similarly, using SASB, Ahmed, Westra, and Constantino (2012) compared early interpersonal processes during both resistant and cooperative segments in session one of CBT for GAD (among clients who went on to have either low or high treatment outcome expectations). Findings demonstrated that during moments of resistance, clients exhibited more evidence of asserting and separating in the low expectations group. That is, during moments of resistance (i.e., interpersonal tension between client and therapist) clients who went on to have low expectations tended to act independently, state their own ideas and beliefs, and assert these beliefs even if they reflected opposition to therapist suggestions. As such, there was significantly more evidence of relational conflict and interpersonal instability in the low expectations group. This finding parallels the current findings showing that assertions made in response to the treatment rationale in the CBT-alone group reflected interpersonal tension and lack of engagement. Though asserting and separating is viewed as neither hostile nor affiliative on the SASB circumplex, perhaps in the current study, client assertions that are made following instances of therapist direction could be interpreted as moments of resistance.

This opposition to the therapist/therapeutic rationale is an important finding given that resistance to the direction set by the therapist has been found to be a strong predictor of therapy outcome and engagement with the goals and tasks of therapy (Aviram & Westra, 2011; Beutler, Harwood, Michelson, Song, & Holman, 2011; Jungbluth & Shirk, 2009). In their review of mechanisms of change in MI, Apodaca and Longabaugh (2009) examined client behaviours including resistance and noted that it is surprising how few studies focus on resistance in MI, especially given that one of MI's key principles emphasizes the management of resistance. In fact, only two previous studies have examined observed resistance in the context of MI. Aviram and Westra (2011) investigated observed resistance and homework compliance in CBT among

those who either did or did not receive MI prior to CBT for high severity GAD. Findings demonstrated that the MI group showed less resistance early in CBT compared to the CBT group. The authors suggest that MI improved outcomes when added to CBT by reducing client resistance and increasing client engagement with treatment. In the area of problem drinking, Miller, Benefield, and Tonigan (1993) found that individuals who received an MI counseling style showed significantly lower levels of observed resistance compared to those who received a directive-confrontational counseling style. Moreover, greater resistance predicted poorer outcomes at 1-year follow-up.

Similarly, in the current study, clients who received MI prior to CBT showed no evidence of asserting and separating in response to the CBT treatment rationale; perhaps reflecting greater engagement in therapy/CBT. As discussed, MI has also been found to specifically decrease resistance in therapy (Aviram & Westra, 2011; Miller, Benefield, & Tonigan, 1993) and improve outcomes (Westra, Aviram, & Doell, 2011). The current results fit with the existing literature and suggest that receiving an MI pretreatment increased client receptivity to the treatment rationale in subsequent CBT as evidenced by the lack of client assertions in response to therapist direction in the MI group.

Broadly, the literature emphasizes the importance of client receptivity to the treatment rationale. The treatment rationale has been viewed as a common factor among all modalities of psychotherapy and has been shown to influence engagement in therapy (Frank, 1961, 1971; Addis & Jacobson, 2000). Client acceptance of the treatment rationale has consistently been found to significantly predict more positive therapy outcomes (Addis & Jacobson, 2000; Fennell & Teasdale, 1987; Safren, Heimberg, & Juster, 1997). Constantino, Ametrano, and Greenberg (2012) propose a number of significant practice suggestions based on their review of the

literature, including providing a strong treatment rationale. Specifically, the authors recommend providing a rationale that is both clear and convincing and then competently delivering a treatment that is consistent with the rationale results in more positive treatment outcomes (Constantino, Ametrano, & Greenberg, 2012). Conceivably, not accepting the rationale may result in more negative interpersonal process, resistance, and/or poor outcome.

Client Deferring & Submitting. During the presentation of the treatment rationale, clients in the group that did not receive MI prior to CBT deferred to the therapist significantly more than clients in the MI-CBT condition. One explanation is that it might be easier interpersonally for clients to submit to the therapist rather than voice concerns or disagree. Generally, clients have a hard time voicing objections to therapy (Rennie, 1994; Rhodes et al., 1994). In the therapy dyad, the therapist is commonly considered to be more expert than the client, which has been found to produce client deference to the therapist (Bohart & Tallman, 1999; Rennie, 1994; Rennie, 2002). Individuals entering therapy often see themselves as lay people and see their therapist as knowledgeable clinical experts. Therefore, it makes sense that clients tend to doubt their judgments when they conflict with those of the therapist. Although deference as an interpersonal process may be subtle and nuanced, the current findings suggest that deferring and submitting following the presentation of the treatment rationale may not be associated with good therapy process and may represent disagreement with the goals and tasks of treatment.

This finding also points to the value of having received MI prior to CBT in reducing client deference to the therapist after the presentation of the treatment rationale. Clients who received MI prior to CBT in the current study showed no evidence of deference to the therapist following the presentation of the CBT treatment rationale. Given that MI has been shown to

increase motivation for change and enhance engagement in therapy (Westra, Aviram, & Doell, 2011) it makes sense that clients who received MI prior to CBT were more engaged with negotiations about the goals and tasks of treatment and less likely to defer or submit to therapist direction. Moreover, since receptivity to the treatment rationale is viewed as such an important moment in therapy that predicts outcome (Frank, 1961, 1971; Addis & Jacobson, 2000) and involves client acceptance and engagement; client deference during discussion of the treatment rationale may ultimately lead to negative interpersonal process, lack of engagement, and poor outcome.

In their recent study, Safran and colleagues (2014) examined the impact of alliance-focused training on negative interpersonal process in therapy. Therapists who were treating patients using cognitive therapy began 'alliance-focused training' supervision groups at session 8 or 16 out of a 30-session CBT protocol. Alliance-focused training primarily focused on integrating a variety of strategies that emphasize the resolving of alliance ruptures. The spirit of this might be somewhat comparable to 'rolling with resistance' in MI. In their study, SASB was used to investigate the effect of process-oriented alliance training on client and therapist interpersonal processes in therapy. Similar to the current results, Safran et al.'s (2014) findings demonstrated that clients of therapists who received alliance-focused training over the course therapy showed significantly less evidence of deferring and submitting than they did during CBT. As such, shifting away from a less controlling or directive approaches and embodying a more autonomy-granting stance may reduce deference to the therapist by allowing client disagreement/expression of concerns about therapy or the therapeutic rationale.

Therapist Watching & Controlling. Therapists of the clients who did not receive MI prior to CBT were more likely to display controlling interpersonal behaviour following the

presentation of the treatment rationale than they were in the MI-CBT condition. That is, the same CBT therapists who were following the same treatment protocol (using parallel techniques with similar GAD clients) exhibited distinctly different interpersonal behaviours with clients who received MI prior to CBT as compared to clients who did not receive MI prior to CBT. Importantly, the CBT therapist was controlled for in the current study (i.e., the same CBT therapists, who were blind to treatment group, were responding differently to clients who received MI prior to CBT versus those who did not). Therefore, this significant difference in treatment group may be driven by the client or client motivation; underscoring the importance of how client motivation may pull for or shape therapist behaviour.

Client behaviour has been shown to have a negative influence on therapist behaviour. In their study examining whether resistance to change among smokers affects the confrontational behaviour of practitioners, Francis and colleagues (2005) randomly assigned 32 therapists to a standardized patient/actor who portrayed a smoker who had been briefed to show either high or low levels of resistance to change. Quantitative and qualitative analyses both demonstrated that higher levels of confrontational behaviour on the part of the therapist was observed in the high resistance group. Qualitative analysis also revealed that client resistance had a persistent negative impact on other therapist behaviours (such as, therapist questioning style, information/advice-giving, empathy, praise, and encouragement). In this study, therapist "confrontational behaviour" included responses that showed a negative-parent-type quality, relational power differential, disapproval, disagreement, or negativity. The authors go on to conclude that therapist confrontational behaviour may be triggered by client resistance.

Furthermore, using SASB, Anderson and colleagues (2012) examined low-hostile versus moderately-hostile interpersonal episodes in 62 therapy dyads. Findings demonstrated that

therapists in the moderate-hostility group offered more interpretations and education, and fewer questions and reflections. Also, therapist interpretations with a self-focus were more characteristic of moderate-hostility than low-hostility episodes (Anderson et al., 2012). Although it may be a challenge to receive messages that oppose therapeutic suggestions and to set aside negative reactions generated within the therapist at these difficult times (e.g., Binder & Strupp, 1997), doing so may be vital to preserving and enhancing client engagement in therapy and increasing receptivity to the treatment rationale.

Therapist control in particular has been found to be associated with a lack of client engagement in therapy and poor therapy outcome. Ahmed, Westra, and Constantino (2012) found that therapists of clients who went on to have low outcome expectations engaged in higher levels of watching and controlling than therapists of clients who went on to have high expectations for outcome. Similarly, Keijsers, Schaap, Hoogduin, and Lammers (1995) found that treatment outcome was negatively correlated with therapist instructions, advice, and explanations in session one of CBT. In their SASB study, Coady and Marziali (1994) demonstrated that therapist watching and controlling behaviours were significantly associated with poor alliances early in therapy. Moreover, Castonguay et al. (1996) examined cognitive therapy for depression and found that CBT therapists tended to persist with the cognitive rationale and techniques despite evidence of client avoidance of the therapeutic task or unresponsiveness to intervention. The authors suggest that therapists in their study may have increased their adherence to the cognitive rationale and relied on techniques in order to rectify problems within the therapeutic alliance. However, in doing so, therapist behaviour actually interfered with therapeutic change as greater protocol adherence was negatively correlated with outcome (Castonguay et al., 1996). Conceivably, less therapist control and increased therapist

flexibility or autonomy-granting behaviour would have resulted in a different outcome. Notably, these are therapeutic qualities that are characteristic of the MI approach.

In the study cited above, Safran and colleagues (2014) observed significant shifts in both therapist and client interpersonal processes after CBT was supplemented with alliance-focused training. Specifically, after receiving alliance-focused training in session 8 or 16 of CBT, therapists showed significantly less evidence of watching and controlling behaviour than they did when conducting CBT on its own (prior to such training). Critchfield and colleagues (2007) used SASB to investigate three variants of CBT for GAD. Differences in interpersonal processes were observed among these three types of CBT. Specifically, a reflective listening component was included in two of the three CBT variants. In the reflective listening conditions, the authors found significantly less controlling therapist behaviours (i.e., watching and controlling). This may be because reflective listening, a common component in MI, allows clients to freely express their ideas and concerns. In connecting this finding to other findings in the CBT-alone group, reduced levels of therapist control may pull for less client deference and assertions, leading to more affiliative interpersonal processes overall.

