

**Psychotherapists Theoretical Orientations and Attitudes Towards Evidence Based
Mental Health (EMBH)**

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Abstract

Due to the growing prevalence of mental health issues, there is increased urgency to encourage psychotherapists to use the most effective treatment methods available. Evidence-based mental health (EBMH) has emerged as one of the most widely pursued strategies aiming to improve treatments used in psychotherapy, primarily by promoting the implementation of evidence-based interventions (EBIs) among psychotherapists. In the current study we aimed to investigate obstacles to the effective implementation of EBIs in psychotherapy focusing on how theoretical orientations might be associated with psychotherapists attitudes towards EBMH. In line with this, the main analysis investigated a possible association of the participants schools of thought with their attitudes towards EBMH. The study used a quantitative cross-sectional and correlational research design with a sample of 135 psychologists working in mental health care. Quantitative data was collected through a questionnaire using convenience and purposive sampling. The results of the study suggest that participants trained in an empirical school of thought may have more positive attitudes towards EBMH compared to participants that received training in a school of thought conceptualized as intuitive. Psychotherapists attitudes towards implementing EBIs may be influenced by theoretical disagreements between psychology researchers and practitioners regarding the use of the EBMH framework. We conclude that the current utilization of EBMH could be improved by incorporating a more balanced approach to the implementation of EBIs, equally combining intuition and empiricism.

Keywords: evidence-based mental health (EBMH), evidence-based interventions (EBIs), theoretical orientations, treatment outcomes.

Psychotherapists Theoretical Orientations and Attitudes Towards Evidence Based Mental Health (EMBH)

According to the World Health Organization (WHO, 2022), approximately one in eight individuals worldwide live with a mental disorder. As the prevalence of mental health problems continues to rise, there is a growing urgency to motivate psychotherapists¹ to utilize the most effective treatment options available (Lilienfeld et al., 2013; Michie, 2005; Washington State University Spokane, 2003). Many treatments currently used in psychotherapy are not based on scientific evidence (Hengartner, 2018). This is problematic according to many experts who believe that an empirically guided approach to psychotherapy would optimize treatment outcomes for patients (e.g., Becker et al., 2004; Lash et al., 2011; Michie, 2005; Pignotti & Thyer, 2009). Assuming that evidence-based treatments improve psychotherapy, finding a nuanced and effective approach to implementing research insights in psychotherapy could pave the way for delivering high-quality scientifically evaluated psychological treatment (Cha & DiVasto, 2017; Kratochwill & Shernoff, 2004; Lilienfeld et al., 2013; Lyon et al., 2018; Michie, 2005).

Evidence-Based Mental Health (EBMH)

One approach trying to achieve that is evidence-based mental health (EBMH), which after emerging in the 1990s quickly developed into one of the most widely pursued strategies for improving psychological treatments (Cook et al., 2017). EBMH generally refers to the use of empirical research, using methods such as randomized control trials (RCTs), to inform, shape, and innovate mental health care (Kratochwill & Shernoff, 2004). In the context of psychotherapy specifically, Lilienfeld and Basterfield (2020) called the approach of EBMH,

¹ The term “psychotherapist” is used throughout this article and plainly refers to professionals working in mental health care and providing some kind of conversational therapy.

“evidence-based practice” (EBP). Lilienfeld and others (2013), conceptualized EBP as a “three-legged stool” comprising of a research, client, and therapist component. Even though client and therapist variables are important components to consider this study will predominantly focus on the integration of research by addressing the implementation of evidence-based interventions (EBIs) in psychotherapy.

In the context of EBMH, EBIs refer to empirically investigated interventions that have been shown to produce positive client outcomes regarding specific mental disorders (Drake et al., 2001; Sheldon et al., 2008; Walker et al., 2022; Watkins et al., 2018). Extensive research on cognitive behavioral therapy (CBT) for instance has shown that CBT can have a significant positive effect on a range of emotional disorders (Cuijpers et al., 2013; Jansen et al., 2012; Marks, 2017). One reason why EBIs may improve treatment outcomes is that they potentially minimize psychotherapists cognitive biases (Cook et al., 2017). A wealth of research has established that all human beings including psychotherapists are fallible to judgment errors such as confirmatory bias and thus letting them use objectively investigated treatments might reduce these biases and in turn improve treatment outcomes (Kahneman, 2011; Lilienfeld; 2013).

Despite the promising research conducted on EBIs there are some researchers and psychotherapists who have voiced concerns regarding their applicability and effectiveness (Garfield, 1996; Levant, 2004). Garfield (1996) for instance argued that EBIs are often not generalizable to a broader population of clients due to the multitude of therapist and client variabilities creating a different set of demands for each individual client-therapist pairing. Some research even suggests that therapeutic variables such as the quality of relationship between client and therapists as well as the skill level of the individual therapist are better predictors of therapy outcomes than treatment choice (Garfield, 1996; Mahoney, 2004). This implies that trying to improve psychotherapy outcomes solely by adjusting treatment selection might be of limited efficacy (Garfield, 1996; Lambert & Barley, 2001; Levant, 2004; Luborsky

et al., 1986). Despite all the criticism, EBIs are a promising step towards delivering effective treatments, but their practical application can often pose multiple challenges (Eccles et al., 2012).

