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Does patient reluctance towards exposure and psychologists' attitudes about evidence based practice influence treatment recommendations for panic disorder? An experimental investigation

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ABSTRACT

This study examined the effects of patient reluctance towards exposure on practitioners' subsequent treatment recommendations. Participants ($N = 236$) were doctoral level psychologists who received a vignette of a patient with panic disorder, which either did (experimental group) or did not (control group) mention patient reluctance towards exposure. Evidence Based Practice (EBP) attitudes were also assessed and taken into account. A significant main effect of reluctance, averaged across all levels of EBP attitudes, and theoretical orientations was obtained ($OR = 2.85$, 95% CI = [1.51, 5.39], $p = 0.001$, $RR = 1.46$), with controls 1.46 times more likely to recommend exposure. A significant main effect of EBP attitudes was also obtained ($p < 0.001$). The odds of recommending exposure increased by 11% with each increase of positive EBP attitudes, across both levels of patient reluctance and theoretical orientation.

1. Introduction

The concept of evidence-based practice (EBP) is predicated on the idea that patient services are enhanced by treatments that have empirical support (Woody, Weisz, & McLean, 2005). This concept arose out of the recognition that physicians tended to prioritize tradition and personal experiences, engendering a troubling variation in treatment quality (Barends & Briner, 2014). Hence, EBP was developed to promote the use of practices with strong empirical support while eliminating the dysfunctional ones (Gone, 2009). EBP in psychology is the result of the "integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA, 2005, p. 5). This is similar to the evidence-based model in medicine (EBM; Sackett, 1997; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996; Sackett, Rosenberg, Gray, Haynes & Richardson, 2007).

The American Psychological Association developed EBP in psychology in the 1990s when a Presidential Task Force was appointed to define criteria for empirically supported psychological interventions. This effort spawned a unified model of practice for the implementation of those interventions in clinical settings (APA, 2006). EBP made use of scientific evidence and methodologies with the premise that science can improve outcomes through a better understanding of the world (Melnyk, Fineout-Overholt, Gallagher-Ford, & Kaplan, 2012). A solid empirical foundation for psychological interventions has been established (Butler, Chapman, Forman, & Beck, 2006; Chambless, 2001; Crome et al., 2016; Driessen et al., 2015; Hofmann, Sawyer, & Fang, 2010), and there has been significant investment in dissemination and implementation efforts in this domain (Chambless, 1996; Chambless, Babich, Christoph, Frank, & Gilson, 1993; Church, Feinstein, Palmer-Hoffman, Stein, & Tranguch, 2014; Kendall, 1998). However, there remains significant variation in the extent that EBP (Melnyk et al., 2012) and evidence-based interventions are utilized in clinical practice (Becker, Zayfert, & Anderson, 2004; Castelnuovo, 2010; Goldfried et al., 2014; Jacobson, Newman, & Goldfried, 2016; Mussell et al., 2000). Thus, enhancing understanding of the specific factors that prevent EBP implementation is one way of ensuring effective translation of research into practice.

Abbreviations: EBP, evidence based practice; PDA, panic disorder with agoraphobia; EXT, therapy with exposure.

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Recent research suggests that there are problems with the implementation of evidence-based practice, and that this may be due in part to variations in clinician's training (Pignotti & Thyer, 2009). Attitudes and changes in workplace culture have also been posited as barriers to implementation (Aarons, 2004; Aarons et al., 2012; Borntrager et al., 2009; Reding, Chorpita, Lau, & Innes-Gomberg, 2014; White-Williams et al., 2013). While theoretical models identify the factors that determine EBP implementation in health care contexts, a consensus and evidence for determinants is still lacking (Nilsen, 2015). These aspects denote a controversy with the implementation of evidence-based intervention in clinical practice (Gaudiano & Miller, 2013; Pilecki & McKay, 2016; Wandersman et al., 2008), as many clinical psychologists seem resistant to EBP (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013). For example, a study of 176 psychologists of diverse backgrounds found that an intuitive thinking style was associated with a more negative attitude toward EBP (Gaudiano, Brown, & Miller, 2011). These findings suggest that there is need for clarification on those aspects that lead psychologists prioritize clinical intuition over systematic research.

A central feature of the debate concerns the ecological validity of empirical research (Reding et al., 2014; Wilson, Armouliev, Yakunina, & Werth, 2009), and the extent to which data can be usefully applied, or practically implemented, in everyday clinical practice settings (Hunsley, 2007; Kazdin, 2008). For example, EBP relies primarily on findings that are applied to all or most individuals within a given population (Maher & Gottesman, 2005). Yet, in everyday practice, psychologists deal with the uniqueness of each clinical case and are confronted with the difficult task of applying group-based findings to individuals (Lilienfeld et al., 2013). Lack of clarity in statistical methods and implications for practice have also been highlighted as issues (Brown, Wickline, Ecoff, & Glaser, 2009; Gallo & Barlow, 2012; Stewart, Stirman, & Chambless, 2012).