Broadly speaking, the findings from the current study fit with previous studies and suggest that lower client motivation may adversely shape therapist behaviour and that behaviours such as increased attempts to control and influence the client may be associated with lower client engagement and receptivity to the treatment rationale. Prematurely moving toward a concrete rationale or proposing solutions too soon, before thoroughly exploring client concerns and experiences, may reduce the credibility of the therapist/therapeutic rationale, leading to client disengagement or poorer outcomes. MI may be of potential value in decreasing this effect given that therapists of clients who received MI (and who were blind to treatment group) did not

show evidence of watching and controlling behaviour after the presentation of the treatment rationale. Though the CBT therapists were not utilizing MI per se, they were responding to clients who received MI differently than to clients who did not receive MI. As such, MI may have increased client readiness to hear the CBT rationale, thereby pulling for less therapist control than in dyads where the client did not receive MI.

Switching Interpersonal Focus. The majority of the time spent in therapy involves the client focusing on themselves and the therapist focusing on the client. However, the findings of the current study indicated that following the presentation of the treatment rationale, dyads in the CBT-alone condition showed significant evidence of awkward switches in interpersonal focus (i.e., therapist focused on self vs. client; client focused on therapist vs. self), whereas such switches were virtually absent in the MI-CBT condition. During negotiations about the goals and tasks of treatment, when clients who did not receive MI shifted the focus away from themselves and onto the therapist, this behaviour may have reflected discomfort with the CBT rationale, attempts to sidetrack the task at hand, or efforts to influence/control the therapist. Stated differently, client shifting of interpersonal focus may have been another form of lack of engagement, or an expression of disagreement or discomfort with the treatment rationale (much like client deference and assertions).

When therapists in the CBT-alone dyads focused on themselves (rather than the client) in the current study, the majority of these instances involved therapist 'disclosing and expressing' in SASB terms. Though there are many types of therapist self-disclosures, the literature suggests that when the therapist focuses on oneself rather than the client, it is sometimes a contentious issue involving discussions about its appropriateness and boundaries. The traditional psychoanalytic tradition, for example, posits that therapists be neutral, anonymous, and non-self-

disclosing in therapy. According to the conventional Freudian approach, not revealing too much and remaining neutral as a therapist is essential to the discovery, interpretation, and resolution of clients' transference (Goldstein, 1997; Knox & Hill, 2003).

However, a relevant therapist self-disclosure at the right moment may be considered therapeutic (Knox & Hill, 2003). For example, in humanistic psychology, therapist self-disclosures may represent therapists' genuineness and unconditional positive regard for clients and have the effect of equalizing power in the therapeutic relationship (Jourard, 1971; Robitschek & McCarthy, 1991). Rogers (1951) theorized that therapist genuineness and authenticity are essential to facilitating client openness, intimacy, trust, self-awareness, and change (Jourard, 1971; Rogers, 1951). Using a sample of 67 undergraduates, Nyman and Daugherty (2001) found that participants rated therapists who made self-disclosures (that were congruent with what the client was feeling) more favorably on expertness, trustworthiness, and attractiveness, than therapists whose disclosures were incongruent with the client.

In the area of CBT, Goldfried and colleagues (2003) suggest that therapist self-disclosures are consistent with the underlying principles of the cognitive-behavioural model. As such, therapists may help clients modify behaviours by positively reacting to adaptive interpersonal behaviours and negatively reacting to maladaptive interpersonal behaviours. When therapists disclose personal reactions to client actions, they are offering a form of behavioural reinforcement (Goldfried, Burckell, & Eubanks-Carter, 2003). In addition, therapist self-disclosures may challenge clients' assumptions about themselves and others, normalize their feelings, and serve to model more effective coping strategies (Goldfried, Burckell, & Eubanks-Carter, 2003; Knox & Hill, 2003).

Accordingly, though therapist disclosures may take many forms (e.g., disclosing about

personal history, feelings, thoughts, or reactions), many have theorized that it is only when therapist disclosures are used in the appropriate moment that they are generally viewed as effective. Unfortunately, in the current study, therapist self-disclosures did not appear to be used as well-thought-out or purposeful interventions designed with the client's best interest in mind. Instead, these self-disclosures often reflected a therapist defending themselves in the context of defending the CBT rationale, interpersonal awkwardness/tension, or therapist discomfort or anxiety.

Although interpersonal focus shifts are not by definition disruptive, the current findings suggest that they may be less desirable during negotiations about the goals and tasks of therapy and/or when they represent opposition to the treatment rationale. Perhaps, therapists' ability to recognize client's switching focus is a first step toward preventing negative interpersonal process and enhancing engagement during important moments in therapy.

The Impact of MI on Client Receptivity to Treatment and the CBT Treatment Rationale

In the current study, clients who received MI prior to CBT did not exhibit disaffiliative or opposing behaviours during the presentation of the treatment rationale in CBT. This may have been a result of having received a non-directive, autonomy-granting treatment that contributed to resolving ambivalence about change prior to being asked to follow the demands of the CBT therapist. Aviram and Westra (2011) examined observed resistance and homework compliance in CBT among those who either did or did not receive MI prior to CBT for GAD. Findings indicated that those who received MI showed less resistance early in CBT compared to those who received CBT on its own. Results also suggest that MI enhanced outcomes when added to CBT for GAD by reducing client resistance and increasing client engagement with treatment (Aviram & Westra, 2011). As such, the results of the current study fit strongly with evidence

that receiving MI prior to CBT is associated with lower levels of interpersonal resistance in CBT. Westra, Aviram, and Doell (2011) explored the use of MI and related motivational enhancement therapies in their review of the literature. Across clinical diagnoses, evidence generally supports the addition of MI to existing psychotherapies in order to increase engagement with treatment, increase attendance, and improve outcomes. The authors suggest that this finding is particularly important given that MI not only targets clinically significant problems such as client ambivalence, resistance, and disengagement; but also may be used to complement rather than replace existing treatments. Overall, the results of the current study fit with previous studies and suggest that receiving an MI pretreatment prior to CBT led to more affiliative interpersonal processes between client and therapist after the presentation of the treatment rationale (and less evidence of client asserting/separating, client deferring/submitting, therapist watching/controlling, and client-therapist interpersonal focus switching).

Findings also correspond to client post-CBT narratives of feeling more engaged in treatment if they first received MI prior to CBT. Using the same dataset, in a qualitative study of client post-treatment interviews of their experiences in therapy, Kertes, Westra and Angus (2011) reported that clients of high worry severity who received MI prior to CBT described the CBT therapist as collaborative and themselves as playing an active role in therapy. Clients who did not receive MI prior to CBT described the same CBT therapists as directive and themselves as playing a passive role in therapy. Again, treatment groups were matched for therapist in this study. That is, the same CBT therapist was experienced differently if the client did or did not receive MI prior to CBT; further underscoring changes in client motivation as a result of having received MI. Findings point to the importance of studying of interpersonal processes between client and therapist in CBT, and how much the therapist and/or collaboration is shaped by client

motivation as a result of having received an MI pre-treatment (Kertes et al., 2011).

Importantly, the results of the current study also indicate that one of the potential values of receiving MI prior to CBT is that it increases client receptivity to (or readiness for) the treatment rationale. Clients in the MI condition appeared to be more open to suggestions made by the therapist after the presentation of the CBT rationale, exhibiting more positive interpersonal behaviours than the clients who did not receive MI. This is significant given that the treatment rationale has been identified as a common factor in psychotherapy, influencing subsequent engagement in therapy (Frank, 1961, 1971; Addis & Jacobson, 2000). In fact, client acceptance of the treatment rationale has been found to be significantly associated with positive therapy outcomes (Addis & Jacobson, 2000; Fennell & Teasdale, 1987; Safren, Heimberg, & Juster, 1997), and plays a fundamental role in CBT in particular (e.g., Beck, Rush, Shaw, & Emery, 1979; Craske, Meadows, & Barlow, 1994). Theorists have suggested that the treatment rationale allows the client to feel that their struggles are understood and instills hope that they can be effectively treated in therapy (Frank, 1961; Frank & Frank 1991; Ilardi & Craighead 1994; Kanter, Kohlenberg & Loftus, 2002; Snyder, Illardi, Michael & Cheavens 2000). In the area of CBT, the purpose of the rationale is to provide both therapist and client with a model of the etiology and treatment of a given concern. Addis and Jacobson (2000) demonstrated that acceptance of the therapeutic rationale during the first three sessions of CBT for depression predicted change both halfway through treatment and at treatment outcome.

Given the importance of client agreement with the therapeutic rationale, Addis and Carpenter (2000) recommend that clinicians check-in repeatedly about clients' reactions to the treatment rationale. When therapist and client discuss why a problem may be occurring and what action to take, they are establishing a context where interpersonal influence is likely to occur,

whether it is labeling the issue or identifying the locus of responsibility for the problem. Addis and Carpenter (2000) also suggest that since these interpersonal processes are unavoidable, therapists should not ignore them. Rather, clinicians must be aware of the power differential when discussing a treatment rationale and ensure collaboration.

In the current study, MI also generally helped to foster more positive interpersonal processes early in therapy. Findings suggest that those who did not receive MI prior to CBT showed evidence of an interpersonal rigidity that may be influenced or decreased by receiving MI. This is particularly relevant since GAD clients have been found to have higher levels of interpersonal problems (Borkovec, Newman, Pincus, & Lytle, 2002; Durham, Allan, & Hackett, 1997). In particular, worry may be maintained because of relational problems or not having one's interpersonal needs met. Horowitz, Rosenberg, and Bartholomew (1993) suggest that individuals who are domineering, vindictive, or intrusive in relationships are more likely to experience a maladaptive emotional life. For similar reasons, Crits-Christoph and colleagues (1996) advocate for the possible efficacy of an interpersonally-oriented psychodynamic therapy for GAD. Also, there is evidence demonstrating that, among those with GAD, the quality of intimate relationships predicts long-term treatment outcome (Durham, Allan, & Hackett, 1997). As such, the current findings support the use of MI in potentially reducing difficult interpersonal processes that arise outside of therapy and also during negotiations about the goals and tasks of treatment.

This finding is important given that among anxiety disorders, GAD is regarded as the least CBT responsive (Borkovec & Ruscio, 2001; Campbell & Brown, 2002; Heimberg, Turk, & Mennin, 2004; Hunot et al., 2007; Newman, Castonguay, Borkovec, Fisher, & Nordberg, 2008; Newman & Erickson, 2010). Sanderson and Bruce (2007) asked expert cognitive behavioural

therapists what they have found to contribute to poor treatment response. The top two (out of ten) factors associated with lack of responding were ranked as being “lack of engagement in behavioural experiments” and “noncompliance” (Sanderson & Bruce, 2007). In their meta-analysis, Westen and Morrison (2001) also suggest that, in the area of GAD, a large number of clients do not engage with therapeutic tasks or respond to treatment. The current findings support the importance of paying attention to early interpersonal processes (such as assertions or deference) during/after the presentation of the treatment rationale in order to increase engagement in therapy. The quality of the client's engagement with treatment has been found to be among the most critical contributors to positive treatment outcomes (Orlinsky, Grawe, & Parks, 1994).