The Scientist-Practitioner Gap

The successful implementation of EBIs in psychotherapy arguably relies on cooperation between scientists and practitioners, as emphasized by the widely used Scientist-Practitioner Model² (Jones & Mehr, 2007). However, the increasing divide between researchers and psychotherapists hinders collaboration and prevents the effective implementation of research findings in psychotherapy (Lilienfeld et al., 2013). This disconnect between psychology researchers and psychotherapists, is part of the “scientist-practitioner” or “research-practice” gap, which describes a gap between the knowledge produced in scientific research and its implementation in psychotherapy (Banker & Klump, 2010; Lilienfeld et al., 2013). Researchers have not yet reached a consensus regarding the cause of this gap. Most experts agree however that the gap might be caused by a combination of organizational and personal factors which are dividing scientists and practitioners, possibly preventing psychotherapists from collaborating with researchers in incorporating research insights into their practice (Lilienfeld et al., 2013). On the one hand, research suggests that organizational factors such as a lack of resources and education hinder scientists and practitioners from cooperating (Banker & Klump, 2010; Bonham et al., 2014; Phelps, 2019). On the other hand, there are researchers who argue that personal factors, such as differing conceptualizations of science among psychotherapists, may

² The “scientist practitioner” model, also called “boulder model”, is an educational model aimed at teaching future clinical psychologists basic scientific research skills so they can partake in psychological research themselves (Frank, 1984).

contribute to this disconnect (Banker & Klump, 2010; Godin et al., 2008; Lilienfeld et al., 2013).

Theoretical Orientations in Psychotherapy

One potential factor influencing psychotherapists might be their varying theoretical orientations (Beutler, 1995). The theoretical orientation of a psychotherapist is a structured set of epistemological assumptions and preferences for certain psychological theories, providing the therapists with a conceptual framework to guide their clinical practice (APA Dictionary of Psychology, 2023). Therefore, theoretical orientations often shape which treatments and research methods each individual psychotherapist prefers and influence how they operationalize evidence (Banker & Klump, 2010; Lilienfeld, 2013; McHugh, 1994). Psychotherapists typically undergo training in institutions that teach specific theoretical frameworks and treatment approaches which often adhere to a particular school of thought in psychology and thus shape their theoretical orientation (Boswell et al., 2010). Consequently, schools of thought in psychotherapy can help identify therapists' theoretical orientations and are potentially associated with their attitudes towards the implementation of EBIs in their practice (Cha & DiVasto, 2017; Lilienfeld, 2013).

To investigate a possible association between different theoretical orientations and therapists' attitudes toward research implementation, it is useful to categorize them into two groups. One way to approach that is to group the different theoretical orientations based on the attached underlying epistemological presumptions. McHugh (1994, as cited in Lilienfeld 2013), for instance used the terms "romantic" or "empirical" approaches while Cha and DiVasto (2017), conceptualized theoretical orientations as either "ideographic" or "research based". In line with this, for this study, the theoretical orientations will be categorized as either "intuitive" or "empirical".

Empirical Approaches to Psychotherapy

Empirical approaches to psychotherapy, particularly cognitive behavioral therapy (CBT), have experienced a significant rise in popularity over the past few decades, with CBT currently being the most commonly taught treatment in European universities (David et al., 2018). CBT is often used as an umbrella term which encompasses more modern therapeutic approaches such as acceptance and commitment therapy (ACT) (Hofmann et al., 2010).

Furthermore, CBT is considered an evidence-based treatment and is most commonly used to treat clients with depression and anxiety disorders while also for instance frequently being utilized for obsessive compulsive disorder (OCD), and post-traumatic stress disorder (PTSD) (Marks, 2017). Furthermore, it is often assumed that its effectiveness extends to clients with similar DSM-5 diagnoses (Castelnuovo, 2010).

In addition to CBT, other empirical approaches such as systemic therapy and clinical neuropsychology emerged (for an elaboration on the different therapies see Kazdin, 2000). These approaches often concentrate on more specific and narrow issues, with therapists adopting specialized treatment strategies. Moreover, they frequently utilize manualized interventions that are applicable to populations experiencing similar symptoms (Cammisuli & Castelnuovo, 2023; Jansen et al., 2012; Pote et al., 2003; Twohig et al., 2021).

In line with this psychotherapist who adopt an empirical approach to their practice, tend to rely on quantitative and empirically generated evidence to guide their clinical decisions (Cha & DiVasto, 2017). Consequently, they prefer treatments that have undergone rigorous methodological research, often including randomized control trials (Cha & DiVasto, 2017). Additionally, these therapists frequently follow a nomothetic approach, aiming to develop treatments that can be standardized and manualized (Levant, 2004). Overall, empirically

oriented therapists often strive to ensure that their treatment methods align with the practices most supported by scientific research (McHugh, 1994).

Intuitive Approaches to Psychotherapy

Considering the current trend towards empiricism in psychotherapy it is crucial to understand that throughout most of history psychotherapy was approached from a more intuitive perspective (Benjamin, 2014; Marks, 2017). In line with this Sigmund Freud, the founder of Psychoanalysis, emphasized the important role of "clinical intuition" in guiding his therapeutic approach (Zanchettin, 2018). Despite its long history of practice, treatment effects of Psychoanalysis have only recently been investigated according to today's empirical standards, meaning that it was predominantly based on anecdotal evidence throughout most of its historical use (Luborsky & Barrett, 2006; Paris, 2017; Kris, 2002).

Many modern psychotherapists practicing person-centered therapy, analytical psychotherapy, and psychodynamic psychotherapy continue to believe in the importance of intuition (Levant, 2004) (for an elaboration on the different therapies see Kazdin, 2000). This often leads those therapists to approach their work with a focus on the individual, recognizing the unique aspects of each client's personality, history, and pathology (Lilienfeld et al., 2013). In order to account for that individuality, these therapists tend to rely on clinical observations, their clinical experience, and case studies to inform their decision-making. This often leads them to believe that recognizing pathological patterns is more valuable than trying to predict them (Cha & DiVasto, 2017; Stewart & Chambless, 2007). In line with this, they often view complex and layered problems as the underlying causes of most psychopathologies, thus calling for more holistic treatment approaches (Cha & DiVasto, 2017). Overall, intuition-oriented therapists view empirically generated research as of limited use in the psychotherapeutic setting and tend to focus on the skill of the psychotherapist instead.

