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Motivational Interviewing as an Adjunct to Cognitive Behavior Therapy for Anxiety Disorders: A Critical Review of the Literature

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Cognitive behavior therapy (CBT) is efficaciously and effectively used in the treatment of anxiety disorders; however, as CBT for anxiety routinely utilizes exposure components, clients often experience ambivalence about treatment and their clinicians often must deal with resistance. Motivational Interviewing (MI) is a therapeutic strategy that addresses ambivalence about change in clinical interventions. MI has been applied as an adjunct for treatments such as CBT in order to increase motivation for and commitment to the intervention, especially when components of the treatment may be challenging (e.g., exposure, cognitive restructuring). Though researchers have commented specifically on the use of MI as a supplement to CBT for anxiety disorders, no comprehensive review has systematically assessed the strengths and limitations of extant literature on the topic, nor across anxiety disorders. Findings are summarized from 6 case studies and uncontrolled trials and 11 randomized controlled trials published through March 2016. An integrated critique of this literature also is offered. Limitations and the preliminary nature of the work in this area notwithstanding, it appears that it is feasible to supplement or integrate CBT with MI and that doing so has the potential to improve treatment initiation and engagement, as well as clinical outcomes. A number of directions for future research are addressed, such as determining which MI approaches to implement, with whom, when, and in what contexts.

Anxiety disorders are prevalent and have detrimental impacts at both individual and societal levels (Goetzel, Hawkins, & Ozminkowski, 1999; Kessler et al., 2005; Kessler et al., 2012; Sanderson & Andrews, 2002). The evidence for cognitive behavior therapy (CBT) as a treatment of choice for mental disorders is strong, and particularly so for anxiety disorders (Butler, Chapman, Forman, & Beck, 2006; Hofmann et al., 2012). Exposure-related and cognitive restructuring methods are some of the most widely used and well-validated CBT intervention strategies for the treatment of anxiety disorders. Nevertheless, not all clients receiving CBT intervention for anxiety disorders achieve optimal treatment outcome (e.g., Hofmann et al., 2012; Olatunji, Cisler, & Deacon, 2010). By their very nature, CBT's exposure and cognitive restructuring exercises can be distressing and difficult for clients, as contacting anxiety-provoking stimuli (physical and/or cognitive) and contingencies is required. Not surprisingly, non-completion of exposure-related aspects of CBT often is cited as a significant barrier to clinical improvement (e.g., Cordioli et al., 2003; Maltby & Tolin, 2003; Purdon, Rowa, & Antony, 2004). Additionally, failure to seek treatment and premature termination of treatment are barriers to clinical improvement for clients with anxiety disorders generally (e.g., Abramowitz, Franklin, Zoellner, & DiBernardo, 2002; Demyttenaere et al., 2004; Grant et al., 2005; Wang et al., 2005). Dropout rates appear to be higher for the treatment of anxiety disorders as compared to other disorders such as major depressive disorder (e.g., Haby et al., 2005; Jacobson et al., 1996).

Given these barriers, strategies have been developed to improve client outcomes by bolstering rates of treatment utilization, completion of treatment, and engagement with critical components of treatment. One such strategy is increasing client/patient motivation (McNeil & Quentin, 2015), as low motivation frequently has been cited as the most common reason for treatment dropout and/or poor engagement with treatment (e.g., Bados, Balaguer, & Saldaña, 2007; Dugas et al., 2003). In addition to improving treatment engagement and rates of completion generally, increasing client motivation may reduce apprehension about challenging or intense exposure exercises, specifically (Maltby & Tolin, 2003), and/or cognitive restructuring exercises.

Motivational Interviewing (MI) was developed as a means to help clients resolve ambivalence about behavior change and to encourage and support motivation for and

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commitment to that change (Miller & Rollnick, 2013). The most current definition of MI indicates that it "is a collaborative, goal-oriented style of communication with particular attention to the language of change" and "is designed to strengthen personal motivation for change" (Miller & Rollnick, 2013, p. 29). Considered critical, the relational context of MI involves the following components: an attitude of collaboration rather than an authoritative style (i.e., "Partnership"), respect for the autonomy of the client/patient (i.e., "Acceptance"), promotion of the client's welfare and prioritization of his/her needs (i.e., "Compassion"), and the evocation of the client/patient's own motivation (versus the provision of this motivation from the therapist; i.e., "Evocation"; Miller & Rollnick, 2013). Together, these four components make up "MI spirit." In addition to operating under the umbrella of MI spirit, MI involves four processes: (a) *engagement*, or using person-centered, empathic listening; (b) *focusing*, or identifying a target for change that will be the primary subject of discussion in therapy (e.g., clarifying goals for treatment); (c) *evoking*, or supporting client motivation and eliciting change talk; and (d) *planning*, or using client expertise to implement change. Additionally, MI involves five core skills: (a) asking open-ended questions, (b) affirming, (c) reflective listening, (d) summarizing, and (e) informing and advising. For a comprehensive description of MI, see Miller and Rollnick (2013).