The Importance of Infrequent Interpersonal Behaviours

It is worth noting that the great majority of interpersonal behaviours observed and detailed in the current study were positive in both groups. That is, there were no significant differences between groups on the most common therapist and client interpersonal processes in the current study (i.e., therapist codes of affirming/understanding and nurturing/protecting; and client codes of disclosing/expressing, and trusting/relying). These client and therapist interpersonal behaviours occurred with equal and high frequency in both groups. Also, groups did not differ significantly on any of the interpersonal complementarity indices. That is, when clients were disclosing and expressing, therapists were affirming and understanding. When therapists were nurturing and protecting, clients were trusting and relying. That is, interpersonal reciprocity was observed within the dyads, reflecting largely harmonious interchanges. However, it was the *infrequent behaviours* that differentiated treatment groups in the current study.

Specifically, client asserting and separating following the presentation of the treatment

rationale highly differentiated treatment groups (i.e., no clients in the MI condition engaged in this behaviour) but was relatively infrequent, involving less than 6% of all client responses in the CBT-alone group. Similarly, client deferring and submitting after the presentation of the treatment rationale also differentiated treatment group, but in terms of frequency, accounted for only 1% of client responses in the CBT-alone condition (and did not occur in the MI-CBT group at all). In terms of therapist codes that differentiated treatment groups, therapist watching and controlling made up only 2.5% of all therapist responses in the CBT-alone group and less than .01% of therapist responses in the MI-CBT group. Finally, therapist-client focus switching following the presentation of the treatment rationale occurred just over 2% of the time in the CBT-alone group and .09% of the time in the MI-CBT group.

Overall, Binder and Strupp (1997) suggest that negative process in therapy is a significant obstacle to successful treatment but that its pervasiveness is often overlooked. Therefore it may dangerous for therapists to conclude that just because the response to the treatment rationale was mainly positive, we should ignore occasional disagreements, assertions, or any interpersonal tension. For example, though hostility is quite infrequent in therapy, it has been found to be strongly associated with outcome (Aviram, Westra, & Eastwood, 2011). As such, it may be easier to assume that things are progressing smoothly given that most interpersonal behaviour tends to be affiliative in therapy, and it may pose more of a challenge to accept messages that oppose one's suggestions and set aside negative reactions at these difficult times (Binder & Strupp, 1997). However, results of the current study suggest that paying attention to infrequent client behaviours may be vital to maintaining client engagement in therapy and increasing receptivity to the treatment rationale.

Clinical and Training Implications

Results of the current study underscore the importance of paying attention to early therapy processes. In treatments such as CBT, the technical features of therapy that typically occur over the course of treatment (e.g., specific interventions and skills-based techniques) are emphasized to a much greater extent than early interpersonal process factors. The findings of the current study suggest that interpersonal process, occurring as early as session one, should not be neglected in developing an effective course of treatment. Generally, to the extent that future research replicates these findings and shows a causal connection, the current study suggests that nurturing client receptivity to the treatment rationale requires sensitivity to interpersonal processes such as client assertions and client deference; and also therapist self-awareness of tendencies to control the client. As such, the current findings also support training models emphasizing the significance of early therapy contact (i.e., negotiating the goals and tasks of treatment) that may influence key outcomes in therapy (such as client engagement and receptivity to the treatment rationale). This is especially true given that the capacity to deliver a sound CBT rationale that is accepted by the client is viewed as an important clinical skill that contributes to treatment success (Addis & Carpenter, 2000; Frank, 1961; Frank & Frank 1991).

Observational training on the identification of negative process in therapy may also be particularly useful. Hara and colleagues (in press) examined therapist awareness of client resistance in CBT for GAD by comparing therapists' post-session ratings of client resistance with observer ratings of client resistance based on the same session. Findings indicated that observer ratings were much more strongly and consistently related to outcome, whereas therapist ratings were largely unrelated to client outcomes. The authors underscore the need to enhance therapists' ability to identify important and often subtle client behaviour such as resistance and

markers of disengagement with the tasks of treatment. Not only are difficulties in recognizing covert opposition (such as deference) common given that clients often have difficulty expressing their concerns about therapy (Rennie, 1994), but therapists also have difficulty identifying negative process when they are recipients or participants in the process (Binder & Strupp, 1997). As such, detecting such potent but rare moments in therapy seems to be of particular importance for effective therapist interventions (such a navigating resistance in therapy or identifying opposition to or nonacceptance of a treatment rationale).

In fact, studies have found that making therapists aware of negative process (e.g., giving therapists feedback when their cases are worsening) can work to improve client outcomes (Lambert et al., 2001; Whipple et al., 2003). Hara and colleagues (in press) suggest that because observers were able to reliably identify moments of resistance that significantly related to outcomes, training therapists to become aware of such processes is both possible and necessary. Based on their findings that negative process in therapy is largely destructive and particularly difficult for therapists to detect and manage, Binder and Strupp (1997) also advocate for observational training in the identification of negative process, and recommend that it be a standard part of psychotherapy training models.

As discussed, treatment groups in the current study did not significantly differ on any of the interpersonal complementarity indices following the presentation of the treatment rationale. In general, the overall landscape of the therapy process in the current study was positive, and it was the infrequent interpersonal behaviours that differentiated treatment group. This finding has important training implications. In particular, it may not be advisable to conclude that because the response to the treatment rationale was mainly positive, therapists should ignore negative process, occasional disagreements, assertions, or interpersonal tension. Explicitly training

therapists to attend to infrequent process markers that may be important to outcome may be of vital importance.

Finally, given that therapists of clients who did not receive MI engaged in more controlling interpersonal behaviour following the presentation of the treatment rationale in the current study, efforts to add and integrate MI into more action-oriented therapies such as CBT for anxiety may be particularly useful (e.g., Arkowitz, Westra, Miller, & Rollnick, 2008; Westra, 2012; Westra & Arkowitz, 2010). MI advocates learning to stay affiliative and reframing resistance as nonthreatening in the effective management of resistance. From an MI perspective, the ways in which a therapist responds to resistance or disaffiliative processes may significantly influence whether or not resistance increases or decreases. As such, therapist responses such as confronting, persuading, arguing, or convincing are considered to be counterproductive. Rather, "rolling with resistance", one of the central principles of MI, purports that reflective, autonomy-granting responses, or coming alongside the client (all reflecting greater affiliation) are more effective ways of managing disaffiliative processes or resistance (Westra, 2012). Though the findings of the current study are based on having received an MI pretreatment prior to CBT (rather than on an integration of MI with CBT), current results support the benefit of integrating such skills into more action-oriented therapies such as CBT. Integration and training in MI may be helpful in the effective management of assertions, deference, hostility, control, and focus shifting; and by potentially increasing receptivity to the treatment rationale and engagement in therapy.

Constantino and colleagues (2013) outline a model of context-responsive psychotherapy integration. In doing so, they advocate for the matching of specific therapeutic interventions to important in-session events and individual processes rather than simply attempting to match

theoretical orientation to patient diagnosis. This context-responsive model operates on an if-then structure such that therapists can respond to clients' individual needs with therapeutic strategies that are relevant to the context in which they arise. Similarly, Stiles, Honos-Webb, and Surko (1998) suggest that both therapist and client behaviour is strongly influenced by context (including assessments of each other's personal characteristics and behaviour). The authors argue that therapist responsiveness is of clinical value regardless of theoretical framework or outcome. The current findings also support the need for therapist responsiveness to nuanced early interpersonal processes. Switching to MI for example when ambivalence, assertions, resistance, or deference arise may be beneficial to increase engagement and receptivity to the treatment rationale in CBT.

Limitations & Future Studies

This study has a number of important limitations. First, a limitation of the greater clinical trial (Westra et al., 2009) is that clients who received MI in addition to CBT received four more therapy sessions than those who only received CBT. Hence, one might argue that client differences in interpersonal behaviours in the first session of CBT, and outcome differences between treatment groups, may merely be due to additional therapist contact, rather than to MI per se. Additionally, since clients in the current study knew that they would receive extra therapy or not, one could argue that client expectations differed (e.g., increased optimism in the extra therapy group since they knew that they received the "improved" treatment) and that might account for differences in better interpersonal process at the time of the treatment rationale.

Furthermore, due to the extensive time demands of the SASB coding, the current study utilized a small sample size and short excerpt selections. In particular, the current results and conclusions are based on 10.5 minute segments (out of the first CBT session) from a limited

number of cases (N=20); thus, the generalizability of the current findings is unknown. It is also possible that because of the small sample size, significant relationships between certain SASB indices and engagement with the tasks of treatment were not observed due to this limitation. Moreover, given the small sample size in the current study, significant interpersonal processes were not correlated with treatment outcome because conducting such analyses would reduce power (or increase the likelihood of Type II errors).

Given that one might argue that client differences in interpersonal behaviours in the first session of CBT may be merely due to additional therapist contact time, rather than to MI per se, future studies should aim to have equivalent therapy contact time across treatment conditions. In addition, future studies utilizing larger sample sizes are needed in order to increase confidence in the generalizability of findings and should examine the relationship among significant SASB processes and treatment outcome.

Future studies are also needed to examine whether or not resistance or negative interpersonal processes observed in the current study are being generated by the presentation of the treatment rationale, or whether it is simply the broader effect of the CBT-alone group showing more evidence of resistance in therapy (Aviram & Westra, 2011). That is, there may be nothing particularly significant about the interpersonal tension that is present at the time of the treatment rationale. Future studies could compare negative process during other less theoretically meaningful points in an early treatment session to those found in the current study and examine their relative significance to proximal or distal outcomes.

Finally, future studies should test the value of integrating MI with CBT rather than just using MI as a pretreatment to CBT for GAD. In doing so, the therapist may be able to better navigate through moments of resistance or negative process, which may then increase

engagement with therapy and improve outcomes. In other words, matching specific therapeutic interventions (such as rolling with resistance) to important moments in therapy and individual processes when needed, rather than simply attempting to fit the client into the CBT framework, needs to be tested in order for better intervention models to emerge.