The Current Study

In this study we aim to investigate obstacles to the effective implementation of EBIs in psychotherapy. By conducting this study, we hope to contribute to the understanding of how personal attitudes of individual psychotherapists are associated with their behavior regarding research implementation. This could aid the development of interventions aiming to increase cooperation and communication between psychotherapists and scientists, thus resulting in a more effective approach to the implementation of research in psychotherapy and possibly more practice-focused and relevant research. In line with this the current study tests the assumption that epistemological presumptions inherent to different schools of thought in psychotherapy are associated with psychotherapists' attitudes towards implementing EBIs in their practice. Therefore, we hypothesize that psychotherapists with an empirical approach to therapy are more inclined to adopt EBIs into their practice than intuition-oriented therapists.

Methods

This study was preregistered:

https://osf.io/7eyra/?view_only=cd45a9b61ce44baf8fee71840f553184

Study Design

This study employs a quantitative cross-sectional and correlational research design using the statistical software IBM SPSS Statistics (Version 29) and JASP (Version 0.17.2; JASP Team, 2023). The quantitative data was obtained through a questionnaire created in Qualtrics (Qualtrics, Provo, UT, 2023), using a within-subjects design consisting of mostly close-ended questions.

Participants

The population of interest for this study were psychologists working in mental health care. The sample initially consisted of 232 participants, but we excluded 97 participants for reasons including, lack of consent for participation or data processing, early discontinuation, or

insufficient education beyond high school, leaving us with 135 participants. The average age of the participants was 39.62 ($SD = 12.32$), ranging from 24 to 68 years old. Most of the participants were female ($n = 114$, 84.4%), while 21 participants were male (15.6%). We also asked the participants for their highest academic title. Most participants ($n = 117$) completed a master's degree or equivalent (86.7%), while 18 participants achieved a PhD or equivalent (13.3%). Most of the participants resided in the Netherlands ($n = 108$, 80%), followed by Germany ($n = 24$, 18%) and the USA ($n = 3.2\%$).

Procedure

Before modifying our survey, we developed a short pilot survey asking the responding psychotherapists about their country of residence and the school of psychotherapy they identify with, so we could get an overview of the different schools of thought.

The full survey was previously developed by another student and was then augmented and expanded upon to fulfil the demands of our investigation. Our survey was created and distributed with Qualtrics software (Qualtrics, Provo, UT, 2023), using a combination of convenience and purposive sampling. The primary distribution channels of the convenience sampling included personal contacts working in mental health care and social media pages such as LinkedIn and Twitter. Furthermore, we asked the participants to share the study within their social networks with the aim of generating a snowball effect. Given our interest in various psychotherapeutic schools, we purposely focused on specific mental health care institutions that were affiliated with a particular psychotherapeutic orientation.

Our study was based on the participation of volunteers and the subjects did not receive any financial incentive to participate. The data collection was set up to be stopped 14 days after the first day of distribution, or as soon as our maximum sample size of 350 participants was reached.

This study was conducted in the context of a bachelor thesis project in the psychology faculty of the University of Groningen (RUG) and was approved by the Ethics Committee of the [Faculty of Behavioral and Social Sciences](#) of the [University of Groningen \(the Netherlands\)](#) on the 07. 04. 2023.

Materials

Questionnaire Generation

The survey used in this study is based on previous research of a graduate psychology student. This student conducted semi-structured interviews with trainers of the GZ-training³, working in a PPO⁴-training institute located in the northeast of the Netherlands. The GZ instructors were asked about their perspectives on factors that can promote the application of EBMH and possible obstacles to the application of EBMH. The answers given by the GZ instructors were then used to develop a questionnaire aiming to assess the representation and implementation of EBMH within practitioners' professional practices and their overall work environment. The students and supervisor working on this study modified the questionnaire and included new questions to allow for more specific investigations. All these adjustments were discussed and approved by the principal investigators of this research.

The Current Questionnaire

The modified questionnaire used for this study started with a short introduction explaining the concept of EBMH to the participants. The complete questionnaire can be found in Appendix A. It is important to mention that we explained EBMH in a way so that the participants would associate EBMH with the “integration of scientifically supported

³ “GZ” is an abbreviation for “Gezondheidszorg” which means health care in Dutch.

⁴ The “PPO“, is a Dutch educational institution, providing training for postgraduates aiming to become psychotherapists

interventions into treatment decisions” (as phrased in the study-info of the questionnaire). Therefore, it is possible to equate their responses on EBMH as responses on EBIs.

The first part of the questionnaire collected participants’ demographic information (e.g., age and gender), educational background and their current work setting by letting them choose between pre-determined answer options. Question 12 for instance investigated which psychological school of thought the participants were trained in, providing them with seven different schools of thought as answer options.

The main part of the questionnaire used 5-point Likert scales (1 = disagree totally, 5 = agree totally) to obtain the participants attitudes and opinions on several variables related to the use of EBMH in clinical practice. Moreover, the EBMH-use questions were divided into categories that represent different factors relevant to EBMH-use: personal factors, contextual factors, and organizational factors. Personal attitudes for instance were measured using multiple sub-questions of question 17 and question 18. The outcomes of the questionnaire yielded descriptive data of the frequency of demographic characteristics, different attitudes, and behaviors of psychotherapists as well as the distribution of these traits over different institutional, organizational, and contextual levels.

Analysis Plan

The main analysis conducted consisted of testing the effect of the independent variable “schools of thoughts” on the dependent variable “attitude of participants towards EBMH”. The initial plan was to conduct an independent samples *t*-test using a computed dependent variable aiming to operationalize attitudes of participants towards EBMH. Thus, a new variable was computed to sum up multiple questions about EBMH (Q18.1, Q18.5, Q18.6, Q18.9). Question 18.5 and 18.9 were reverse coded so a higher score would indicate a positive attitude towards EBMH. The internal consistency of this variable however was quite low ($\alpha = .49$) (Nunnally & Bernstein, 1994). Therefore, there was a deviation from the initially planned statistical analysis

and question 17.2 was used as an alternative conceptualization of attitude. Other attitude related questions were explored as well.

