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The effects of mindfulness-based treatments for aggression: A critical review ☆

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ABSTRACT

Recently, there has been significant growth in the empirical literature on mindfulness and mindfulness-based treatments (MBTs). The purpose of the current review was to critically examine and critique eleven studies evaluating MBTs for reducing aggressive behaviors. Articles were divided based on design (i.e., group design vs. single subject). This review highlighted evidence supporting the efficacy of the use of mindfulness-based treatments in individuals with aggressive behavior problems. Many of the group studies had weak designs, limiting the validity of the stated results. Results from the single-subject studies were more promising, providing strong support for the use of MBTs in reducing aggression. However, despite recent advances in the use of MBTs with individuals with aggression problems, questions remain unanswered. Finally, suggestions for future research are made to improve and identify means of evaluating the effectiveness of mindfulness-based treatments in an aggressive population.

Contents

☆ Throughout the review, mindfulness-based treatments (MBTs) will be referenced. In addition, several of the reviewed studies utilized a technique called meditation on the soles of the feet (MSF). These concepts will be referenced throughout the article by their respective abbreviations.

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1. Introduction

1.1. Aggression

Aggressive behaviors have been linked to a variety of problems and are a serious concern to society (Centers for Disease Control and Prevention, 2011). Recent statistics suggest aggression affects individuals in the United States at a relatively high frequency. For instance, 1.25 million, or 1 in every 58 children in the United States, were abused in 2006, and 1760 children died in 2007 as a result of child abuse or neglect (Ianelli, 2010). Over 1.8 million emergency department visits were made for injuries related to assault, and 1601 assaults resulted in death in the workplace in 2007 (Centers for Disease Control and Prevention, 2011). Additionally, more than 1.3 million women and 835,000 men were physically assaulted by an intimate partner in 1999 (Tjaden & Thoennes, 2000). Although these occurrences are not common in most individuals' lives, the physical and psychological problems that result from aggression are a serious concern that must be addressed.

Aggressive behavior can be problematic in a diverse array of settings (e.g., mental health, correctional, and school), and aggressive behaviors can result in injuries to peers, family, and staff. Some treatments have been found to effectively reduce aggressive behaviors in most individuals (e.g., functionally-derived behavioral contingencies and cognitive behavioral therapies (CBT)) (Brosnan & Healy, 2011; Novaco, 1997), but there is no panacea. Alternative treatments are being developed to reduce aggressive behaviors in clients who have not had success with typical behavioral treatment or CBT. Mindfulness is one alternative treatment that may decrease aggression because it provides cognitive skills for managing aggressive behavior without reliance on another individual.

1.2. Mindfulness

Derived from Eastern meditation practices, mindfulness has been described as an individual non-judgmentally observing the constantly shifting internal and external stimuli as they occur (Baer, 2003). Multiple meditation exercises have been developed to address mindfulness skill development (e.g., Kabat-Zinn, 1990; Linehan, 1993). Typically, mindfulness is taught using sitting meditation, during which the practitioner closes their eyes and focuses their attention on their breathing in the moment. When practitioners notice their attention has shifted to an emotion, sensation, or cognition, they are instructed to make nonjudgmental observations of these experiences and return the focus of their attention to the breath.

Mindfulness definitions vary between groups of researchers depending on whether the researchers are adopting a more traditionally Buddhist perspective or a more clinically oriented perspective, though both suggest mindfulness can be fostered through practice (Baer, 2003). A traditional Buddhist viewpoint suggests mindfulness references a quality of consciousness, while clinical mindfulness encompasses several facets of Buddhist philosophy including and extending beyond mindfulness (Brown, Ryan, & Creswell, 2007). From one clinical perspective, there are two primary facets of mindfulness: the self-regulation of attention and an orientation to present experience (Bishop et al., 2004). Self-regulation of attention refers to the ability to sustain attention and effectively switch attention between tasks. Orientation to present experience refers to a curiosity about and nonjudgmental acceptance of one's experience.

Recently, there has been significant growth in empirical literature on mindfulness and mindfulness-based treatments (MBTs). This growth was largely influenced by the familiarization of the construct in Western society via researchers including Goleman and Schwartz (1976) and Kabat-Zinn (1982). The most widely researched MBTs include mindfulness-based stress reduction (Kabat-Zinn, 1990), dialectical behavior therapy (Linehan, 1993), acceptance and commitment therapy (Hayes, Strosahl, & Wilson, 1999), and mindfulness-based cognitive therapy (Segal, Williams, & Teasdale, 2002). There is some support for MBTs resulting in fewer difficulties with physical and mental problems, including: chronic pain (Chiesa & Serretti, 2011), depressive relapse (Chiesa & Serretti, 2011), mood disturbance and stress (Baer, 2003), and anxiety (Kabat-Zinn et al., 1992).

1.3. Mindfulness-based treatments for reducing aggression

Mindfulness-based treatments encourage clients to learn to focus their attention, be non-judgmental and accepting, and be present in the moment. Explanations for the apparent success of MBTs are highlighted in Baer's (2003) conceptual review, as are several mechanisms that help clarify how mindfulness skills change behavior. These include exposure (to experiences judged as unpleasant), cognitive change, and self-control. Mindfulness-based treatments may work similarly to CBT, an empirically validated treatment for anger management, by providing cognitive skills that eventually lead to cognitive change (Del Vecchio & O'Leary, 2004). Mindfulness-based treatments are also unique in that they are not reliant on the participation of a secondary member in treatment (e.g., staff and family), and may be preferred by independently-oriented clients struggling with aggression problems (Baer, 2003).

1.4. Objectives

Research has recently begun evaluating the use of MBTs in reducing aggressive behaviors, as it is important to verify whether these treatments are in fact effective. The aim of the current review was to critique all eligible studies that evaluated MBTs for reducing aggressive behaviors.

2. Methods

2.1. Literature search

Literature was assembled for the current review by searching PsycINFO, Google Scholar, Medline (PubMed), CINAHL and Academic Search Complete databases using "mindfulness," "anger," and "aggression" as search terms. Articles published up to June 2012 were included, and literature was not limited by year of publication. Only studies published in English were included in the search strategy.

2.1.1. Eligibility criteria

Non-evidence based reports and case studies were excluded from this critique. Additionally, this review focused on the treatment of adults and adolescents only. All parent-based and staff-based interventions were excluded. Included studies had to investigate the efficacy of a MBT in persons exhibiting aggressive behavior, utilizing a clearly defined MBT and providing quantitative data on appropriate measures of aggression. There are multiple definitions of aggression in the empirical literature. For purposes of this review, aggression is defined as actions (e.g., verbal and physical) involving the intent to harm or injure others (Berkowitz, 1993). Exclusion criteria included: qualitative reports, review articles, book chapters, and studies that aimed to examine correlates of dispositional mindfulness with no MBT. Eleven studies met these criteria. A summary of the eleven reviewed articles along with outcome measures and main findings is presented in Table 1.

3. Results

3.1. Characteristics of included studies

The initial search retrieved 232 articles (including dissertations and theses).