The literature also points to a potential for psychologists to misunderstand the EBP model (Wachtel, 2010). Specifically, the suggestion has been that clinicians equate EBP with the evidence base for therapeutic strategies and interventions. They miss the role of clinical expertise in tailoring those interventions based on patient characteristics, culture, and preferences, and consider that EBP stifles innovation (Luebbe, Radcliffe, Callands, Green, & Thorn, 2007; Pagoto et al., 2007; Pignotti, & Thyer, 2009; Pignotti & Thyer, 2012). Similar misconceptions have been identified among researchers (Sheehan, Walrath, & Holden, 2007) and are evident in the imprecise use of terminology to refer to EBP (see discussions in Aarons, 2004; Gotham, 2006; Spring, 2007). Research on implementation has also examined psychologists' understanding of treatment manuals, and has identified further misconceptions and negative attitudes towards clinical research for practice regarding perceived inflexibility, a lack of attention to the therapeutic alliance, and a lack of emphasis on clinical judgment (Bearman, Wadkins, Bailin, & Doctoroff, 2015; Borntrager et al., 2009).

Due to the aforementioned findings, a variety of theoretical frameworks have been posited to help understand a psychologist's decision to follow EBP (Procter et al., 2009 and see review in Nilsen, 2015). Stemming from the diffusion of innovations framework (Rogers, 2003), a central theme through theories is the need to attend to psychologist's attitudes towards EBP (Borntrager et al., 2009; Lilienfeld et al., 2013). Along with expectations of the work setting, including organizational support, and autonomy for decision-making, it is the psychologist's attitudes towards the validity, utility, and mode of research presentation that are considered crucial to effective implementation (Gallo & Barlow, 2012; Safren et al., 2011). In particular, Lilienfeld et al. (2013) have proposed six sources of negative attitudes and resistance to EBP, which have been subject to limited empirical study: 1) preference for unguided intuition over systematic research (e.g., Gaudiano et al., 2011); 2) preference toward therapeutic approaches on the base of culturally prevalent beliefs even though they have minimal or no scientific support (e.g., Beaulieu-Prévost & Zadra, 2015; Pignotti, & Thyer, 2009); 3) difficulty in applying group-based findings to the individual in everyday practice; 4) misunderstanding and misinterpreting what EBP entails (Wachtel, 2010); 5) perceived discouragement to practicing psychologists from acquiring knowledge (Gallo & Barlow, 2012); and 6) difficulty in understanding the increasingly complex treatment process and outcome literature (see also Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2014).

Additional support for these sources of resistance was found a study of 1112 mental health service providers working across 100 mental health settings in 26 states in the United States of America (Aarons et al., 2012). Specifically, Aarons et al. found that organizational culture (working in a context that prioritized client well-being, and expectations for psychologists to have up-to-date knowledge) was associated with psychologists' attitudes towards EBP, even when controlling for other organizational (i.e., rigid and resistant organizational cultures), and individual clinician characteristics (i.e., gender and educational level, see also Proctor et al., 2007). Others studies have demonstrated the importance of contextual factors and psychologists' attitudes in the implementation of evidence, such as the study conducted by the Society of Clinical Psychology (APA's Division 12), which examined 326 psychologists' impressions of cognitive behavioral therapy (CBT) for panic disorder. Psychologists identified three central limitations, namely patient fear of exposure therapy (47.5%); patient resistance to the directiveness of treatment (37.5%); and patient reluctance to eliminate safety behaviors (60.8%; APA, 2010). Further support for the framework's relevance can be drawn from research demonstrating that psychologists' prefer and rely more on their own clinical experience and the advice of colleagues than they do research evidence (Morrow-Bradley & Elliott, 1986; Raine et al., 2004; Stewart & Chambless, 2007). These findings suggest that further investigation on the role of attitudes toward EBP implementation in conjunction with other factors that might prevent EBP adoption (e.g., organization's characteristics, patient fear, resistance and reluctance) is warranted (Rousseau & Gunia, 2016).

Using a novel application of an experimental design, the present study was designed to examine the effect of a common potential barrier (i.e. patient expressed reluctance) on psychologists' recommended treatment for a case (see also Mamede et al., 2016). Panic disorder with agoraphobia (PDA) was chosen for the case vignette because it remains a high prevalence disorder (Kessler et al., 2005), and there is extensive theoretical and empirical support for exposure-based therapy for this population (Gould, Otto, & Pollack, 1995; Olatunji, Cisler, Deacon, 2010; Ougrin, 2011). Patient expressed reluctance was chosen because it has been identified as a barrier to therapy in studies of service delivery (Zayfert et al., 2005), reviews of published trials (Ponniah, Magiati, & Hollon, 2013), surveys of trained professionals (APA, 2010; Becker et al., 2004) and trainees (Farrell, Deacon, Kemp, Dixon, & Sy, 2013), and expert commentary (Difede, Olden, & Cukor, 2014; Osei-Bonsu et al., 2016). In the present study, doctoral-level psychologists' treatment recommendations in the control group (the vignette without patient reluctance) were compared with recommendations in the experimental group (the vignette with patient reluctance).

Four sets of hypotheses were proposed. First, consistent with the general body of research, the patient's reluctance to engage in exposure therapy was expected to lead psychologists to recommend treatments with less empirical support (i.e., without the inclusion of exposure; Gaudiano et al., 2011; H1). Secondly, based on the findings of Borntrager et al. (2009) it was expected that the effect of patient reluctance on treatment selection would be reduced among those psychologists with more positive attitudes toward EBP (H2). Thirdly, given the results provided by Bearman et al. (2015) it was