To measure the differences between schools of thought conceptualized as “intuitive” and “empirical”, the answers on the independent variable (Q12) were split into two groups. Group 1 was comprised of participants who were trained in one of the following schools of thought: cognitive-behavioral therapy (CBT), systemic therapy, neuropsychology, acceptance and commitment therapy (ACT), whereas Group 2 included participants trained in psychodynamic psychotherapy, analytical psychotherapy or person-centered psychotherapy. We used an alpha level of .05 for all statistical tests. The p -values reported are one-sided for the directed hypotheses and two-sided for the exploratory analysis.

Results

The data file was cleaned, leaving 135 valid responses out of 232 total responses. All figures and tables can be found in the Appendix B.

Assumption Checks

The assumptions for conducting a regular independent samples t -test for our main analysis were not met, as indicated by the Levene's test $F(1, 133) = 8.52, p = .004$, and the Shapiro-Wilk test ($W = .76, p < .001$). The same was true when exploring other attitude related questions such as question 18.4 (Shapiro-Wilk: Group 1: $W = .81, p = < .001$; Group 2: $W = .78, p = < .001$). Consequently, we chose to deviate from the initial analysis plan and used nonparametric tests instead. For the main analysis we conducted the Mann-Whitney test as the nonparametric equivalent of the t -test.

The assumptions needed to conduct a Mann-Whitney test were all met. The dependent variable is ordinal, the independent variable consists of two groups, and the observations are independent. Furthermore, it is important to note that both groups of the independent variable

exhibit different shapes of score distributions on the dependent variable, as presented in Figure 1, affecting how the results may be interpreted.

Main Analysis

The Mann-Whitney test yielded a significant main effect of the independent variable on attitude towards EBMH ($U = 1340.5, p = .019, r(rb) = .27$), with participants in Group 1, scoring significantly higher on attitude than participants of Group 2 as depicted in Figure 2 and Table 1. This indicates that participants trained in an empirical school of thought (Group 1), reported significantly more positive attitudes towards EBMH compared to participants that received training in an intuitive school of thought (Group 2).

Exploratory Analysis

Among the questions designed to measure participants attitudes towards EBMH, only one additional question yielded significant results (Q18.4). In line with this the Mann-Whitney test showed a significant main effect of the independent variable schools of thought on question 18.4 ($U = 664, p = .005, r(rb) = -.37$), with participants in Group 1 scoring significantly lower than participants of Group 2 as visualized in Figure 3 and Table 2. This implies that participants who were trained in an intuitive school of thought (Group 2), held more favorable attitudes towards the statement "I think there is a gap between science and practice in clinical psychology", compared to participants who received training in an empirical school of thought (Group 1).

Discussion

This study investigated a possible association between theoretical orientations of psychotherapists and their attitudes towards implementing EBIs in their practice. Our findings support this association as we reported significant differences in attitudes among psychotherapists trained in different schools of thought. This is congruent with previous research conducted proposing that psychotherapists treatment choices are partially guided by their theoretical orientation (Banker & Klump, 2010; Beutler et al., 1995; Lilienfeld, 2013;

McHugh, 1994). Furthermore, the main hypothesis for our statistical analysis was that practitioners trained from an empirical perspective would be more inclined to adopt EBIs into their practice than intuition-oriented practitioners. Consistent with this hypothesis, participants trained in a school of thought conceptualized as empirical scored significantly higher on attitude towards evidence-based mental health (EBMH) than participants trained in schools conceptualized as intuitive, thus supporting the already existing research in this area (Cha & DiVasto, 2017; Lilienfeld 2013; McHugh, 1994).

This association might be partially explained by the increasing polarization between practitioners and scientists, possibly resulting from a deep theoretical disagreement surrounding the widespread adoption of EBMH (Lilienfeld, 2013; Phelps, 2019). One potential reason for the polarizing nature of EBMH is that its proponents may have exaggerated its effectiveness, causing unease among more skeptical psychotherapists (Levant, 2004; Thibault, 2019). The term EBMH itself implies a specific direction of how evidence should be defined and operationalized which could alienate psychotherapists who have a different perspective (Levant, 2004; Thibault, 2019). Some therapists such as Yalom (2010), for instance view psychotherapy as an art form or craft rather than a purely empirically guided pursuit.

Our study findings support this hypothesis of polarization, as participants who aligned with intuitive schools of thought reported perceiving a greater gap between scientific research and psychological practice than others. This may reflect their frustration with the narrow perspective propagated by proponents of EBMH.

Limitations

One limitation of our study is the low overall sample size. Especially the group of psychotherapists trained in intuitive schools of thought had a small sample size, as most of our participants reported practicing CBT which was categorized as an empirical approach. This led

to a higher standard deviation within the intuitive group, reducing the overall effect size of our main analysis and negatively impacted the internal validity of our study.

Another potential limitation of our study is the inherent challenge of accurately categorizing psychotherapists' current theoretical assumptions and preferences based on the schools of thought they were trained in. Not all therapists strictly adhere to the tools and techniques associated with a specific therapeutic approach, and their practice may deviate from these guidelines on a case-by-case basis (Werbart et al., 2019). There are many different explanations for why this might happen. Some therapists for example may claim to use a specific treatment approach, but in practice, they may not employ any techniques related to that approach (Waller et al., 2012). Furthermore, psychotherapists that have initially been trained in a particular school of thought might no longer identify with this school (Mahoney & Craine, 1991). Their beliefs might overlap with those of other schools of thought, which might point to a systematic flaw in the categorization of our participants possibly confounding our measurements and negatively impacting the construct validity of this study.