Summary

Overall, the results of the current study suggest that, following the presentation of the CBT treatment rationale, clients who did not receive MI prior to CBT exhibited more evidence of negative interpersonal process than those in the MI-CBT condition. To the author's knowledge, this is the first study to systematically examine the interpersonal processes between client and therapist after the presentation of the CBT treatment rationale, an important moment in the first session of CBT. In particular, no studies to date have examined whether or not receiving MI prior to CBT (versus not receiving an MI pretreatment) positively influenced early interpersonal processes within CBT following the presentation of the treatment rationale. Findings highlight the importance of therapist attunement to early interpersonal processes such as client assertions, client deference, therapist control, and therapist-client focus switching. The results also emphasize the value of adding an MI pretreatment to CBT for GAD such that it decreases opposition to the therapist/therapeutic rationale and increases client engagement with therapy. In addition, it may be a mistake to conclude that because the response to the treatment rationale was mainly positive, we should ignore occasional disagreements, assertions, or interpersonal tension. On the contrary, the current results elucidate the importance of paying attention to infrequent interpersonal process markers that may imply underlying client disengagement, particularly during clinically important moments in therapy (e.g., the presentation of the treatment rationale).

References

Abramowitz, J. S., Franklin, M. E., Zoellner, L. A., & DiBernardo, C. L. (2002). Treatment compliance and outcome in obsessive- compulsive disorder. *Behavior Modification*, 26, 447–463.

Addis, M. E., & Carpenter, K. M. (2000). The treatment rationale in cognitive behavioral therapy: Psychological mechanisms and clinical guidelines. Cognitive and Behavioral Practice, 7(2), 147-156.

Addis, M. E., & Jacobson, N. S. (2000). A closer look at the treatment rationale and homework compliance in cognitive-behavioral therapy for depression. *Cognitive Therapy and Research, 24*, 313-326.

Ahmed, M., & Westra, H. A. (2009). Impact of a treatment rationale on expectancy and engagement in cognitive behavioral psychotherapy for social anxiety. *Cognitive Psychotherapy and Research, 33*, 314-322.

Ahmed, M., Westra, H.A., & Constantino, M.J. (2012). Early therapy interpersonal process differentiating clients high and low in outcome expectations. *Psychotherapy Research*, 22(6): 731-745.

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington, VA: American Psychiatric Association.

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision*. Washington, DC: American Psychiatric Association.

Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing. *Journal of Consulting &*

Clinical Psychology, 71, 862-878.

Anderson, T., Knobloch-Fedders, L., Stiles, W. B., Ordoñez, T., & Heckman, B. D. (2012). The power of subtle interpersonal hostility in psychodynamic psychotherapy: A speech acts analysis. *Psychotherapy Research*, 22(3), 348-362.

Antony, M. M., Roth Ledley, D., & Heimberg, R. G. (2005). Improving outcomes and preventing relapse in cognitive-behavioural therapy. New York: Guilford Press.

Apodaca, T.R., & Longabaugh, R. (2009). Mechanisms of change in motivational interviewing: a review and preliminary evaluation of the evidence. *Addiction*, 104, 705-715.

Arkowitz, H. (2002). Toward an integrative perspective on resistance to change in psychotherapy. *Journal of Clinical Psychology, 58*, 219-227.

Arkowitz, H., Westra, H.A., Miller, W.R., & Rollnick, S. (2008). *Motivational Interviewing in the Treatment of Psychological Problems* (Eds). New York, NY: Guilford.

Arnkoff, D. B., Glass, C. R., & Shapiro, S. J. (2002). Expectations and preferences. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapists contributions and responsiveness to patients* (pp. 325-346). New York: Oxford University Press.

Aveline, M. (2005). The person of the therapist. *Psychotherapy Research, 15,* 155-164.

Aviram, A., & Westra, H. A. (2011). The impact of motivational interviewing on resistance in cognitive behavioral therapy for generalized anxiety disorder. *Psychotherapy Research, 6,* 698-708.

Aviram, A., Westra, H.A., & Eastwood, J. (2011). Patterns of Early Resistance and Client Outcome in Cognitive Behavioural Therapy. Paper presented at the Meeting of North American Society for Psychotherapy Research, Banff, Canada.

Barlow, D. H. (2002). *Anxiety and its disorders: The nature and treatment of anxiety and panic.* (2nd ed.). New York: Guilford Press.

Barlow, D.H. (2008). *Clinical Handbook of Psychological Disorders: A Step-by-Step Treatment Manual* (4th ed.). New York, NY: Guilford Press.

Beck, J. S. (1995). *Cognitive therapy: Basics and beyond.* New York: Guilford.

Beck, A.T. & Emery, G. (1985). *Anxiety Disorders and Phobias: A Cognitive Perspective*. New York: Basic Books.

Beck, A. T., & Greenberg, R. L. (1974). Coping with depression. New York: Institute for Rational Living.

Beck, A. T., Rush, A. J., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. NewYork: Guilford.

Behar, E., & Borkovec, T. D. (2010). Treatment considerations in generalized anxiety disorder. In: M. W. Otto & S. Hofmann (Eds.), *Resolving treatment complications* (pp. 185-208). New York: Springer.

Behar, E., Dobrow DiMarco, I., Hekler, E.B., Mohlman, J., & Staples, A.M. (2009). Current theoretical models of generalized anxiety disorder (GAD): Conceptual review and treatment implications. *Journal of Anxiety Disorders*, 23, 1011-1023.

Benjamin, L. S. (1974). Structural analysis of social behavior. *Psychological Review, 81,* 392-425.

Benjamin, L. S. (1987). Use of the SASB dimensional model to develop treatment plans for personality disorders, I: Narcissim. *Journal of Personality Disorders*, 1, 43-70.

Benjamin, L. S. (1994). SASB: A bridge between personality theory and clinical psychology. *Psychological Inquiry, 5,* 273-316.

Benjamin, L. S. (1996). Introduction to the special section on structural analysis of social behavior. *Journal of Consulting and Clinical Psychology,* 64*,* 1203-1212.

Benjamin, L. S., & Cushing, G. (2000). *Reference manual for coding social interactions in terms of Structural Analysis of Social Behavior.* Salt Lake City: University of Utah.

Benjamin, L. S., Rothweiler, J. C., & Critchfield, K. L. (2006). The use of Structural Analysis of Social Behavior (SASB) as an assessment tool. *Annual Review of Clinical Psychology*, 2, 83-109.

Beutler, L. E., Harwood, T. M., Michelson, A., Song, X., & Holman, J. (2011). Reactance/Resistance Level. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Evidence-based responsiveness* (2nd ed., pp. 261-278). New York: Oxford University Press.

Beutler, L.E., Malik, M., Alimohamed, S., Harwood, T. M., Talebi, H., Noble, S., et al. (2004). Therapist variables. In M. Lambert (Ed.), *Handbook of psychotherapy and behavior change* (5th ed., pp. 227-306). New York: Wiley.

Beutler, L.E., Moleiro, C.M., & Talebi, H. (2002). Resistance in psychotherapy: What conclusions are supported by research. *Journal of Clinical Psychology*, 58, 207-217.

Binder, J. L., & Strupp, H. H. (1997). "Negative process": A recurrently discovered and underestimated facet of therapeutic process and outcome in the individual psychotherapy of adults. *Clinical Psychology: Science and Practice*, 4, 121-139.

Bohart, A.C., & Tallman, K. (1999). *How clients make therapy work: The process of active self healing*. Washington, DC: American Psychological Association.

Borkovec, T. D. (1994). The nature, functions, and origins of worry. In G. C. L. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment, and treatment* (pp. 5–34).

New York: Wiley.

Borkovec, T. D., Alcaine, O., & Behar, E. (2004). Avoidance theory of worry and generalized anxiety disorder. In R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.), *Generalized anxiety disorder: Advances in research and practice*, pp. 77-108. New York: Guilford Press.

Borkovec, T. D., & Costello, E. (1993). Efficacy of applied relaxation and cognitive behavioral therapy in the treatment of generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 57, 3–8.

Borkovec, T.D., Hazlett-Stevens, H., & Diaz, M.L. (1999). The role of positive beliefs about worry in generalized anxiety disorder and its treatment. *Clinical Psychology & Psychotherapy*, 6,126-138.

Borkovec, T.D., Lyonfields, J.D., Wiser, S.L., & Diehl, L. (1993). The role of worrisome thinking in the suppression of cardiovascular response to phobic imagery. *Behaviour Research and Therapy*, 31, 321-324.

Borkovec, T. D., & Mathews, A. M. (1988). Treatment of nonphobic anxiety disorders: A comparison of nondirective, cognitive, and coping desensitization therapy. *Journal of Consulting and Clinical Psychology*, 56, 877–884.

Borkovec, T. B., Newman, M. G., Pincus, A. L., & Lytle, R. (2002). A component analysis of cognitive-behavioral therapy for generalized anxiety disorder and the role of interpersonal problems. *Journal of Consulting and Clinical Psychology*, 70(2), 288–298.

Borkovec, T.D., & Roemer, L. (1995). Perceived functions of worry among generalized anxiety disorder subjects: Distraction from more emotionally distressing topics? *Journal of Behavior Therapy and Experimental Psychiatry, 26*, 25-30.

Borkovec, T. D., & Ruscio, A. M. (2001). Psychotherapy for generalized anxiety disorder. *Journal of Clinical Psychiatry*, 62, 37–42.

Brown, T. A., Antony, M. M., & Barlow, D. H. (1992). Psychometric properties of the Penn State Worry Questionnaire in a clinical anxiety disorders sample. *Behaviour Research and Therapy*, 30, 33–37.

Brown, T.A., DiNardo, P., & Barlow, D.H. (1994). *ADIS: Anxiety Disorders Interview Schedule for DSM IV*. Colorado: Graywind Publications.

Bryant, M. J., Simons, A. D., & Thase, M. E. (1999). Therapist skill and patient variables in homework compliance: Controlling an uncontrolled variable in cognitive therapy outcome research. *Cognitive Therapy and Research, 23*(4), 381-399.

Buckner, J.D., Roth, L.D., Heimberg, R.G., & Schmidt, N.B. (2008). Treating comorbid social anxiety and alcohol use disorders: combining motivation enhancement therapy with cognitive behavioral therapy. *Clinical Case Studies*, 7 208-223.

Buckner, J.D., & Schmidt, N.B. (2009). A randomized pilot study of motivation enhancement therapy to increase utilization of cognitive-behavioral therapy for social anxiety. *Behavior Research and Therapy*, 47(8), 710-715.

Burke, B.L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology, 71*, 843-861.

Burke, B.L. (2011). What can motivational interviewing do for you? *Cognitive and Behavioral Practice*, 18, 74-81.

Campbell, L.A., & Brown, T.A. (2002). Generalized anxiety disorder. In M.M. Antony & D.H. Barlow (Ed.), *Handbook of Assessment and Treatment Planning for Psychological*

Disorders (pp 147-181). New York: Guilford.