A number of meta-analyses provide a strong indication that MI can yield moderate to large effects across a range of problem behaviors and health behavior change (e.g., Burke, Arkowitz, & Menchola, 2003; Burke, Dunn, Atkins, & Phelps, 2004; Hettema, Steele, & Miller, 2005; Lundahl, Kunz, Brownell, Tollefson, & Burke, 2010; Rubak, Sandbæk, Lauritzen, & Christensen, 2005). Though not all studies have demonstrated positive results, effect sizes as high as .75 and .77 have been observed for some MI-targeted behavior change, such as treatment compliance and risky behavior (e.g., substance abuse, unsafe sex practices) reduction, and across a variety of populations, including those that are medical, mental health, and/or predominantly comprised of racial and ethnic minority individuals.

MI can be applied to a wide variety of psychopathology and problem behaviors, partly because it can be complementary to other treatment strategies (Miller & Rose, 2009). Originally designed for the treatment of substance abuse (Miller, 1983), MI thereafter was applied to the treatment of other psychological disorders and health behavior problems (see Arkowitz, Westra, Miller, & Rollnick, 2015; McNeil, Hayes, & Randall, in preparation; Rollnick, Miller, & Butler, 2008; and Westra & Arkowitz's 2011 special issue in *Cognitive and Behavioral Practice*). Because it is grounded in theory (with relational and technical components; see Miller & Rose, 2009), offers specific strategies for improving motivation for change, and can be delivered in a relatively brief manner, MI also can be applied as an adjunct to, and in combination with, existing psychotherapeutic interventions such as CBT (e.g., Simpson & Zuckoff, 2011). MI, provided before or during anxiety treatment, may supplement and enhance CBT by increasing motivation for change and commitment to the intervention, ultimately improving clinical outcomes.

MI has, in fact, been utilized along with CBT for anxiety disorders, and a number of authors have provided a rationale for this integration and have suggested how to successfully combine the two treatment approaches (see Naar & Flynn, 2015; Slagle & Gray, 2007; Westra, Arkowitz, & Dozois, 2009; Westra, 2012; Westra & Dozois, 2008). Naar and Flynn (2015) suggested four major elements of CBT that are consistent with MI: (a) problem-oriented focus, (b) case formulation and treatment planning, (c) skills training and cognitive restructuring, and (d) behavioral activation. Slagle and Gray's (2007) discussion of the utility of MI as an adjunct to exposure therapy for anxiety disorders includes a short review of literature demonstrating the efficacy of MI in anxiety disorder samples; they concluded that, given the few studies reviewed, utilizing MI with clients with anxiety disorders is beneficial. Likewise, Westra's (2012) very brief summary of existing literature, and Westra, Aviram, and Doell's (2011) concise review of similar literature are concluded with parallel statements: Preliminary research demonstrating the efficacy of using MI as an adjunct to CBT is promising. Though these summaries of extant literature are an important first step in integrating the available data on the use of MI as an adjunct to CBT for anxiety disorders, they do not systematically address the strengths and limitations of available empirical literature.

Purpose and Organization of the Critical Review

The purpose of this review is to offer a comprehensive summary and critical evaluation of currently available literature pertaining to the utilization of MI in combination with CBT for anxiety disorders. To amass the literature, Academic Search Complete, CINAHL, ERIC, Google Scholar, Medline, PsycARTICLES, and PyscINFO were searched. Search terms included "Motivational Interviewing" or "motivation enhancement (therapy)" and one of the following: "CBT," "cognitive behavior therapy," "exposure," "exposure therapy," "anxiety," "Generalized Anxiety Disorder" (GAD), "Obsessive-Compulsive Disorder" (OCD), "Panic Disorder," "Posttraumatic Stress Disorder" (PTSD), "Social Phobia," "Social Anxiety Disorder" (SAD), and "Specific Phobia." For the purposes of this review, only empirical articles published by