Another limitation of our study is that a part of the discovered association between theoretical orientations and attitude might be explained by confounding variables, thus reducing the study's internal validity. Organizational factors attached to a certain work environment could for instance act as mediators between the school of thought a psychotherapist has been trained in and their attitude towards the implementation of EBIs (Olenick et al., 2018; Phelps, 2019). For instance, psychotherapists might choose to work in different organizational settings depending on their theoretical orientations, which might influence the amount of financial support and encouragement they receive to integrate research into their practice, thus influencing their attitudes towards EBMH (Bonham et al., 2014). In line with this, numerous studies have found evidence supporting the influence of organizational factors on psychotherapists' attitudes towards the implementation of EBIs (Banker & Klump, 2010;

Bonham et al., 2014; Olenick et al., 2018; Phelps, 2019). More research needs to be conducted in order to rule out a possible interaction between theoretical orientations and organizational factors (Banker & Klump, 2010; Bonham et al., 2014; Phelps, 2019).

Further Research

We need to conduct more extensive research to be able to make more definitive statements about the investigated associations. Replicating the findings of our study by using a more specialized research design and larger sample sizes would be especially beneficial. For instance, designing a separate study specifically aimed at testing the effect of theoretical orientations on personal attitudes towards EBIs, rather than relying on explorative questionnaire designs like ours, could reduce the amount of possible confounding variables and thus increase the internal validity of the study. In line with this, it would be useful to replicate our study by selecting two schools of thought associated with different theoretical orientations, for example psychoanalysis and CBT, to examine the attitudes of psychotherapists' who have received training in either of these approaches.

Additionally, it would be beneficial to design and use more extensive and accurate measurements of psychotherapists theoretical orientations to establish better construct validity. One possible approach to do that could involve exploring not just the training backgrounds of participating psychotherapists, but also the specific theoretical frameworks with which they currently identify themselves. This would help to account for psychotherapists' changing beliefs over the course of their professional practice following the completion of their initial training (Mahoney & Craine, 1991).

In sum, a more targeted exploration of psychotherapists' attitudes towards EBIs using more specialized research designs is needed in order to understand the theoretical dispute regarding the implementation of EBIs in more depth.

Future Implications

Understanding The Limits of EBMH

The initial objective of EBMH as a conceptual framework was to equally integrate the three main components influencing treatment outcomes (research, client, and therapist) (Cook et al., 2017; Kratochwill & Shernoff, 2004; Lilienfeld & Basterfield, 2020). The strong promotion of EBMH since its emergence in the 1990s however has primarily focused on research, revolving predominantly around the increased implementation of EBIs in psychotherapy while neglecting the other important components influencing psychotherapy (Garfield, 1996). This push towards implementing EBIs might have partially been motivated by the notion that EBIs offer fast, effective, and widely applicable treatments for clients, allowing psychotherapists to accommodate a large number of clients in a cost-effective manner (Clark, 2018). In line with this, numerous government health departments across many Western countries have increasingly prioritized funding the implementation of EBIs while neglecting more traditional approaches to psychotherapy (Chevreul et al., 2012; Gaudiano & Miller, 2013).

The wide scale implementation of EBIs however might not improve treatment outcomes as promised (Levant, 2004). The currently used process of designing and implementing EBIs relies primarily on scientific evidence which, according to researchers such as Levant (2004), is not sufficiently developed to serve as the sole foundation for determining the efficacy of psychotherapeutic treatments. Treatment outcomes in psychotherapy are notoriously hard to quantify, and isolating the effects of a specific type of treatment is even more difficult because there are many possible confounding factors affecting treatment outcomes (Ewbank et al., 2020; Skelly et al., 2012). Mahoney (2004) for instance argued that the therapist's personal qualities, such as experience and skill, have approximately eight times more influence on treatment outcomes than their theoretical orientation or specific therapeutic techniques. Therefore, solely concentrating on enhancing psychotherapy through the implementation of EBIs might represent

an oversimplification of the complex range of factors impacting therapy outcomes (Kratochwill & Shernoff, 2004; Lambert & Barley, 2001; Levant, 2004).

Accordingly, it is advisable for proponents of EBMH to re-emphasize the balanced integration of research, client, and therapist components, and create a more nuanced approach to the implementation on EBIs.

Moving Forward

The original idea of the scientist-practitioner model, which is closely tied to EBMH, was to promote collaboration between science and practice in psychotherapy (Jones & Mehr, 2007). To achieve that, the goal was to foster overlapping competencies among practitioners and researchers by training so called scientist-practitioners (Jones & Mehr, 2007). This however requires people with different theoretical orientations to work together and combine their expertise to find effective ways of implementing EBIs into practice. Models such as Participatory Action Research (PAR) for instance encourage researchers to cooperate with psychotherapists and utilize their experiential knowledge in order to come to more informed conclusions (Cornish et al., 2023; Dworski-Riggs & Langhout, 2010; Langhout & Thomas, 2010).

To facilitate collaboration between psychotherapists and researchers, it is crucial to recognize that the majority of both share a common overarching goal - to assist individuals in improving their mental health and enhancing their quality of life to the best of their abilities (Garland & Brookman-Frazee, 2013). Furthermore, each psychotherapist regardless of their theoretical orientation considers their methods as based on evidence (Lilienfeld, 2013). Recognizing that psychotherapists and researchers share more similarities than differences might help them to find common ground.

Psychology, in its very nature, is a science characterized by uncertainty as most investigated variables are hard to isolate and quantify (Uher, 2020). This can be a tough pill to swallow for psychologists looking for clear answers and can tempt even the most professional researchers to oversimplify highly complex issues in order to create a false sense of certainty (Hoekstra & Vazire, 2021). To avoid falling prey to logical fallacies like this, many researchers argue that science should be practiced with a deep intellectual humility always questioning the validity of one's own beliefs (Hoekstra & Vazire, 2021; Levant, 2004; Lilienfeld et al., 2013; Tavis & Aronson, 2008).