Cassidy, J. (1995). Attachment and generalized anxiety disorder. In D.C. & S. Toth (Eds.), *Rochester symposium on developmental psychopathology: Emotion, cognition and representation* (pp. 343-370). Rochester, NY: University of Rochester Press.

Castonguay, L. G., Goldfried, M. R., Wiser, S., Raue, P. J., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology, 64*(3), 497-504.

Coady, N. F. (1991). The association between client and therapist interpersonal process and outcomes in psycodynamic psychotherapy. *Research on Social Work Practice, 1,* 122-138.

Coady, N. F., & Marziali, E. (1994). The association between global and specific measures of the therapeutic relationship. *Psychotherapy, 31,* 17-27.

Constantino, M.J. (2000). Interpersonal process in psychotherapy through the lens of the Structural Analysis of Social Behavior. *Applied & Preventive Psychology,* 9, 153-172.

Constantino, M.J., Ametrano, R.M., & Greenberg, R. P. (2012). Clinician interventions and participant characteristics that foster adaptive patient expectations for psychotherapy and psychotherapeutic change. *Psychotherapy*, 49, 557-569.

Constantino, M. J., Boswell, J.F., Bernecker, S.L., & Castonguay, L.G. (2013). Context responsive psychotherapy integration as a framework for a unified clinical science: Conceptual and empirical considerations. *Journal of Unified Psychotherapy and Clinical Science*, 2, 1-20.

Constantino, M. J., Glass, C. R., Arnkoff, D. B., Ametrano, R. M., & Smith, J. Z. (2011). Expectations. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Evidence*

based responsiveness (2nd ed., pp 354-376). New York: Oxford University Press.

Covin, R., Ouimet,A.J., Seeds, P.M., & Dozois, D.J.A. (2008). A meta-analysis of CBT for pathological worry among clients with GAD. *Journal of Anxiety Disorders*, 22(1): 108-116.

Craske, M. G., Meadows, E., & Barlow, D. H. (1994*). Therapist's guide for the mastery of your anxiety and panic II & agoraphobia supplement*. New York: Graywind.

Critchfield, K. L., Henry, W. P., Castonguay, L. G., & Borkovec, T. D. (2007). Interpersonal process and outcome in variants of cognitive-behavioral psychotherapy. *Journal of Clinical Psychology*, 63(1), 31-51.

Cuijpers, P., Sijbrandij, M., Koole, S., Huibers, M., Berking, M., & Andersson, G. (2014). Psychological treatment of generalized anxiety disorder: A meta-analysis. *Clinical Psychology Review,* 34, 130-140.

Davey, G.C.L., Jubb, M., & Cameron, C. (1996). Catastrophic worrying as a function of changes in problem-solving confidence. *Cognitive Therapy and Research*, 20, 333-344.

Dietzel, C. S., & Abeles, N. (1975). Client-therapist complementarity and therapeutic outcome. *Journal of Counseling Psychology*, 22(4), 264– 272.

Dozois, D.J.A., Westra, H.A., Collins, K.A., Fung, T.S., & Garry, J.K.F. (2004). Stages of change in anxiety: psychometric properties of the University of Rhode Island Change Assessment (URICA) scale. *Behaviour Research and Therapy,* 42, 711–729.

Dugas, M. J. (2000). Generalized anxiety disorder publications: So where do we stand? *Journal of Anxiety Disorders*, 14, 31-40.

Dugas, M.J., Buhr, K., & Ladouceur, R. (2004). The role of intolerance of uncertainty in etiology and maintenance. In R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.),

Generalized anxiety disorder: Advances in research and practice, pp. 77-108. New York: Guilford Press.

Dugas, M. J., Gagnon, F., Ladouceur, R., & Freeston, M. H. (1998). Generalized anxiety disorder: a preliminary test of a conceptual model. *Behaviour Research and Therapy*, 36, 215-226.

Dugas, M.J., Gosselin, P., & Ladouceur, R. (2001). Intolerance of uncertainty and worry: Investigating specificity in a nonclinical sample. *Cognitive Therapy and Research*, 25, 13-22.

Dugas, M. J., & Koerner, N. (2005). Cognitive-behavioral treatment for generalized anxiety disorder: current status and future directions. *Journal of Cognitive Psychotherapy*, 19, 61 -68.

Dugas, M. J., Marchand, A., & Ladouceur, R. (2005). Further validation of a cognitive behavioral model of generalized anxiety disorder: diagnostic and symptom specificity. *Journal of Anxiety Disorders*, 19, 329–343.

Durham, R. C., Allan, T., & Hackett, C. A. (1997). On predicting improvement and relapse in generalized anxiety disorder following psychotherapy. *British Journal of Clinical Psychology*, 36, 101–119.

Durham, R. C., Fisher, P. L., Dow, M. G. T., Sharp, D., Power, K .G., Swan, J. S., & Morton, V. R. (2004). Cognitive behaviour therapy for good and poor prognosis generalized anxiety disorder: A clinical effectiveness study. *Clinical Psychology and Psychotherapy*, 11, 145-157.

Engle, D.E., & Arkowitz, H. (2006). *Ambivalence in Psychotherapy: Facilitating Readiness to Change*. New York: Guilford Press.

Fennell, M. J., & Teasdale, J. D. (1987). Cognitive therapy for depression: Individual differences and the process of change. *Cognitive Therapy and Research*, 11, 253–271.

Fisher, P.L., & Durham, R.C. (1999). Recovery rates in generalized anxiety disorder following psychological therapy: an analysis of clinically significant change in the STAI-T across outcome studies since 1990. *Psychological Medicine*, 29, 1425-1434.

Florsheim, P. & Benjamin, L.S. (2001) The Structural Analysis of Social Behavior Observational Coding Scheme. In. P.K. Kerig & L.M. Lindahl (Eds.) *Family observational coding systems: Resources for systemic research*. Hillsdale, N.J. Erlbaum.

Flynn, H. A. (2011). Setting the stage for the integration of motivational interviewing with cognitive behavioral therapy in the treatment of depression. *Cognitive and Behavioral Practice*, 18, 46–54.

Francis, N., Rollnick, S., McCambridge, J., Butler, C., Lane, C., & Hood, K. (2005). When smokers are resistant to change: Experimental analysis of the effect of patient resistance on practitioner behaviour. *Addiction*, 100, 1175-1182.

Frank, J. D. (1961). *Persuasion and healing.* Baltimore: Johns Hopkins University Press.

Frank, J. D. (1971). Therapeutic factors in psychotherapy. *American Journal of Psychotherapy,25,* 350-361.

Frank, J. D., & Frank, J. B. (1991). *Persuasion and healing: A comparative study of psychotherapy*. Baltimore: Johns Hopkins University Press.

Freeston, M.H., Rheaume, J., Letarte, H., Dugas, M.J., & Ladouceur, R. (1994). Why do People Worry? *Personality and Individual Differences, 17*, 791-802.

Goldfried, M.R., Burckell, L.A., & Eubanks-Carter, C. (2003). Therapist self-disclosure in cognitive-behavior therapy. *Journal of Clinical Psychology*, 59, 555-568.

Goldman, N., Dugas, M. J., Sexton, K. A., & Gervais, N. J. (2007). The impact of written exposure on worry: A preliminary investigation. *Behavior Modification*, 31, 512-538.

Goldstein, E.G. (1997). To tell or not to tell: The disclosure of events in the therapist's life to the patient. *Clinical Social Work Journal*, 25, 41–58.

Gould, R. A., Otto, M. W., Pollack, M. H., & Yap, L. (1997). Cognitive-behavioral and pharmacological treatment of generalized anxiety disorder: a preliminary meta analysis. *Behavior Therapy*, 28, 285–305.

Gould, R. A., Safren, S. A., Washington, D. O., & Otto, M. W. (2004). A meta-analytic review of cognitive-behavioral treatments. In: R. G. Heimberg, C. A. Turk, & D. S. Mennin (Eds.), *Generalized Anxiety Disorder: advances in research and practice*. New York: Guilford Press.

Greenberg, L. S. (1986). Change process research. *Journal of Consulting and Clinical Psychology, 54,* 4-9.

Greenberg, R. P., Constantino, M. J., & Bruce, N. (2006). Are patient expectations still relevant for psychotherapy process and outcome? *Clinical Psychology Review*, 26, 657-78.

Hara, K.A., Westra, H.A., Aviram, A., Button, M.L., Constantino, M.J., & Antony, M.M. (in press). Therapist awareness of client resistance in cognitive-behavioural therapy for generalized anxiety disorder

Heimberg, R.G., Turk, C.L., & Mennin, D.S. (2004). *Generalized anxiety disorder: Advances in research and practice*. New York: Guilford.

Helbig, S., & Fehm, L. (2004). Problems with homework in CBT: Rare exception or rather frequent? *Behavioral and Cognitive Psychotherapy, 32(3)*, 291-301.

Henry, W. P., Schacht, T. E., & Strupp, H. H. (1986). Structural analysis of social behavior: Application to a study of interpersonal process in differential psychotherapeutic outcome. *Journal of Consulting and Clinical Psychology*, 54, 27-31.

Henry, W. P., Schacht, T. E., & Strupp, H. H. (1990). Patient and therapist introject, interpersonal process and differential psychotherapy outcome. *Journal of Consulting and Clinical Psychology*, 58, 768-774.

Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology, 1*(1), 91-111.

Horowitz, L. M., Rosenberg, S. E., & Bartholomew, K. (1993). Interpersonal problems, attachment styles, and outcome in brief dynamic therapy. *Journal of Consulting and Clinical Psychology*, 61, 549–560.

Hunot, V., Churchill, R., Teixeira, V., & Silva de Lima, M. (2007). Psychological therapies for generalized anxiety disorder (review). *Cochrane Libraries, 4*.

Huppert, J.D., & Baker-Morissette, S.L. (2003). Beyond the manual: The insider's guide to panic control treatment. *Cognitive and Behavioral Practice, 10*, 2-13.

Ilardi, S. S., & Craighead, W. E. (1994). The role of nonspecific treatment factors in cognitive behavior therapy (CBT) for depression. *Clinical Psychology Science and Practice*, 1, 138-156.

Jorgensen, C. R., Hougaard, E., Rosenbaum, B., Valbak, K., & Rehfeld, E. (2000). The dynamic assessment interview (DAI), interpersonal process measured by structural analysis of social behavior (SASB) and therapeutic outcome. *Psychotherapy Reserach*, 10(2), 181-195.

Jourard, S. (1971). Self-Disclosure: An Experimental Analysis of the Transparent Self. New

York, NY: John Wiley & Sons.

Jungbluth, N.J., & Shirk, S.R. (2009). Therapist strategies for building involvement in cognitive-behavioral therapy for adolescent depression. *Journal of Consulting and Clinical Psychology,* 77, 1179-1184.