Keeping this in mind, it is essential to recognize and clearly communicate that both intuitive and empirical approaches to psychotherapy play vital roles in contributing to the quality of mental health treatment. As Lilienfeld and colleagues (2013) stated, "The romantics in us hold out hope that by doing so, our field can move past fruitless debates and enhance the quality of interventions for our clients, and the empiricists in us look forward to testing this conjecture scientifically" (pp. 7-8).

Conclusion

This study investigated psychotherapist attitudes towards the implementation of evidence based mental health (EBMH) and possible associated factors. Overall, the findings of this study support the notion that psychotherapists attitudes towards the implementation of evidence-based interventions (EBIs) are associated with their theoretical orientations. This might be rooted in theoretical disagreements among increasingly polarized groups of psychology researchers and practitioners regarding the use of EBMH. In order to effectively implement EBIs in psychotherapy, it is imperative to incorporate both intuition and scientific rigor.

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Appendix A

Questionnaire

Q1 **Language**

In which language would you like to continue the questionnaire?

In welke taal wilt u deze vragenlijst verderzetten?

In welcher Sprache möchten Sie den Fragebogen fortsetzen?

(English/Nederlands/Deutsch)

Q2 **Introduction**

Welcome to our study and thank you for your interest!

You were invited to participate in this study because you work as a psychologist in mental health care. This study focuses on how psychotherapists/clinical psychologists use evidence-based mental health (EBMH) in their clinical practice. EBMH is derived from evidence-based medicine, which means the “conscientious, explicit, and judicious use of **current best evidence** in making decisions about the care of individual patients” (Sacket et al., 1996). Thus, in addition to patient preferences and clinical expertise, EBMH refers to the **integration of scientifically supported interventions** into treatment decisions. In this study, we investigate how the research evidence of EBMH is embedded in clinical practice and how this is influenced by different characteristics, such as thoughts, attitudes, and working environments.

More detailed information about the study is on the next page.

Q3 **Study information**

INFORMATION ABOUT THE RESEARCH

VERSION FOR PARTICIPANTS

**“SURVEYING PSYCHOLOGISTS WORKING IN MENTAL HEALTH CARE ON EVIDENCE-BASED
MENTAL HEALTH PRACTICES”**

PSY-2223-S-0276

• **Why do I receive this information?**

- *You receive this information because you are a psychologist working in a mental health care setting and therefore invited to take part in our research.*
- *This study is being conducted by researchers of the University of Groningen (RUG): Drs. Nina Schwarzbach, Dr. Rink Hoekstra, Prof. Dr. Marieke Pijnenborg, and Prof. Dr. Theo Bouman. Students involved in this research are: Jane de Boer, Lina Hävecker, Robin Hoekstra, Lee Hornbogen and Aaron Landers.*
- *The starting date of this research project is 01-04-2023. The research project will end 30-07-2023.*

• **Do I have to participate in this research?**

- *Participation in the research is voluntary. However, your consent is needed. Therefore, please read this information carefully. Ask all the questions you might have, for example because you do not understand something. Only afterwards you decide if you want to participate. If you decide not to participate, you do not need to explain why, and there will be no negative consequences for you. You have this right at all times, including after you have consented to participate in the research.*

• **Why this research?**

- *The purpose of this study is to expand the knowledge about the gap between research and practice in a clinical psychotherapeutic setting. We are curious if/how*

practitioners of psychotherapy use 'evidence-based mental health' (EBMH), and how this is embedded in your professional practice and environment.

- **What do we ask of you during the research?**

- *Before you start with the survey, we will ask you to give informed consent. Then the survey will start.*
- *The main survey will take **about 10-15 minutes**. In this survey we will first ask for some demographic information. Then the survey will contain questions about the use of scientific literature, related attitudes and skills, and how 'evidence-based mental health' is embedded in your professional practice and environment.*
- *There is no experimental manipulation in this study.*
- *There will be no financial compensation.*

- **What are the consequences of participation?**

- *By participating in this research, you will contribute to the scientific understanding of the gap between science and practice, especially the practitioners' perspective. By this, you can contribute to advancing the communication of science and practice*
- *By participating in this research, you will also critically reflect on the gap between science and practice, which may widen understanding and lead to a more conscious use of research.*
- *You will also help Bachelor thesis students with learning how to conduct research.*
- *We don't expect any direct or indirect negative consequences for you after participating in this study.*

- **How will we treat your data?**

- *Besides data collection meant for scientific publication, the data is also used for educational purposes, namely a Bachelor Thesis project.*

- *The data that we use are quantitative.*
- *We will not ask for directly identifiable information. The only personal information that will be required of the participants are age and gender. Therefore, the data is not completely anonymous, but 'pseudoanonymous'.*
- *All researchers will have access to the data throughout the proces.*
- *We will share the data once our research is published, so that other researchers can profit from it. However, we will not disclose identifiable information, such as age and gender. Therefore, the published dataset is anonymous.*
- *Upon request, we might (after careful evaluation) share the whole dataset, if researchers provide a valid reason for needing the unpublished information.*
- *Because we do not want to create a link to personal information but we still want to provide a possibility to retract data, we decided to work with a code, created by the participant.*
- *With the code, participants have the right of access, rectification, and deletion of personal information. You have the right to do this before 30-07-2023.*
- *The full data will be stored according to the data management protocol of the Faculty of Behavioral and Social Sciences on the University drives.*

- **What else do you need to know?**

- *You can always ask questions about the study. This can be done by mailing the corresponding researcher (n.r.schwarzbach@rug.nl).*
- *Do you have questions/worries about your rights as a participant or the execution of the study? For this you can also contact the Ethics Committee Behavioural and Social Sciences of the University of Groningen: ec-bss@rug.nl*

- *Do you have questions of how your personal data will be handled? For this you can contact the Data Protection Officer of the University of Groningen: privacy@rug.nl*

As a participant, you have the right to receive a copy of this study information.

Q4 **Informed consent**

INFORMED CONSENT

“SURVEYING PSYCHOLOGISTS WORKING IN MENTAL HEALTH CARE ON EVIDENCE-BASED MENTAL HEALTH PRACTICES”

PSY-2223-S-0276

- I have read the provided information about the research project and had enough opportunities to ask questions.
- I have understood the purpose of this research and what is asked of me as well as what kind of negative consequences this research can have.
- I have been informed of my rights as a participant, I understand participation is voluntary and I have independently decided to take part.
- I understand that I have the right to withdraw at any time, without giving a reason and without it having any negative consequences.
- I understand how my data will be processed and protected.
- Below I am indicating what I am consenting to.

Consent to participate in this study:

Yes agree to participate; this agreement is valid until 30.07.2023

No, I do not agree to participate

Consent for the processing of my personal data

Yes, I consent to the anonymized processing of my data as it is explained in the study information. I know that I can ask for my data to be deleted until the 30.07.2023. I can also ask my data to be deleted in case I discontinue participation in the study.

No, I am not consenting to the processing of my data.

Q5 Consent to participate in this study:

Yes, agree to participate, and my agreement is valid until 30.07.2023/

No, I do not agree to participate

Q6 Consent for the processing of my personal data.

(Personal data refers to demographic information such as gender, work experience etc.. As explained before, this data is handled confidentially. We need this consent to proceed with the study.)

Yes, I consent to the anonymized processing of my data as it is explained in the study information. I know that I can ask for my data to be deleted until the 30.07.2023. I can also ask my data to be deleted in case I discontinue participation in the study./

No, I am not consenting to the processing of my data.

Check question

Q7 Do you work as a psychologist in mental health care? (Yes/No)

If no, direct to the end of the survey. If yes, proceed

Demographics

Demographic questions:

- **Q8** What is your age?

- **Q9** What is your current gender identity? (Check all that apply) (Male, Female, Trans male/trans man, Trans female/trans woman, Genderqueer/gender non-conforming, Different identity (please state): _____, don't want to say

- **Q10** What is your highest (academic) degree? (High school degree or equivalent, Bachelor's Degree or equivalent, Master's Degree or equivalent, PhD Degree or equivalent)

- **Q29** In what country do you work? (Netherlands, Germany, USA, Other)

Psychotherapy related questions:

- **Q11** Indicate the degree to which your therapy/interventions include elements of the following movement (school).

- Slider for CBT, Psychodynamic Psychotherapy, (Analytical Psychotherapy), Systemic Therapy, Neuropsychology, person-centered Psychotherapy, ACT, add option other: _____

- **Q12** If you would need to choose, which therapeutic movement (school) did most of your training (GZ, psychotherapist training, clinical psychologist training) primarily follow?

- Forced choice between CBT, Psychodynamic Psychotherapy, (Analytical Psychotherapy), Systemic Therapy, Neuropsychology, person-centered Psychotherapy, ACT

- **Q13** How long is your average treatment trajectory?

(short-term therapy (up to 25 sessions or up to a year) / long-term therapy (more than 25 sessions or longer than a year) / It varies)

- **Q14** In which year did you graduate?

- **Q15** How many years of (practical) clinical experience do you have?

- **Q16** What is your current work setting (general hospital, general mental health institution, psychiatric hospital, specialized treatment institution (e.g. epilepsy center, sleep center), forensic institution, private practice, retirement institution, child/youth mental health institution)?

EBMH

Q17: Please rate the following statements: (5 point scale from 1=disagree totally – 5=agree totally)

- 17.1 I am familiar with the concept of EBMH
- 17.2 EBMH is an essential approach in my clinical practice.

Personal factors

Q18: Please rate the following statements (If not applicable, leave the question empty): (5 point scale from 1=totally disagree – 5=agree totally)

- 18.1 I am open to adjusting my practices when I encounter new scientific evidence.
- 18.2 My research knowledge is sufficient in order to understand the scientific literature.
- 18.3 My skills in the English language are sufficient to understand English scientific literature.
- 18.4 I think there is a gap between science and practice in clinical psychology.
- 18.5 I don't think clinical science accurately reflects clinical practice.
- 18.6 I think only evidence-based treatments should be used in clinical practice.
- 18.7 I want to use more evidence-based treatments in my practice.

- 18.8 I know how to use the databases to find scientific literature.
- 18.9 I think clinical experience is more valuable than clinical research in order to inform my treatment decisions.

Contextual factors

Q19: Please rate the following statements (If not applicable, leave the question empty): (5 point scale from 1=disagree totally – 5=agree totally)

- 19.1 I am conducting scientific research.
- 19.2 In my direct work environment, my colleagues and I work together in order to keep us updated regarding the latest scientific evidence.
- 19.3 There is a collaborative atmosphere among me and my colleagues.
- 19.4 In my work environment, I feel comfortable to try (new) EBMH interventions.
- 19.5 The application and adherence to EBMH is a personal responsibility in my professional practice.
- 19.6 The application of EBMH is endorsed by my colleagues.
- 19.7 The application of EBMH is endorsed by my supervisor.

Organizational factors

Q20: Please rate the following statements (If not applicable, leave the question empty): (5 point scale from 1=disagree totally – 5=agree totally)

- 20.1 My employer provides me with opportunities to learn new academic skills which make it easier for me to apply EBMH.
- 20.2 My employer provides me with practical support to get practical training in applying evidence-based treatments (e.g. by providing training in a specific intervention).
- 20.3 My current employer emphasizes the importance of applying EBMH.