Kanter, J. W., Kohlenberg, R. J., & Loftus, E. F. (2002). Demand characteristics, treatment rationales, and cognitive therapy for depression. *Prevention & Treatment*, 5(41), 1-16.

Kazantzis, N., Deane, F. P., & Ronan, K. R. (2004). Assessing compliance with homework assignments: Review and recommendations for clinical practice. *Journal of Clinical Psychology*, 60, 627–641.

Kazantzis, N., Lampropoulos, G. K., & Deane, F. P. (2005). A national survey of practicing psychologists' use and attitudes toward homework in psychotherapy. *Journal of Consulting and Clinical Psychology, 73*, 742-748.

Kazdin, A.E. (2008). Evidence-based treatment and practice: new opportunities to bridge clinical research and practice, enhance the knowledge base, and improve patient care. *American Psychologist, 63*, 146-159.

Kazdin, A. E. (2005). Treatment outcomes, common factors and continued neglect of mechanisms of change. *Clinical Psychology: Science & Practice*, 12, 184–188.

Kiesler, D. J. (1996). *Contemporary interpersonal theory and research: Personality, psychopathology, and psychotherapy*. New York: Wiley.

Keijsers, G.P.J., Schaap, C.P.D.R., Hoogduin, C.A.L., & Lammers, M.W. (1995). Patient therapist interaction in the behavioral treatment of panic disorder with agoraphobia. *Behavior Modification*, 19(4), 491-517.

Kertes, A., Westra, H.A. & Angus, L. (2011). Elucidating the impact of motivational

interviewing on client experiences of cognitive behavioral therapy for generalized anxiety disorder. *Cognitive and Behavioral Practice*, 18: 55-69.

Kiesler, D. J. (1996). *Contemporary interpersonal theory and research: Personality, psychopathology, and psychotherapy*. New York: Wiley.

Koerner, N., & Dugas, M. J. (2006). A cognitive model of generalized anxiety disorder: the role of intolerance of uncertainty. In: G. Davey & A. Wells (Eds.), *Worry and its psychological disorders: theory, assessment and treatment* (pp. 201–216). West Sussex, England: Wiley and Sons.

Knox, S., & Hill, S. (2003). Therapist self-disclosure: Research based suggestions for practitioners. *Journal of Clinical Psychology*, 59(5), 529- 539.

Kushner, M.G., & Sher, K.J. (1989). Fear of psychological treatment and its relation to mental health service avoidance. *Professional Psychology Research and Practice*, 20, 251-257.

Ladouceur, R., Dugas, M. J., Freeston, M. H., Rheaume, J., Blais, F., Boisvert, J. M., et al. (1999). Specificity of generalized anxiety disorder symptoms and processes. *Behavior Therapy*, 30, 191-207.

Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., & Nielsen, S. L. (2001). The effects of providing therapists with feedback on patient progress during psychotherapy: Are outcomes enhanced? *Psychotherapy Research*, 11, 49-68.

Leahy, R.L. (2003). *Roadblocks in Cognitive-Behavioural Therapy: Transforming Challenges into Opportunities for Change.* New York: Guilford Press.

Leahy, R.L. (2004). Cognitive-behavioral therapy. In R.G. Heimberg, C.L. Turk, & D.S. Mennin, D.S. (Eds.). *Generalized anxiety disorder: Advances in research and practice*. New York: Guilford.

McCabe, R. E., & Antony, M. M. (2005). Panic disorder and agoraphobia. In M. Antony, D. R. Ledley, & R. Heimberg (Eds.), *Improving Outcomes and Preventing Relapse in Cognitive Behavioral Therapy*. New York: The Guilford Press.

Mergenthaler, E., & Stinson, C. H. (1992). Psychotherapy transcription standards. *PsychotherapyReserach*, 2(2), 125-142.

Merlo, L.J., Storch, E.A., Lehmkuhl, H.D., Jacob, M.L., et al. (2010). Cognitive behavioral therapy plus motivational interviewing improves outcome for pediatric obsessive compulsive disorder: A preliminary study. *Cognitive Behavior Therapy*, 39(l), 24-27.

Meyer, T.J., Miller, M.L., Metzger, R.L., & Borkovec, T.D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behavior Research and Therapy, 28*, 487-495.

Miller, W.R., Benefield, R.G., & Tonigan, J.S. (1993). Enhancing motivation for change in problem drinking: a controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology*, 61, 455-461.

Miller, W. R., & Johnson, W. R. (2008). A natural language screening measure for motivation to change. *Addictive Behaviors*, 33, 1177-1182.

Miller, W. R., & Rollnick, S. (2002). *Motivational Interviewing: Preparing People for Change*. New York: Guilford.

Miller, W.R. & Rollnick, S. (2009). Ten things that Motivational Interviewing is not. *Behavioural and Cognitive Psychotherapy*, 37, 129-140.

Miller, W.R., & Rose, G.S. (2009). Toward a theory of motivational interviewing. *American Psychologist*, 64, 527-537.

Murphy RT. (2008) Enhancing combat veterans' motivation to change posttraumatic stress disorder symptoms and other problem behaviors. In H. Arkowitz, H.A. Westra, W.R.

Miller, & S. Rollnick (Eds.) *Motivational interviewing in the treatment of psychological problems*. (pp. 57-84). New York: Guilford Press.

Murphy, R.T, Thompson, K.E., Murray, M. Rainey, Q., & Uddo, M.M. (2009). Effect of a motivation enhancement intervention on veterans' engagement in PTSD treatment. *Psychological Services*, 6(4), 264-278.

Najavits, L. M., & Strupp, H. H. (1994). Differences in the effectiveness of psychodynamic therapists: a process-outcome study. *Psychotherapy*, 31(1), 114-123.

Newman, M. G., Castonguay, L. G., Borkovec, T. D., Fisher, A. J., & Nordberg, S. S. (2008). An open trial of integrative cognitive therapy for generalized anxiety disorder. *Psychotherapy, 45*, 135-147.

Newman, M. G., & Erickson, T. M. (2010). Generalized anxiety disorder. In J. G. Beck (Ed.), *Interpersonal processes in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 235-259). Washington, DC: American Psychological Association.

Noble, L. M., Douglas, B. C., & Newman, S. P. (2001). What do patients expect of psychological services? A systematic and critical review of empirical studies. *Social Science & Medicine*, 52, 985-998.

Norton, P.J., & Price, E.C. (2007). A meta-analytic review of adult cognitive-behavioral treatment outcome across the anxiety disorders. *The Journal of Nervous and Mental Disease,* 195, 521-531.

Nyman, S.J., & Daugherty, T.K. (2001). Congruence of counselor self-disclosure and perceived effectiveness. *Journal of Psychology*, 125(3), 269-276.

O'Hare, T. (1996). Readiness for change: Variation by intensity and domain of client distress.

Social Work Research, 20, 13-17.

Oliveau, D. C., Agras, W. S., Leitenberg, H., Moore, R. C., & Wright, D. D. (1969). Systematic desensitization, therapeutically oriented instructions and selective positive reinforcement. *Behavior Research and Therapy*, 7, 27–33.

Penney, A.M., Mazmanian, D., & Rudanycz, C. (2013). Comparing positive and negative beliefs about worry in predicting generalized anxiety disorder symptoms. *Canadian Journal of Behavioural Science*, 45, 34-41.

Persons, J. B., Davidson, J., Tomkins, M. A. (2001). *Essential components of cognitive behavioral therapy for depression*. American Psychological Association.

Pincus, A.L. (1998). Structural Analysis of Social Behavior (SASB): Circumplex analyses and structural relations with the interpersonal circle and the five-factor model of personality. *Journal of Personality and Social Psychology,* 74, 1629-1645.

Pincus, A. L., Gurtman, M. B., & Ruiz, M. A. (1998). Structural analysis of social behavior (SASB): Circumplex analyses and structural relations with the interpersonal circle and the five-factor model of personality. *Journal of Personality and Social Psychology*, 74, 1629-1645.

Rennie, D. L. (1994). Clients' deference in psychotherapy. *Journal of Counseling Psychology*, 41(4), 427-437.

Rennie, D.L. (2002). *Person-centred counselling: An experiential approach*. London: SAGE Publications.

Rhodes, R. H., Hill, C. E., Thompson, B. J., & Elliott, R. (1994). Client retrospective recall of resolved and unresolved misunderstanding events. *Journal of Counseling Psychology*, 41(4), 473-483.

Robitschek, C.G., & McCarthy, P.R. (1991). Prevalence of counselor self-reference in the therapeutic dyad. *Journal of Counseling and Development*, 69, 218–221.

Robichaud, M., & Dugas, M. J. (2006). A cognitive-behavioral treatment targeting intolerance of uncertainty. In: G. Davey & A. Wells (Eds.), *Worry and its psychological disorders: theory, assessment and treatment* (pp. 289–304). West Sussex: Wiley.

Roemer, L., Molina, S., & Borkovec, T. D. (1997). An investigation of worry content among generally anxious individuals. *Journal of Nervous and Mental Disease*, 185, 314-319.

Roemer, L., Molina, S., Litz, B.T., & Borkovec, T.D. (1997). Preliminary investigation of the role of previous exposure to potentially traumatizing events in generalized anxiety disorder. *Depression and Anxiety*, 4, 134-138.

Rogers, C. (1951). *On becoming a person*. Boston: Houghton Mifflin.

Rogers, C. R. (1956). Client-centered therapy. *Journal of Counseling Psychology, 3*, 115-120.

Safren, S. A., Heimberg, R. G., & Juster, H. R. (1997). Clients' expectancies and their relationship to pretreatment symptomatology and outcome of cognitive-behavioral group treatment for social phobia. *Journal of Consulting & Clinical Psychology*, 65(4), 694-698.

Safran, J. D., Muran, J. C., Demaria, A., Boutwell, C., Eubanks-Carter, C., & Winston, A. (2014). Investigating the impact of alliance-focused training on interpersonal process and therapists' capacity for experiential reflection. *Psychotherapy Research*, 24, 1-17.

Safran, J. D., Muran, J. C., Samstag, L. W., & Stevens, C. (2001). Repairing alliance ruptures. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 406-412.

Salzer, S., Pincus, A. L., Hoyer, J., Kreische, R., Leichsenring, F., & Leibing, E. (2008). Interpersonal subtypes within generalized anxiety disorder. *Journal of Personality*

Assessment, 90, 292-299.

Sanderson, W.C., & Bruce, T.J. (2007). Causes and management of treatment-resistant panic disorder and agoraphobia: A survey of expert therapists. *Cognitive and Behavioral Practice*, 14, 26–35.

Schmidt, N.B., & Woolaway-Bickel, K. (2000). The effects of treatment compliance on outcome in cognitive-behavioral therapy for panic disorder: Quality versus quantity. *Journal of Consulting and Clinical Psychology*, 68: 13-18

Simpson, H.B., & Zukoff, A. (2011). Using motivational interviewing to enhance treatment outcome in people with obsessive-compulsive disorder. *Cognitive and Behavioral Practice*, 18, 28-37.

Simpson, H. B., Zuckoff, A., Page, J. R., Franklin, M. E., & Foa, E. B. (2008). Adding motivational interviewing to exposure and ritual prevention for obsessive-compulsive disorder: an open pilot trial. *Cognitive Behavior Therapy*, 37,38–49.

Snyder, C. R., Illardi, S., Michael, S. T., & Cheavens, J. (2000). Hope theory: Updating a common process for psychological change. In C. R. Snyder, & R. E. Ingram (Eds.) *Handbook of psychological change: Psychotherapy processes and practices for the 21st century* (pp. 128–153). New York: Wiley.

Sookman, D., & Steketee, G. (2007). Directions in specialized cognitive behavior therapy for resistant obsessive-compulsive disorder: Theory and practice of two approaches. *Cognitive and Behavioral Practice*, 14, 1-17.

Stiles, W. B., Honos-Webb, L., & Surko, M. (1998). Responsiveness in psychotherapy. *Clinical Psychology: Science and Practice*, 5, 439-458.

Taft, C. T., Murphy, C. M., King, D. W., Musser, P. H., & DeDeyn, J. M. (2003). Process and

treatment adherence factors in group cognitive-behavioral therapy for partner violent men. *Journal of Consulting and Clinical Psychology*, 71(4), 812-820.

Tasca, G. A., Foot, M., Leite, C., Maxwell, H., Balfour, L., & Bissada, H. (2011). Interpersonal processes in psychodynamic-interpersonal and cognitive behavioral group therapy: A systematic case study of two groups. *Psychotherapy*, 48, 260-273.

Tasca, G. A., & McMullen, L. M. (1992). Interpersonal complementarity and antithesis within a stage model of psychotherapy. *Psychotherapy, 29*(4), 515-523.

Tolin, D. F., & Maltby, N. (2008). Motivating treatment-refusing patients with obsessive-compulsive disorder. In H. Arkowitz, H. A. Westra, W. R. Miller & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp.85-108). New York, NY: Guilford Press.

Tracey, T. J. (1993). An interpersonal stage model of the therapeutic process. *Journal of Counseling Psychology*, 40(4), 396–409.

Tracey, T. J., Sherry, P., & Albright, J. M. (1999). The interpersonal process of cognitive-behavioral therapy: An examination of complementarity over the course of treatment. *Journal of Counseling Psychology*, 46(1), 80–91.

Villard, K., L., & Whipple, L. J. (1976). *Beginnings in relational communication*. New York: Wiley.

Wampold, B. E. (2001). Therapist effects: An ignored but critical factor. In B. E. Wampold (Ed.), *The great psychotherapy debate* (pp. 184–202). New Jersey: Lawrence Erlbaum Associates.

Wells, A. (1995). Meta-cognition and worry: a cognitive model of generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy*, 23, 301-320.

Wells, A. (1997). *Cognitive therapy of anxiety disorders: a practice manual and conceptual guide*. Chichester, UK: Wiley.

Wells, A. (2000). *Emotional disorders and metacognition: Innovative cognitive therapy.* New York: Wiley.

Wells, A. (2004). A cognitive model of GAD: metacognitions and pathological worry. In: R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.), *Generalized anxiety disorder: advances in research and practice* (pp. 164–186). New York: Guilford.

Wells, A. (2005). The metacognitive model of GAD: assessment of meta-worry and relationship with DSM-IV generalized anxiety disorder. *Cognitive Therapy and Research*, 29, 107-121.

Wells, A. (2006). The metacognitive model of worry and generalized anxiety disorder. In: G. Davey & A. Wells (Eds.), *Worry and its psychological disorders: theory, assessment and treatment* (pp. 179–200). West Sussex, England: Wiley & Sons.

Westen, D., & Morrisson, K. (2001). A multidimensional meta-analysis of treatments for depression, panic, and generalized anxiety disorder: an empirical examination of the status of empirically supported therapies. *Journal of Consulting and Clinical Psychology,* 69, 875-899.

Westra, H.A. (2011). Comparing the predictive capacity of observed in-session resistance to self reported motivation in cognitive behavioral therapy. *Behaviour Research and Therapy*, 49, 106-113.

Westra, H. A. (2012). *Motivational interviewing in the treatment of anxiety*. New York: Guilford.

Westra, H.A., & Arkowitz, H. (2010). Combining Motivational Interviewing and Cognitive

Behavioral Therapy to Increase Treatment Efficacy for Generalized Anxiety Disorder. In D. Sookman & B. Leahy (Eds.), *Resolving Treatment Impasses with Resistant Anxiety Disorders* (pp. 199-232). Routledge.

Westra, H.A., Arkowitz, H. & Dozios, D.J.A. (2009). Adding a motivational interviewing pretreatment to cognitive behavioral therapy for generalized anxiety disorder: A preliminary randomized controlled trial. *Journal of Anxiety Disorders*, 23, 1106-1117.

Westra, H.A., Aviram, A., & Doell, F.K. (2011). Extending motivational interviewing to the treatment of major mental health problems: Current directions and evidence. *Canadian Journal of Psychiatry*, 56, 643-650.

Westra, H.A., Constantino, M.J., Arkowitz, H., & Dozois, D.J.A. (2011). Therapist differences in cognitive-behavioral psychotherapy for generalized anxiety disorder: a pilot study. *Psychotherapy,* 48(3), 283-292.

Westra, H.A., & Dozois, D.J.A. (2003). Motivational interviewing adapted for anxiety. Unpublished treatment manual.

Westra, H.A. & Stewart, S.H. (1998). Cognitive behavioural therapy and pharmacotherapy: Complementary or contradictory approaches to the treatment of anxiety? *Clinical Psychology Review*, 13, 307-340.

Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L., Hawkins, E. J. (2003). Improving the effects of psychotherapy: the use of early identification of treatment failure and problem-solving strategies in routine practice. *Journal of Counseling Psychology*, 50, 59-68.

Wong, K. & Pos, A. E. (2012). Interpersonal processes affecting early alliance formation in experiential therapy for depression. *Psychotherapy Research*, 11, 1-11.

Appendix A: Penn State Worry Questionnaire

Instructions. Please read the following statements and rate the degree to which each describes you "on average" in the past week. Use the following scale.

1 2 3 4 5

Not at all typical of me	Somewhat typical of me	Very typical of me

____ 1. I worry if I do not have enough time to do everything

____ 2. My worries overwhelm me

____ 3. I tend to worry about things

____ 4. Many situations make me worry

____ 5. I know I should not worry about things, but I just cannot help it

____ 6. When I am under pressure I worry a lot

____ 7. I am always worried about something

____ 8. I find it hard to dismiss worrisome thoughts

____ 9. As soon as I finish one task, I start to worry about everything else I have to do

____ 10. I always worry about everything

____ 11. Even when there is nothing more I can do about a concern, I continue to worry about it

____ 12. I have been a worrier all my life

____ 13. I notice that I have been worrying about things

____ 14. Once I start worrying, I cannot stop

____ 15. I worry all the time

____ 16. I worry about projects until they are done

Appendix B: Change Questionnaire

What is the change that you are considering? Write it here: to _____

Now answer each of the following questions about this change that you are considering. Wherever there is a blank _____, think of the change that you have written above, and then circle the one number that best describes where you are right now. For example, if you had written "get a job" on the line above, then item 1 for you would be "I ***want*** to get a job" and you would indicate how much you want to get a job.

1. I ***want*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
2. I ***could*** _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
3. There are ***good reasons*** for me to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
4. I ***have*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
5. I ***intend*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
6. I am ***trying*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
7. I ***hope*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
8. I ***can*** _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
9. It is ***important*** for me to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
10. I ***need*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
11. I am ***going*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely
12. I am ***doing things*** to _____	0 1 2 3 4 5 6 7 8 9 10 Definitely Not Probably Not Maybe Probably Definitely

Table 1: Descriptions of Focus on Other (Surface 1) SASB Cluster Codes.

SASB Cluster Code	Description	Example
1-1: Free & Forget	Neutral autonomy giving, which includes letting another "be their own person," express their own identity, feelings, or beliefs. This form of behavior is neutral on the affiliative dimension, communicating little warmth or hostility.	"Do whatever you want, it's totally up to you."
1-2: Affirm & Understand	Warm autonomy granting, communicating empathy and understanding of another's experience; includes actively listening and validating the other's perspective or opinion.	"I understand how you must feel."
1-3: Love & Approach	Extreme warmth, which is neither particularly autonomy giving nor controlling This behavior often involves initiating affection.	"I love you."
1-4: Nurture & Protect	Warm, caring control, which may involve taking care of, protecting, teaching, or guiding another person.	"Would you like some help with that?"
1-5: Watch & Control	Behavior that is controlling or monitoring and that conveys little warmth or hostility. This type of behavior may include telling another person what to do or how to think.	"Do as I say."
1-6: Belittle & Blame	Hostile control. This form of behavior communicates criticism or condescension toward another person.	"You never get anything right."
1-7: Attack & Reject	Extremely hostile behavior, which is neither particularly autonomy giving nor controlling- This form of behavior involves destroying or threatening another person (physically or verbally).	"I hate you."
1-8: Ignore & Neglect	Hostile autonomy-giving behavior, which may involve abandoning, neglecting, or ignoring another person.	"Get Lost!"

Note. This table has been reproduced from: The structural analysis of social behavior observational coding scheme by P. Florsheim, & L. S. Benjamin. In P. K. Kerig, & K. M. Lindahl (Eds.), *Family observational coding systems: Resources for systemic research* (pp. 136-137).

Table 2: Descriptions of Focus on Self (Surface 2) SASB Cluster Codes.