- 20.4 My university education emphasized the importance of applying EBMH.
- 20.5 My employer supports me financially in order to educate myself on the newest scientific evidence.
- 20.6 My employer recognizes that part of my working time is necessary to educate myself on the newest scientific evidence.
- 20.7 My employer provides physical facilities (such as study rooms, libraries, working stations) to educate myself on the latest scientific evidence.
- 20.8 I get support from my workplace when I want to make use of an evidence-based treatment I have no prior experience with.
- 20.9 My employer recognized EBMH in its official policies.
- 20.10 My study and additional training prepared me well for my everyday practice.

Q21 Is there anything else you would like us to know about this topic?

—

Q22 Do you have any suggestions for improvement of this survey?

—

Q23 **Code creation**

As explained in the beginning of the survey, you have the right to retract your information until 30.06.2023. To protect your privacy, we did not gather personal information such as your name or email address, with which we could usually identify your data.

In order to know which data belongs to you in case you want to retract your data, we kindly ask you to create a code.

Please enter below a 7 digit code. We suggest making that code memorable. You could choose the day of your mother's birthday, the day of your own birthday, and the last three numbers of your phone number. If your mother's birthday is on 04.11.1960, your own birthday is on the 12.05.1992, and your phone number is 0912345667, your code would be 0412667. In case you forget your code, we will give you these hints to remember. (You can also choose any other 7 digit code of course!)

If you want your data not to be used in the study, an email to n.r.schwarzbach@rug.nl stating that code.

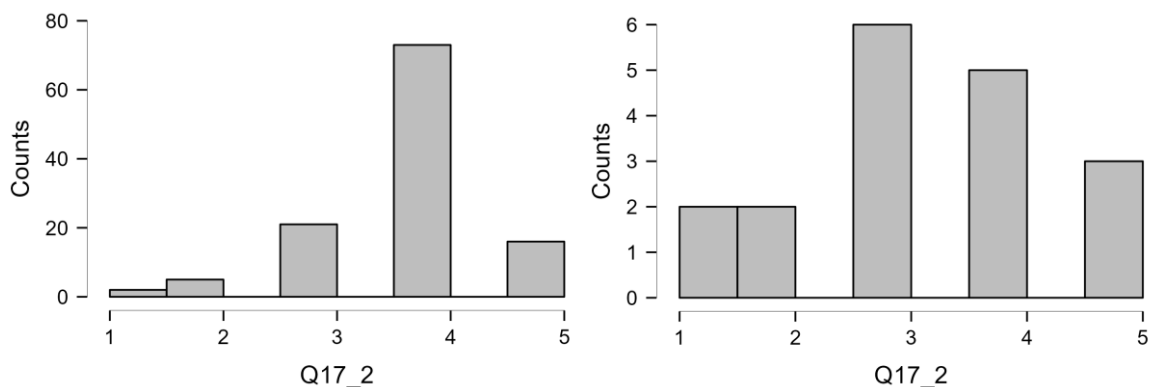
Q24 *End*

This is the end of the questionnaire. In case you have any questions or remarks regarding this study, please feel free to contact n.r.schwarzbach@rug.nl . Thank you so much for your participation!

Appendix B

Figure 1

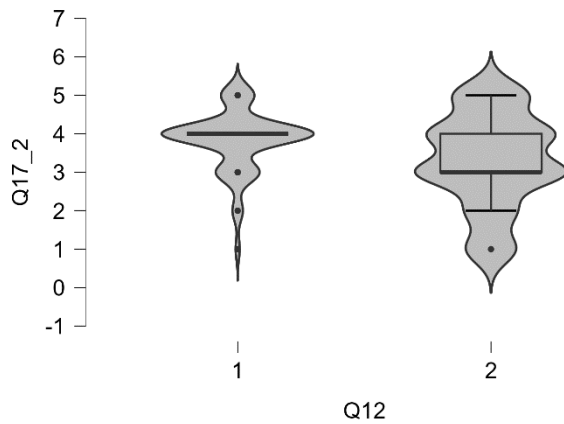
Distribution of Independent Variable



Note. Distribution of EBMH attitude within empirical approaches (left) and intuitive approaches (right).

Figure 2

Box Plot of the Main Analysis



Note. Group 1 represents participants trained in empirical schools of thought, while Group 2 represents participants trained in intuitive schools of thought. The y-axis of the graph represents "attitude towards EBMH".

Table 1

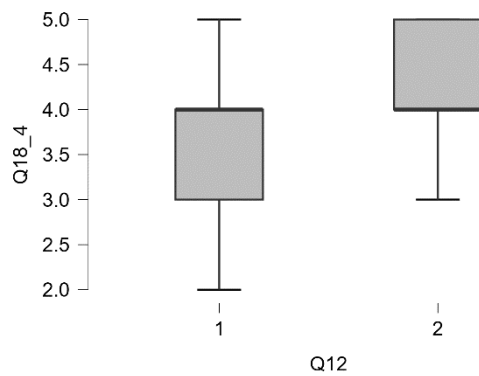
Descriptives of the Main Analysis

	Q17_2	
	1	2
Valid	117	18
Missing	0	0
Median	4.000	3.000
Mean	3.821	3.278
Std. Deviation	0.784	1.227
Minimum	1.000	1.000
Maximum	5.000	5.000

Note. Group 1 represents participants trained in empirical schools of thought, while Group 2 represents participants trained in intuitive schools of thought.

Figure 3

Box Plot of the Exploratory Analysis



Note. Group 1 represents participants trained in empirical schools of thought, while Group 2 represents participants trained in intuitive schools of thought. The y-axis of the graph represents scores on question 18.4 of the questionnaire.

Table 2

Descriptives of the Exploratory Analysis

	Q18_4	
	1	2
Valid	117	18
Missing	0	0
Median	4.000	4.000
Mean	3.778	4.333
Std. Deviation	0.800	0.686
Minimum	2.000	3.000
Maximum	5.000	5.000
Sum	442.000	78.000

Note. Group 1 represents participants trained in empirical schools of thought, while Group 2 represents participants trained in intuitive schools of thought. The y-axis of the graph represents scores on question 18.4.