SASB Cluster Codes	Description	Example
2-1: Assert & Separate	Neutral autonomy-taking behavior, which may involve acting independently and asserting one's own ideas and beliefs. As neutral on the affiliation dimension, this form of behavior is neither particularly warm nor hostile.	"I'm going to do things my way."
2-2: Disclose & Express	Warm autonomy taking; characterized as a friendly, open sharing of ideas, experiences, and feelings with another.	"I am feeling frightened right now."
2-3: Joyfully Connect	Extreme warmth that is neither autonomy taking nor submissive. Involves responding to the other's approach in a receptive, loving, and joyful manner. This communicates enjoyment in being close to the other.	"I love you too."
2-4: Trust & Rely	Warm submissiveness; involves willingly receiving help or learning from another person. This behavior is classically "childlike."	"Would you help me with this?"
2-5: Defer & Submit	Submissiveness that is neither warm nor hostile. This type of submissiveness usually involves giving in, yielding, or complying with expectations.	"Yes, ma'am."
2-6: Sulk & Scurry	Hostile submissiveness, which might include whining, "poor me" statements, defensive self-justification, resentful compliance, and "scurrying" to appease another person.	(In a whiny, defensive tone) "Fine ... I"ll do what you say—just like I always do!"
2-7: Protest & Recoil	Extreme hostility, which is neither autonomy taking nor deferring. This type of behavior communicates fear, hate, and/or disgust toward another, and may include an attempt to escape from or fight off a perceived attacker.	"I feel disgusted by you"
2-8: Wall-off & Distance	Hostile autonomy taking, which may involve shutting others out, isolating oneself, or withdrawing from an interaction.	"bug off"

Note. This table has been reproduced from: The structural analysis of social behavior observational coding scheme by P. Florsheim, & L. S. Benjamin. In P. K. Kerig, & K. M. Lindahl (Eds.), *Family observational coding systems: Resources for systemic research* (pp. 136-137).

Table 3. Sample Descriptives.

Client	Treatment Group	CBT Therapist	Sex	Age	Education	Baseline CQ	Baseline PSWQ
1	MI-CBT	A	M	34	College diploma	80	80
2	MI-CBT	A	M	34	Bachelor's degree	112	76
3	MI-CBT	B	F	35	Bachelor's degree	117	70
4	MI-CBT	B	F	47	College diploma	109	75
5	MI-CBT	B	F	39	PhD or equivalent	89	74
6	MI-CBT	C	F	24	Bachelor's degree	103	74
7	MI-CBT	C	F	35	Bachelor's degree	110	73
8	MI-CBT	C	F	50	Bachelor's degree	112	72
9	MI-CBT	D	M	49	College diploma	104	68
10	MI-CBT	D	F	48	College diploma	115	76
11	NO MI-CBT	A	F	52	Master’s degree	65	70
12	NO MI-CBT	A	F	54	High school diploma	99	76
13	NO MI-CBT	B	M	33	Bachelor's degree	96	80
14	NO MI-CBT	B	F	57	Bachelor's degree	116	70
15	NO MI-CBT	B	F	22	Bachelor's degree	73	69
16	NO MI-CBT	C	M	43	Bachelor's degree	97	76
17	NO MI-CBT	C	F	27	Bachelor's degree	114	78
18	NO MI-CBT	C	F	39	College diploma	120	78
19	NO MI-CBT	D	F	38	Some post-secondary	61	76
20	NO MI-CBT	D	F	59	College diploma	106	76

Table 4. Average Thought Units by Treatment Group.

	MI-CBT Mean (SD) Range	NO MI-CBT Mean (SD) Range
Therapist Thought Units	128.7 (18.14) 95-154	112.3 (28.43) 63-150
Client Thought Units	109.2 (34.41) 56-184	95.0 (33.41) 39-144
Total Thought Units	237.9 (48.68) 172-338	207.3 (49.14) 140-294

Table 5. Therapist Interpersonal Behaviours as a Function of Treatment Group.

	MI-CBT	NO MI-CBT	Significance Test	Effect Size	95% Confidence Interval
	Mean Percent (SD)	Mean Percent (SD)			
Affirming & Understanding	59.4 (20.67)	44.69 (19.81)	t (18) = 1.63 p = .122	d = .73	-0.21 to 1.60
Nurturing & Protecting	40.4 (20.54)	50.17 (20.24)	t (18) = -1.07 p = .298	d = -.48	-1.35 to 0.43
Watching & Controlling	.006 (.019)	2.56 (4.91)	U = 33.00 p = .043*	d = -.74	-1.61 to 0.20

* p < .05; *Note*: only the most frequently occurring therapist cluster codes are represented in this table.

Table 6. Client Interpersonal Behaviours as a Function of Treatment Group.

	MI-CBT	NO MI-CBT	Significance Test	Effect Size	95% Confidence Interval
	Mean Percent (SD)	Mean Percent (SD)			
Asserting & Separating	0	5.55 (6.44)	$U = 10.00$ $p = .000$*	$d = -1.22$	-2.12 to -0.22
Disclosing & Expressing	51.2 (19.79)	51.23 (13.72)	$t\ (18) = -.004$ $p = .996$	$d = 0.00$	-0.88 to 0.87
Trusting & Relying	48.8 (19.79)	39.68 (13.06)	$t\ (18) = 1.22$ $p = .240$	$d = 0.54$	-0.37 to 1.41
Deferring & Submitting	0	0.80 (1.35)	$U = 30.00$ $p = .043$*	$d = -0.84$	-1.71 to 0.11
Sulking & Scurrying	0	0.78 (1.37)	$U = 35.00$ $p = .105$	$d = -0.81$	-1.68 to 0.14

* $p < .05$; *Note*: only the most frequently occurring client cluster codes are represented in this table.

Table 7. Presence/Absence of Notable Interpersonal Processes.

	MI-CBT	NO MI-CBT
Client		
Asserting & Separating	0/10	8/10
Deferring & Submitting	0/10	4/10
Sulking & Scurrying (hostile)	0/10	3/10

Table 8. Complementarity as a Function of Treatment Group.

	MI-CBT Mean (SD)	NO MI-CBT Mean (SD)	Significance Test	Effect Size	95% Confidence Interval
Complementarity					
Therapist-initiated	58.7 (14.83)	46.3 (16.07)	$t(18)=1.79$ $p=.090$	$d=.80$	-0.14 to 1.68
Client-initiated	60.0 (18.45)	48.7 (18.31)	$t(18)=1.38$ $p=.186$	$d=.61$	-0.31 to 1.48

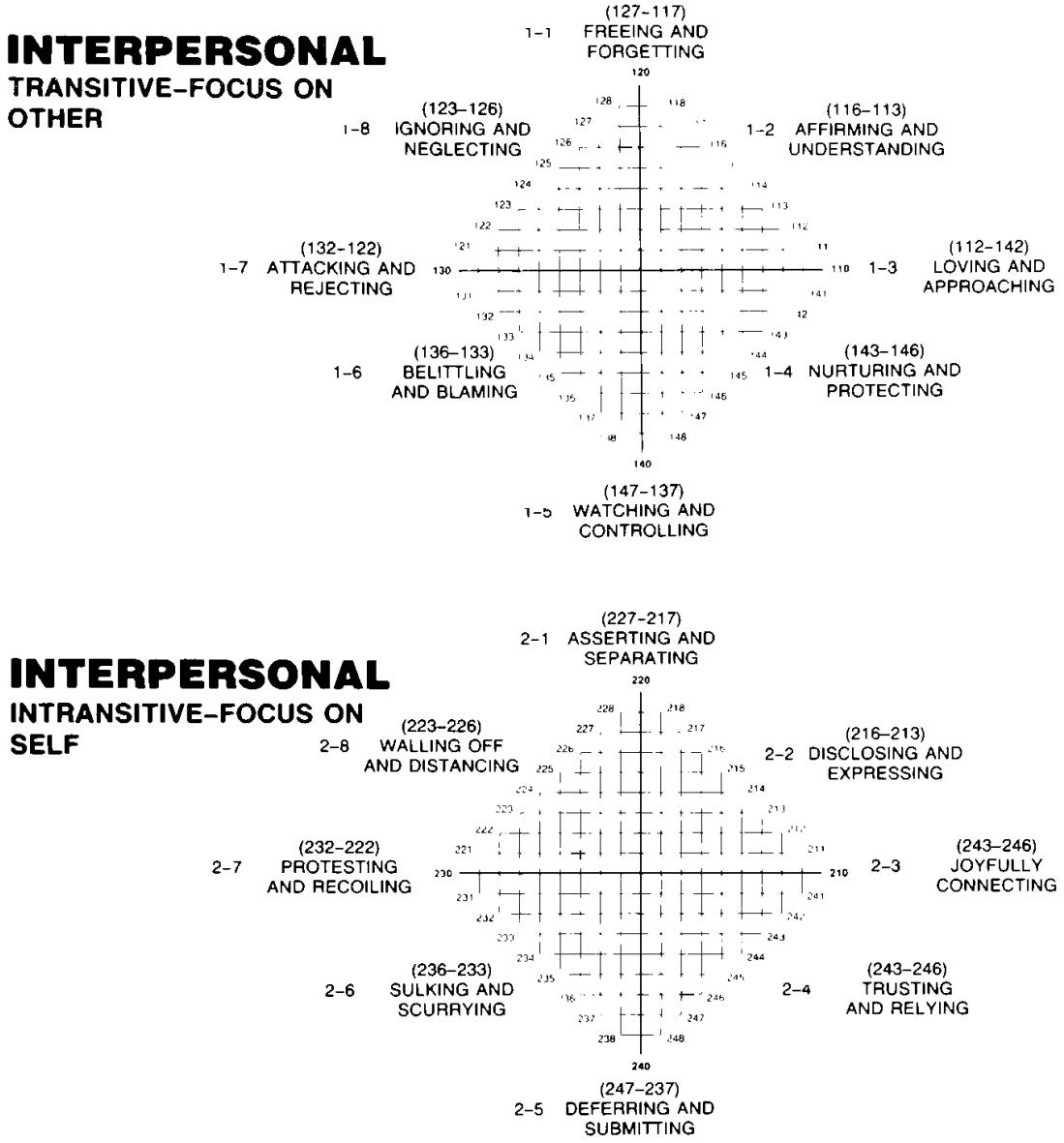
Note: 'therapist-initiated' complementarity refers to when the therapist's interpersonal behaviour elicits a response from the client, and 'client-initiated' complementarity is when the client's interpersonal behaviour elicits a response from the therapist.

Table 9. Surface Switching as a Function of Treatment Group.

	MI-CBT	NO MI-CBT	Significance Test	Effect Size	95% Confidence Interval	X^2 (presence/ absence)
	Mean Percent (SD)	Mean Percent (SD)				
Surface Switch	0.09 (0.28)	2.27 (4.91)	U =25.00 p=.017*	d=-0.63	-1.50 to 0.30	5.49 p=.019*
	1/10 dyads (3 instances)	6/10 dyads (34 instances)				

*$p < 0.05$

Figure 1. The Structural Analysis of Social Behavior (SASB) model, cluster version.



Note. Each of the above two surfaces describes a behavioral focus (either on 'Other' or on 'Self in relation to Other'). Vertical axes represent the degree of interpersonal interdependence and horizontal axes represent the degree of interpersonal affiliation. This figure has been reproduced from: Benjamin, L. S. (1987). Use of the SASB dimensional model to develop treatment plans for personality disorders, I: Narcissim. *Journal of Personality Disorders, 1,* p. 53.